Oklahoma State Regents for Higher Education

CONTRACTUAL ARRANGEMENTS AND/OR TECHNICAL PRIOR LEARNING ASSESSMENT PROGRAM REQUEST FORM

Rose State College
Institution Submitting Proposal

Business Administration Associate in Applied Science Program, General Business (008)
Program name and State Regents’ three-digit program code

Eastern Oklahoma County Technology Center

Contractual Entity

Date of Governing Board Approval: 09/17/15

Signature of President: [Signature] Date: 09/17/15

Signature of Other Entity Signatory: [Signature] Date: 09/23/15

State Regents’ Policy 3.6 and 3.15
http://www.okhighered.org/admin-fac/academic-forms/
From: Higher Learning Commission <changerequests@hlcommission.org>
Sent: Friday, June 19, 2015 2:16 PM
To: Hendrix, Frances
Subject: Contractual Arrangement Conveyed

Thank you for your submission. Based on the information detailed below, the Commission has determined that it has sufficient information to constitute notification of the contractual relationship per policy and no further action is required. If you have any further questions, please send an email to changerequests@hlcommission.org.

Name: Frances M Hendrix
Institution: 1635 - Rose State College - OK
City: Midwest City
State: Oklahoma
Email address: fhendrix@rose.edu
Phone number: 405.733.7395

You confirm you are authorized to provide the Commission with information regarding your institution's contractual arrangements.

Academic program: Data Entry/Microapplication
CIP code: 11.0601
Course catalog name: Microcomputer Applications
Program or credential level: Associate
Expected start date: 2015-08-17
Contractual partner: Eastern Oklahoma County Technology Center

Total program credit hours: 62
Credit hours taught by contractual partner: 6
Calculated percentage: 9.68

The percentage taught by the contractual partner is less than 25%.
Does the contractual partner provide oversight of the curriculum? Yes
Does the contractual partner provide assurance of the consistency? Yes
Does the contractual partner establish academic qualifications for instructional personnel? Yes

The percentage representing the aggregate of the contractual partner's total efforts: Less than 25%
Thank you for your submission. Based on the information detailed below, the Commission has determined that it has sufficient information to constitute notification of the contractual relationship per policy and no further action is required. If you have any further questions, please send an email to changerequests@hlcommission.org.

Name: Frances M Hendrix  
Institution: 1635 - Rose State College - OK  
City: Midwest City  
State: Oklahoma  
Email address: fhendrix@rose.edu  
Phone number: 405.733.7395

You confirm you are authorized to provide the Commission with information regarding your institution's contractual arrangements.

Academic program: Computer Programming/Program  
CIP code: 11.0201  
Course catalog name: Introduction to Computers  
Program or credential level: Associate  
Expected start date: 2015-08-17  
Contractual partner: Eastern Oklahoma County Technology Center

Total program credit hours: 62  
Credit hours taught by contractual partner: 6  
Calculated percentage: 9.68

The percentage taught by the contractual partner is less than 25%.  
Does the contractual partner provide oversight of the curriculum? Yes  
Does the contractual partner provide assurance of the consistency? Yes  
Does the contractual partner establish academic qualifications for instructional personnel? Yes

The percentage representing the aggregate of the contractual partner's total efforts: Less than 25%
Contractual Arrangement and/or Technical Prior Learning Assessment Program Request Form

The proposal for a contractual arrangements or technical prior learning assessment (PLA) program should provide the following information.

NOTE: INFORMATION NOT INCLUDED IN THE PROPOSAL MAY CAUSE A DELAY IN PROCESSING.

1. A signature page (institutional president and entity’s signatory) that includes the names of the participating college and other entity.

2. Name of college-level certificate or degree program(s) toward which credit will be awarded, including the State Regents’ three-digit program code and any options.

(The size of the box is NOT an indicator of the amount of information required to address the request. Please include as much information as necessary [the boxes will expand].)

3. Will this arrangement include:

- [X] contractual arrangement
- [ ] technical assessments (PLA)
- [ ] Combination of both

4. List a) technical courses on the Statewide Contractual Course Inventory/Technical Crosswalk, b) assessments on the Statewide Inventory of Industrial, Technical and Other Assessments, and/or c) general education courses that will be included in the contractual or technical PLA program.

   a) Technical Courses in Contractual Arrangements:

<table>
<thead>
<tr>
<th>Higher Education Course</th>
<th>Contractual Technical Course:</th>
<th>Approved for listing on Statewide Contractual Course Inventory/Technical Crosswalk?</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 1093 Microcomputer Applications</td>
<td>Fundamentals of Administrative Technology</td>
<td>___Yes ___No [X] Request Pending</td>
</tr>
<tr>
<td>CIT 1103 Introduction to Computers</td>
<td>Fundamentals of Administrative Technology II</td>
<td>___Yes ___No ___Request Pending</td>
</tr>
<tr>
<td>Higher Education Course:</td>
<td>Contractual Technical Course:</td>
<td>Approved for listing on Statewide Contractual Course Inventory/Technical Crosswalk?</td>
</tr>
<tr>
<td>(add rows as needed)</td>
<td>Fundamentals of Technology</td>
<td>___Yes ___No ___Request Pending</td>
</tr>
</tbody>
</table>

State Regents’ Policy 3.6 and 3.15

http://www.okhighered.org/admin-fac/academic-forms/
b) Technical Assessments (PLA):

<table>
<thead>
<tr>
<th>Higher Education Course:</th>
<th>Technical Assessment:</th>
<th>Approved for listing on the Statewide Matrix of Industrial, Technical and Other Assessments?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes  No  Request Pending</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes  No  Request Pending</td>
</tr>
<tr>
<td>(add rows as needed)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

c) General Education Courses:

<table>
<thead>
<tr>
<th>Higher Education Course:</th>
<th>Location?</th>
<th>Delivery Method?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>(add rows as needed)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Detail the maximum number of college credit hours to be articulated through contractual technical courses or technical assessments and the maximum college credit awarded toward the degree for work completed outside the institution:

| Total credit hours articulated through contractual technical courses: | 6 |
| Total credit hours articulated through technical assessments: | 0 |
| Total credit hours that can be applied to the degree through approved contractual technical courses and/or assessments: | 6 |
| Total credit hours in general education: | 20-21 |
| Total credit hours required for the degree: | 62 |

1 Note: the Higher Learning Commission requires that at least “15 of the 60 credits for the associate’s degree be credits earned at the institution itself, through arrangements with other accredited institutions, or through contractual relationships approved by the Commission.” However, any time the credit from outside the institution surpasses 50%, a higher level of scrutiny review from HLC should be expected.
6. Description of the contractual entity's classroom and laboratory facilities and how they will be utilized.

Eastern Oklahoma County Technology Center offers up-to-date equipment and facilities to their students in the Business Management Administration Program. Computers are available in a lab environment for students to complete application assignments. Lecture environments are equipped with instructional technology used by the faculty member to conduct the class.

7. Academic credentials of contractual entity's faculty responsible for classroom and laboratory experiences. (Include a summary document here. Full vitae, resume and certifications must be included as attachments, as well as documentation of the institutional process for credential and/or experience evaluation for contractual entity's faculty.)

College faculty supervising the contractual arrangement or application of PLA credit for the program:
N/A

Contractual entity's faculty teaching in the contractual arrangement:
Ms. Tracie Spencer, Business Management Administration Program, M.Ed., Business Education, University of Central Oklahoma; B.S., Education, University of Central Oklahoma

8. Outline the process to assure quality academic programming and continuous improvement in the contractual arrangement or technical PLA program.

Rose State College faculty reviewed the Eastern Oklahoma County Technology Center curriculum and determined that the curriculum duplicated six credit hours of instruction that occurs through the Business Administration, General Emphasis, Associate in Applied Science degree program at Rose State College. Rose State College faculty reviewed the credentials of faculty from Eastern Oklahoma County Technology Center to ensure faculty hold credentials that meet the minimum requirements for adjunct and full-time faculty assignments at Rose State College. Rose State College faculty added the Eastern Oklahoma County Technology Center faculty to the Rose State College Business Administration program advisory committee. Rose State College faculty were added to the Eastern Oklahoma County Technology Center Business Management Administration Program.
9. Describe the criteria for assessment of student outcomes in each contractual technical course and/or assessment.

See attached syllabi.

10. To maintain quality courses, the higher education institution will designate an appropriate individual to direct and oversee the contractual arrangement. Provide the name of the individual as well as the criteria and procedures that will be used for an annual evaluation of courses. (Note if same or different from #7)

In addition to the full-time Business Administration Associate in Applied Science degree program faculty members, Ms. Jerri Cachero, Coordinator for Technology Center Programs, Rose State College, oversees all contractual arrangements with technology centers to ensure that students are advised and enrolled appropriately, serves as the liaison between faculty representatives from the technology centers and the college. She holds meetings with faculty on campus, meets with faculty and staff at each technology center, and arranges and holds joint meetings. She also develops the annual Technology Center catalog, meets with admissions and enrollment staffs from the technology center and on campus, and hosts students from the technology centers on campus on enrollment/advisement days. In addition, she attends advisory committees, and other statewide meetings at the Oklahoma State Regents for Higher Education.

11. Describe the academic and student support services available to students enrolled in the contractual arrangement.

Students from the technology center are hosted on campus. Students are enrolled on campus by Academic Advisors, tour the campus and receive financial aid/college life information from Prospective Student Services and are taken on a campus-wide tour. Students complete their admissions forms, take COMPASS exams, are enrolled and attend various related seminars on campus. Students have access to the College’s website services such as those available in the Learning Resources Center and receive a Rose State College student I.D. card which grants students’ rights and privileges of a Rose State College student.

A college liaison visits each campus on a weekly basis to assist with questions related to degree completion, financial aid deadlines, Ticket to Rose, etc., and serves as an advisor to these students at their technology center.
12. Outline the financial arrangements between the institution and the contractual entity if different from that specified in policy; this should include student tuition and other charges applicable to the contractual arrangement.

Students pay the state-adopted rate of $8.00 per credit hour since instruction takes place at the technology center under the technology center budget.

13. Indicate if high school students may be enrolled in this contractual arrangement and/or any restriction based on age of students due to the nature of the technical field, licensure requirements, etc.

High school students are eligible for enrollment provided that they meet the admission requirements under the cooperative agreement policy.
COOPERATIVE AGREEMENTS PROGRAM
ROSE STATE COLLEGE/EASTERN OKLAHOMA COUNTY TECHNOLOGY CENTER
Fall 2015 – Spring 2016

RSC – Business & Information Technology Division
Degree: A.A.S. - Business Administration – General Business (0061-00)
Various degree programs on campus
Contacts: Professor Arlene Haynes
Division Academic Advisor – Mr. Steve Johnson

Eastern Oklahoma County Technology Program: Business Management Administration
Contact: Ms. Tracie Spencer

Credit Total: 6 hours

<table>
<thead>
<tr>
<th>RSC Course Number and Title</th>
<th>EOC Tech Center Units Covered</th>
<th>Credit Hours</th>
<th>RSC Faculty Initials</th>
<th>Tech Center Faculty Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 1093 Microcomputer Applications</td>
<td>Completion of both: 8103 – Fundamentals of Administrative Technology 8104 – Fundamentals of Administrative Technology II</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIT 1103 Introduction to Computers</td>
<td>8169 – Fundamentals of Technology</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Course Number: 8103 (OHLAP Approved)  
Instructor: Tracie Spencer

Course Title: Fundamentals of Administrative Technologies  
Course Length: 120 hours

Career Cluster: Business, Management and Administration

Pre-requisite: Fundamentals of Technology

Possible Career Outcomes: Data Entry Specialist, Receptionist, Shipping and Receiving Clerk, and Records Processing, Customer Service Occupation, Billing Clerk, Accounts Receivng Clerk, Payroll Accounting Clerk, Accounts Payable Clerk, Full Charge Bookkeeper, Administrative Assistant, Administrative Medical Assistant, Medical Transcriptionist, Medical Office Assistant, Medical Insurance Coder, Office Information Specialist, Human Resource Assistant, Financial & Investment Planning, Financial Assistant and Financial Customer Service.

Course Description: This course builds on the core business skills and will provide students with the concepts, principles, and attitudes needed to understand how an office is operated and managed in a rapidly changing global environment. The integration of state-of-the-art personal computing is done throughout the course.

Learning Competencies

<table>
<thead>
<tr>
<th>Correspondence</th>
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</thead>
<tbody>
<tr>
<td>• Prepare and format effective business documents, including envelopes, letters, reports, faxes, e-mail, outlines, footnotes/endnotes, and minutes</td>
</tr>
<tr>
<td>• Demonstrate knowledge of general mail procedures, including the different classes of mailings, sorting, and distribution of mail</td>
</tr>
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<table>
<thead>
<tr>
<th>Customer Service</th>
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<tbody>
<tr>
<td>• Effectively apply conflict resolution techniques when dealing with internal customers as well as external customers</td>
</tr>
<tr>
<td>• Demonstrate appropriate telephone etiquette when providing customer service, including appropriate manners when handling irate customers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Filing</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Demonstrate the ability to effectively use the many types of filing systems, including subject, standard alphabetic, and numeric</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Use appropriate procedures to effectively prioritize and manage time, projects, and resources</td>
</tr>
<tr>
<td>• Apply appropriate business math skills to prepare business forms and complete financial transactions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reading Comprehension</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Demonstrate effective use of proofreading skills, including spelling, grammar, proofreading marks, and charts/graphs</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Scheduling</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Demonstrate proper parliamentary procedure and effectively plan a meeting</td>
</tr>
<tr>
<td>• Use appropriate procedures and resources to make travel arrangements, including preparing/securing travel documents, creating itineraries, and providing appropriate confirmations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Terminology</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Identify and/or demonstrate the ability to use appropriate and effective language, resources, and organizations needed in an office environment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Office Technology</th>
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</thead>
<tbody>
<tr>
<td>• Describe the different types of the following: Copy machines, fax machines, and printers</td>
</tr>
<tr>
<td>• Demonstrate proper procedures when using the fax, copy machine, printers, paper cutters, electronic staplers, and other office machines</td>
</tr>
</tbody>
</table>

Fundamentals of Administrative Technologies-Course Syllabus
### Communication
- Identify common barriers to open communication.
- Identify appropriate customer care representative behaviors.
- Distinguish between idle conversation and dialogue.
- Demonstrate ability to determine customer expectations.
- Demonstrate ability to use fact-finding techniques.
- Demonstrate proper phone etiquette and techniques—conference calls, voice mail, pagers, video conferencing, transferring calls, ending calls, taking messages, screening calls, hold, cell phones.

### Answering Phones
- Demonstrate proper technique for beginning and ending calls.
- Identify methods for showing customer empathy.
- Identify methods to build customer goodwill.
- Demonstrate methods for dealing with difficult callers.

### Customers
- Describe the importance of behavioral styles as it applies to telephone techniques.
- Describe the components of an ideal customer service environment.

### Telephone Equipment
- Define and describe the following types of telephone equipment: speaker phone, multi-line phones, conference calls, video conference calls, wireless communication devices.

### Terminology
- Define branding.
- Define customer service effectiveness.
- Define screening calls.
- Define the phrase “our customers are blind”.

### Handling the Call
- Demonstrate fact-finding techniques.
- Differentiate when to use open and closed-ended questions.
- Model positive impression using proper communication techniques.

### Professionalism
- Demonstrate proper word choice when dealing with customers.
- Demonstrate proper techniques when transferring calls.

### Develop and Demonstrate Objective and Active Listening Skills, and Telephone Personality
- Demonstrate appropriate voice quality.
- Define the four standard behavioral styles: decisive, inquisitive, rational, and expressive.
- Demonstrate techniques for handling difficult customers.

### Listening
- Define the following listener types: active, passive, cohesive, constructive, and emotive.
- Demonstrate the ability to listen for meaning.
- Define the following barriers to effective listening: psychological, social, sensory, organizational, emotional, bias, difficult customer, physical, preoccupation, and hearing loss.
**Revising and Printing**
- Perform editing (e.g., cut, copy, and move information)
- Specify print options and print files
- Set printing options for templates with fields
- Set printing options to manage print jobs
- Set page orientation
- Check spelling/grammar
- Set specialized language options
- Identify Office Clipboard default settings
- Utilize functions available on the task pane

**Shortcuts**
- Identify and use keyboard shortcuts
- Select text (word, line, paragraph, document) using various methods (e.g., mouse clicks, click and drag, or keyboard combinations)
- Identify templates available in Word
- Use wizards and templates to create documents
- Use templates and add-ins to identify styles.
- Set and modify Smart Tag options

**Formatting**
- Format text for font, style, size, color, underline, effects and spacing.
- Format and modify margins
- Apply borders and shading to paragraphs
- Format and modify line and page breaks

**Word General Knowledge**
- Identify View formats
- Use Views to display Headers/Footers
- Identify shading types
- Format text wrapping for clipart, shapes and text boxes
- Identify default settings for Office Assistant
- Identify toolbars and toolbar buttons
- Display, hide and modify toolbars

**Advanced Features**
- Identify types of mail merge
- Create a mail merge main document and data source
- Identify other types of files that may be used in a mail merge.
- Use track changes in a document
- Identify and modify options for Macro Security

**Page Layout**
- Set and edit tabs.
- Identify tab types.
- Format and modify table structure
- Create, edit, apply and delete styles/themes
- Identify on-screen formatting information including breaks, paragraphs markers and tabs.
- View styles applied to a document
Document Creation
• Open previously created documents and identify components of the open window
• Save files in specified locations and formats and identify components of the save window
• Insert breaks (e.g., page, column, text wrapping, and section)
• Format multicolumn layouts
• Modify text case using Change Case option
• Use find/replace function
• Locate and identify items in the drop down menus
• Add AutoCorrect entries and utilize those entries

Charts
• Identify fill effect options for chart titles
• Insert a chart using the chart wizard
• Insert and modify charts in a worksheet
• Be able to identify if a presented chart accurately represents worksheet data show in a table
• Insert a legend
• Apply fill effects to a chart background
• Insert and modify a PivotChart
• Add titles to various areas on a chart

Data Entry
• Modify reference to an external data link
• Enter data into a worksheet using a Data Form
• Use Spell-check
• Accept labels in formulas (change numbers to text)
• List allowable characters for naming cells
• Create and use defined names in formulas instead of cell references
• Name the filename that stores the custom dictionary information (CUSTOM.DIC)

Data Manipulation
• Apply Merge & Center formatting
• Sort worksheet data
• Apply borders and shading for a cell
• Apply validation criteria to restrict data entry of a cell
• List the allowable types of criteria for validating data
• Insert and modify data
• Apply and use various AutoFilter commands
• Convert text from uppercase to lowercase
• Identify & change number formats, including currency, date & time, percentage formats, and scientific notation
• Apply conditional formatting to a range of cells
• Filter data in place using the Advanced Filter command
• Use the Paste Special command to transpose a range of data from a column to a row

Formulas/Functions
• Use SEARCH
• Use Error Checking
• Insert arithmetic formulas into worksheet cells
• Use common worksheet functions (e.g. SUM, AVERAGE, COUNT, DATE, IF, MID)
• Use iteration command
• Identify a Circular Reference
• Demonstrate an understanding of absolute versus relative cell addresses
• Manually recalculate all open worksheets at one time
• Display and print the formulas version of a worksheet
• Use keyboard shortcuts to copy formulas with relative references
Graphics
- Identify various diagram types
- Identify default media file types
- Apply shadow effects for an object

Software Interface
- Use interactive worksheet components
- Switch between sheets in an interactive workbook
- Use the Research Task Pane
- Apply formatting to interactive worksheets
- Protect a shared workbook
- Use the Freeze Pane command
- Identify common buttons of the Formatting toolbar
- Reset toolbar usage data
- Share workbooks and remove a user from a workbook
- Rename a worksheet
- Change the tab color of a worksheet
- Print comments in a worksheet
- Identify common buttons on the External Data Toolbar
- Insert objects in custom headers or footers
- Set and clear Print Areas
- Print spreadsheet gridlines
- Activate and de-activate ScreenTips
- Use the Compare Side by Side toolbar to reset widow positions

Instruction: 30 Hours Theory
80 Hours Lab
10 Hours Certification Preparation and Attainment

Methods of Instruction include:
Lectures, class discussions, hands-on training, demonstrations, projects and performance evaluation

Course Textbooks and Instructional Resources:
- Shelly Cashman Series. Microsoft Office 2010 (Introductory, Advanced, Post-Advanced)
- Oliverio, Pasewark, & White. The Office Procedures and Technology 6e, Southwestern

Online Instructional Resources:
- Skills Assessment Manager Online Training/Testing (SAM) by Cengage Learning
  www.sam2010.course.com
- Office 2010 Shelly Cashman Online Resources www.ascitel.com/office2010
- The Office Procedures and Technology – companion web site: www.theoffice.swlearning.com
- Online Training – www.gcflearnfree.org
- Online Training – www.lynda.com

Grading Scale: Exams – 40%
Projects/Assignments – 30%
Attendance/Performance/Time Management – 30%

Alliance Credit Offered: OSU Institute of Technology
Rose State College
Required Brainbench Certifications (or equivalent industry certifications):

- Word (any level)
- Excel (any level)
- Telephone Etiquette
- Office Procedures

Recommended Additional Competency Testing:

- MS PowerPoint (any level)
- Customer Assistance
- Listening Skills
- MS Outlook
- MS Access (any level)
- Filing
- Data Entry/10-key
Course Number: 8104 (OHLAP Approved)  
Instructor: Tracie Spencer  
Course Title: Administrative Technologies II  
Course Hours: 120.00  
Career Clusters: Business, Management and Administration  
Pre-requisites: Fundamentals of Technology and Fundamentals of Administrative Technologies I  
Possible Career Outcome: Data Entry Specialist, Receptionist, Shipping and Receiving Clerk, and Records Processing, Customer Service Occupations, Billing Clerk, Accounts Receivable Clerk, Payroll Accounting Clerk, Accounts Payable Clerk, Full Charge Bookkeeper, Administrative Assistant, Office Information Specialist and Financial & Investment Planning  

Course Description: This course builds on the Fundamentals of Administrative Technology skills and will provide students with the ability to utilize analyze and manipulate data through a database application. The integration of multiple applications will build critical thinking skills as students utilize the appropriate applications needed to complete case projects.

Learning Competencies

<table>
<thead>
<tr>
<th>DB0432-Microsoft Access Fundamentals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competencies include: creating and editing a database, developing tables, creating queries and customizing forms and reports.</td>
</tr>
</tbody>
</table>

Automation and Integration
- Discuss the conversion, import, export, and linking abilities in an Access database, including MSDB, XML, HTML, Word, Excel, and text files
- Add and/or edit hyperlinks to reports and forms
- Discuss scalability features

Data Manipulation
- Discuss the different query options using the different views, including performing calculations in queries and using expressions
- Create and manipulate tables and reports using the different join properties

Database Concepts
- Define and modify field types, including renaming fields, changing field properties, field size and values
- Create and modify one-to-many relationships
- Specify and enforce referential integrity
- Create and modify tables

Database Planning and Design
- Data Integrity
- Database Normalization
- Database Structure
- Database Templates
- Logical Architecture
- Physical Architecture

Forms and Data Input
- Create an input mask to control how data is entered in field or control
- Create and edit a list box
- Create and modify forms
- Create and modify calculated controls

Multi-User Issues
- Create and manage a shared database
- Identify the types of tables utilized in Access, such as ODBC
Reports and Data Input
- Make dynamic changes in reports
- Create and modify controls
- Create and modify reports
- Describe the relationship of a Sub report to a main parent report, both bound and unbound

User Interface and Application Refinement
- Define and run the various types of macros
- Compact and Repair an Access database
- Utilize the wizards available in Access to perform specific operations
- Utilize the filter options to manage information
- Describe how a PivotTable control is managed in a Data Access Page

VBA
- Utilize the debug function in Access
- Develop a working knowledge of code for the following situations:
  - .MoveNext method
  - Resolving conflicting records/errors
  - Declaring variables to store data as related to data types
  - Built-in procedures
  - Retrieval of information
  - Dynamically run and SQL statement string

Creating Presentations
- Identify the different views of a presentation
- Describe the different uses for different views
- Demonstrate how to change slide and handout orientation
- Describe how to Open, Edit, Close, Print, and Save presentations
- Use AutoContent and the AutoContent Wizard
- Understand how to use Slide Design Templates
- Apply slide show transitions, backgrounds, animation schemes and text formatting
- Identify pointer options when viewing a presentation

Help & Research
- Identify how to set up your Office Assistant to show the Tip of the Day at startup
- Know the meaning of the various help and research icons (images)

Menu Bar
- Understand linking to an Excel spreadsheet
- Insert an Excel data range as a link
- Utilize spell check for acronyms in a presentation
- Apply animation to an object using the menu bar

Slide Setup & Presentation
- Insert HTML signatures on slides
- Insert/edit slide numbers on presentations
- Utilize placeholders to insert text
- Apply various layouts to slides
- Troubleshoot image use in presentations
- Utilize headers and footers to insert information
- Apply and understand text formatting options and their icons
<table>
<thead>
<tr>
<th>Slide Show Enhancements/Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Understand the purpose of Custom Shows</td>
</tr>
<tr>
<td>• Identify the groups of Animation Schemes available and the colors utilized to make up the schemes</td>
</tr>
<tr>
<td>• Apply animation to slides</td>
</tr>
<tr>
<td>• Quickly and efficiently change from one slide show to another</td>
</tr>
<tr>
<td>• Adjust the speed of slide transitions</td>
</tr>
<tr>
<td>• Apply voice recordings to presentations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Editing Text/Objects</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Demonstrate how to manipulate objects</td>
</tr>
<tr>
<td>• Demonstrate how to increase the text size on bulleted lists and manipulate the order of bulleted items</td>
</tr>
<tr>
<td>• Describe how to add and move text</td>
</tr>
<tr>
<td>• Identify how to find, replace, and review text and fonts</td>
</tr>
<tr>
<td>• Demonstrate how to move/copy/cut/paste/paste special and utilize shortcut keys to perform tasks</td>
</tr>
<tr>
<td>• Describe how to modify text size, alignment, spacing, and color</td>
</tr>
<tr>
<td>• Understand implications to color and formatting when importing from presentation to presentation</td>
</tr>
<tr>
<td>• Send items from a slide to another application and from another application to a presentation slide</td>
</tr>
<tr>
<td>• Convert from one type of chart to another</td>
</tr>
<tr>
<td>• Format text within objects</td>
</tr>
<tr>
<td>• Insert charts into existing slides</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Managing &amp; Delivering a Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Understand the package for CD utility features and limitations</td>
</tr>
<tr>
<td>• Preview and publish a presentation on the Web</td>
</tr>
<tr>
<td>• Manage file size for emailing large presentations</td>
</tr>
<tr>
<td>• Export PowerPoint outlines to other applications</td>
</tr>
<tr>
<td>• Utilize a PowerPoint presentation to create a Word document</td>
</tr>
<tr>
<td>• Place an HTML signature on every slide</td>
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<thead>
<tr>
<th>Publishing Presentation Documents</th>
</tr>
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<tbody>
<tr>
<td>• Identify the maximum number of slides per page when printing handouts</td>
</tr>
<tr>
<td>• Demonstrate the different page presentation options</td>
</tr>
<tr>
<td>• Print presentations for various uses: overhead transparencies, handouts, speaker notes, etc.</td>
</tr>
<tr>
<td>• Align and edit objects, graphics, and text on a slide</td>
</tr>
<tr>
<td>• Add page numbers to slides</td>
</tr>
<tr>
<td>• Insert photos into a slide presentation</td>
</tr>
<tr>
<td>• Utilize PowerPoint drawing tools to create and share drawn objects</td>
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<tr>
<th>Task Pane</th>
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</thead>
<tbody>
<tr>
<td>• Identify which task pane enables you to access Animation schemes</td>
</tr>
<tr>
<td>• Determine how to access the Office Clipboard and understand the purpose and limitations of the feature</td>
</tr>
<tr>
<td>• Demonstrate how to create a duplicate presentation</td>
</tr>
<tr>
<td>• Utilize the short cut key to access the Office Clipboard</td>
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</tbody>
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<tr>
<th>Workgroup Collaboration</th>
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</thead>
<tbody>
<tr>
<td>• Demonstrate how add and reveal comments in a presentation</td>
</tr>
<tr>
<td>• Describe how to compare and merge presentations</td>
</tr>
<tr>
<td>• Identify Shared Workspace icons</td>
</tr>
<tr>
<td>• Utilize the reviewing toolbar and web toolbar features</td>
</tr>
<tr>
<td>• Identify the difference in original and reviewed versions of a presentation</td>
</tr>
</tbody>
</table>
INT8432 - Integration

Competencies for this portion of the course will utilize word processing, spreadsheet, database, and presentation skills, in the form of project-based learning, to manipulate and analyze various forms of data into useful reports, letters, charts, graphs, etc. Curriculum needs to be a case-based, problem-solving approach to using the components of the Office Suite. Sample skill sets include:

| Create a memorandum in Word with an embedded worksheet or graph | Integrate database, spreadsheet and word processing documents into presentation software |
| Create database data and merge into a word processing document to create letters, labels, and envelopes | Utilizing queries to sort data for specific records in a database and merge into a letter or report |
| Export data from one application to another | Create, link, and embed spreadsheet charts to word processing documents |
| Sort database data in a spreadsheet | Link data between a spreadsheet worksheet and a database table |
| Create and link word processing data into a spreadsheet worksheet | Create and copy a database table into a word processing document |
| Edit an embedded worksheet | Update linked data and view linked data as an icon |

Instruction: 30 Hours Theory
80 Hours Lab
10 Hours Certification Preparation and Attainment

Methods of Instruction include:
Lectures, class discussions, hands-on training, demonstrations, projects and performance evaluation

Course Textbooks and Instructional Resources:

- Shelly Cashman Series. Microsoft Office 2010 (Introductory, Advanced, Post-Advanced)
- Oliverio, Pasewark, & White. The Office Procedures and Technology 6e, Southwestern

Online Instructional Resources:

- Skills Assessment Manager Online Training/Testing (SAM) by Cengage Learning
  www.sam2010.course.com
- Office 2010 Shelly Cashman Online Resources www.scsite.com/office2010
- The Office Procedures and Technology companion web site: www.theoffice.swlearning.com
- Online Training – www.gcflearnfree.org
- Online Training – www.lynda.com

Grading Scale: Exams – 40%
Projects/Assignments – 30%
Attendance/Performance/Time Management – 30%

Alliance Credit Offered: OSU Institute of Technology
Rosa State College

Required Brainbench Certifications (or equivalent industry certifications):

- Access (any level)
- PowerPoint (any level)

Recommended Additional Competency Testing:

- Microsoft Office
- Customer Assistance

Administrative Technologies II - Course Syllabus
- Listening Skills
- MS Outlook
- Filing
- Data Entry/10-key

**Recommended Certifications:** Microsoft Office Specialist
Course Number: 8169 (OHLAP Approved)  
Course Title: Fundamentals of Technology  
Course Length: 120 hours  
Instructor: Tracie Spencer  
Career Clusters: Business, Management and Administration; Finance; Information Technology; and Marketing Sales and Service

Course Description: This course will provide students with the fundamental concepts, principles, and ideas needed to understand how business is operated and managed in a rapidly changing global environment, which is needed for success in business-related careers. This course also provides job readiness skills and soft skills that are critical for success in any workplace setting.

Specific Learning Competencies — The Duty Task List below is the broad topics of the course.  
Upon successful completion of this course, the student will be able to:

- Categorize types of computers based on their size, power and purpose
- Identify types of microcomputers
- Identify other types of computing devices
- Identify the role of the central processing unit
- Identify how the speed of the microprocessor is measured
- Identify the role of types of memory and storage and the purpose of each, including RAM, ROM and CD ROMs
- Identify concepts related to how memory is measured, including bits, bytes and megabytes
- Identify the flow of information between storage devices (such as floppy or hard disks) to the microprocessor and RAM in relation to everyday computer operations
- Identify the differences between large systems and desktop computers and appropriate uses for large vs. small systems
- Identify that computers integrate into larger systems in a variety of ways
- Identify how computers share data, files, hardware and software

Duty B: Identify the Function of Computer Hardware Components
- Identify the types and purposes of external computer components, including standard input and output devices
- Identify the types and purposes of internal computer components
- Identify the types and purposes of specialized input devices (e.g. digital cameras and touch screens)
- Identify the types and purposes of specialized output devices (e.g. projectors)
- Identify the types and purposes of storage media (e.g. DVDs and network drives)
- Identify ports used to connect input and output devices to a computer (e.g. USB ports and Ethernet ports)
- Identify how hardware devices are installed on a computer system

Duty C: Identify the Factors That Go Into an Organizational Decision on How to Purchase Computer Equipment
- Identify criteria for selecting a personal computer
- Identify factors that affect computer performance
- Identify hardware and software considerations when purchasing a computer
- Identify other factors that go into decisions to purchase a computer including warranties and support agreements
Duty D: Identify How to Maintain Computer Equipment and Solve Common Problems Relating to Computer Hardware
- Identify how to protect computer hardware from theft or damage
- Identify factors that can cause damage to computer hardware or media (e.g., heat and humidity)
- Identify how to protect computer hardware from fluctuation in the power supply, power outages and other electrical issues
- Identify common problems associated with computer hardware such as inoperable hardware devices
- Identify common problems that can occur if hardware is not maintained properly
- Identify maintenance that can be performed routinely by users such as cleaning and defragmenting hard drives
- Identify maintenance that should ONLY be performed by experienced professionals
- Identify the steps required to solve computer-related problems

Duty E: Identify How Software and Hardware Work Together to Perform Computing Tasks and How Software is Developed and Upgraded
- Identify how hardware and software interact
- Identify simple terms and concepts related to the software development process
- Identify issues relating to software upgrades such as pros and cons and methods to upgrade

Duty F: Identify Different Types of Software, General Concepts Relating to Software Categories, and the Tasks to Which Each Type of Software is Most Suited or Not Suited
- Identify fundamental concepts relating to word processing and common uses for word processing applications
- Identify fundamental concepts relating to spreadsheets and common uses for spreadsheet applications
- Identify fundamental concepts relating to presentation software and common uses for presentation applications
- Identify fundamental concepts relating to databases and common uses for database applications
- Identify fundamental concepts relating to graphic and multimedia programs and common uses for graphic or multimedia software
- Identify the types and purposes of different utility programs
- Identify other types of software
- Identify how to select the appropriate application(s) for a particular purpose, and problems that can arise if the wrong software product is used for a particular purpose

Duty G: Identify What an Operating System Is and How It Works, and Solve Common Problems Related to Operating Systems
- Identify the purpose of an operating system and the difference between operating system and application software
- Identify different operating systems including DOS, Windows and Macintosh
- Identify the difference between interacting with character-based and graphical operating systems
- Identify the capabilities and limitations imposed by the operating system
- Identify and solve common problems related to operating systems

Duty H: Manipulate and Control the Windows Desktop, Files and Disks
- Identify elements of the Windows desktop
- Manipulate windows such as minimizing windows
- Shut down, Logoff and restart the computer
- Use the Windows Start menu and Taskbar
- Manipulate desktop folders and icons
- Manage files using the Windows Explorer/File Manager
- Identify precautions one should take when manipulating files including using standardized naming conventions
- Solve common problems associated with working with files

**Duty I: Identify How to Change System Settings, Install and Remove Software**
- Display control panels
- Identify different control panel settings
- Change simple control panel settings such as date and time settings
- Display and update a list of installed printers
- Identify precautions regarding changing system settings
- Install software including installing updates from online sources
- Identify common problems associated with installing and running applications

**Duty J: Be Able to Start and Exit a Windows Application and Utilize Sources of Online Help**
- Start a Windows application
- Exit a Windows application
- Identify and prioritize help resources, including online help within software and contacting a help desk
- Use various forms of automated help

**Duty K: Identify Common On-Screen Elements of Windows Applications, Change Application Settings and Manage Files Within an Application**
- Identify on-screen elements common to Windows applications (e.g. menus, toolbars and document windows
- Display or hide toolbars
- Switch between open documents
- Change views
- Change magnification levels
- Create files
- Open files within an application and from the Windows desktop, identify file extensions including .xls or .doc
- Save files in specified locations/formats
- Close files
- Identify and solve common problems relating to working with files (e.g. product or version incompatibility)

**Duty L: Perform Common Editing and Formatting Functions**
- Navigate around open files using scroll bars, keyboard shortcuts, etc.
- Insert text and numbers in a file
- Perform simple editing (e.g. cut, copy and move information)
- Use the Undo, Redo and Repeat commands
- Find information
• Replace information
• Check spelling
• Perform simple text formatting
• Insert pictures into a file
• Modify pictures in a file
• Add drawn objects into a file, including creating and modifying objects

Duty M: Perform Common Printing Functions
• Format a document for printing
• Preview a file before printing
• Print files, specifying common print options
• Manage printing and print jobs
• Identify and solve common problems associated with printing

Duty N: Be Able to Format Text and Documents Including the Ability to Use Automatic Formatting Tools
• Identify on-screen formatting information, including breaks, paragraph markers etc.
• Select word, line, paragraph, document
• Change line and paragraph spacing
• Insert text
• Create and modify bulleted and numbered lists
• Use outline structure to format a document
• Insert symbols/special characters
• Insert date and time
• Insert, view and print document comments
• Display the ruler
• Use tabs
• Insert and delete a page break or section break
• Insert, modify and format page numbers
• Create, modify and format headers and footers
• Create, modify and format footnotes and endnotes
• Apply borders and shading to text paragraphs
• Create, modify and apply styles
• Copy formatting (Format Painter)
• Use language tools
• Use track changes in a document
• Display document statistics

Duty O: Be Able to Insert, Edit and Format Tables in a Document
• Create a table
• Insert and edit data in a table
• Modify table structure
• Format tables
• Sort data in a table
Duty P: Be Able to Modify Worksheet Data and Structure and Format Data in a Worksheet
- Identify how a table of data is organized in a spreadsheet
- Select information with the keyboard and mouse including selecting rows, columns and worksheets
- Insert and modify data
- Modify table structure
- Identify and change number formats, including currency, date and time and percentage formats
- Apply borders and shading to cells
- Specify cell alignment (e.g. wrapping text within a cell)
- Apply table AutoFormats

Duty Q: Be Able to Sort Data, Manipulate Data Using Formulas and Functions and Add and Modify Charts in a Worksheet
- Sort worksheet data
- Demonstrate an understanding of absolute vs. relative cell addresses
- Insert arithmetic formulas into worksheet cells
- Demonstrate how to use common worksheet functions (e.g. SUM, AVERAGE and COUNT)
- Insert formulas that include worksheet functions into cells
- Modify formulas and functions
- Use AutoSum
- Identify common errors made when using formulas and functions
- Draw simple conclusions based on tabular data in a worksheet
- Insert and modify charts in a worksheet
- Be able to identify if a presented chart accurately represents worksheet data shown in a table
- Identify appropriate chart types for presenting different types of information

Duty R: Be Able to Perform Basic Database Operations
- Design/modify a database
- Open options
- Print options
- Add/delete/edit records
- Create reports/forms using calculated fields
- Close database/exit program
- Perform queries

Duty S: Demonstrate Knowledge of Graphics Software
- Vector objects
- Lines and curves
- Fills, blends and gradients
- Front/back layering
- Text manipulation
- Bitmap/jpeg images
- Paint effects
- Paintbrush type, shade and ink
- Area textures and patterns
• Selective image manipulation
• Photo-image processing
• File format conversion
• Animation

Duty T: Be Able to Create and Format Simple Presentations
• Identify effective design principles for simple presentations
• Manage slides (e.g. delete a slide)
• Add information to a slide
• Change slide view
• Change slide layout
• Modify a slide background
• Assign transitions to slides
• Change the order of slides in a presentation
• Create different output elements (speaker’s notes, handouts, etc.)
• Preview the slide show presentation
• Navigate an on-screen slide show

Duty U: Identify Network Fundamentals and the Benefits and Risks of Network Computing
• Identify terminology relating to telecommunications, networks and the Internet
• Identify types of networks
• Identify how networks work
• Identify benefits of networked computing
• Identify the risks of networked computing
• Identify fundamental principles of security on a network

Duty V: Identify the Relationship Between Computer Networks, Other Communications Networks (Like the Telephone Network) and the Internet
• Identify the different ways the telephone system is used to transmit information
• Identify that telecommunication devices such as modems convert information from analog to digital and digital to analog formats
• Identify the units used to measure data transmission rates
• Identify the Internet as a “super network” of smaller computer networks and that computers connect to the Internet via the “onramp” of a smaller computer network
• Identify the hardware and software required to connect to the Internet
• Identify different types of Internet connections and the advantages and disadvantages of each connection type
• Identify the roles and responsibilities of an Internet Service Provider (ISP)

Duty W: Identify How Electronic Mail Works
• Identify how electronic mail works on a network and on the Internet
• Identify the components of an electronic mail message
• Identify the components of an electronic mail address
• Identify when to use different electronic mail options
• Identify different ways electronic mail is accessed
• Identify the difference between standard electronic mail and other forms of messaging, such as paging or Instant Messaging

Duty X: Identify How to Use an Electronic Mail Application
• Read and send electronic mail messages
• Identify ways to supplement a mail message with additional information
• Manage attachments
• Manage mail
• Manage addresses
• Identify the purpose of frequently used mail-configuration options

Duty Y: Identify the Appropriate Use of E-mail and E-mail Related “Netiquette”
• Identify the advantages of electronic mail
• Identify common problems associated with electronic mail
• Identify the elements of professional and effective e-mail messages
• Identify when other forms of correspondence are more appropriate than e-mail
• Identify when to include information from an original e-mail message in a response as a method of tracking the “history” of e-mail communication
• Identify appropriate use of e-mail attachments and other supplementary information
• Identify issues regarding unsolicited e-mail (“spam”) and how to minimize or control unsolicited mail
• Identify effective procedures for ensuring the safe and effective use of electronic mail

Duty Z: Identify Different Types of Information Sources on the Internet
• Identify terminology related to the Internet
• Identify the purpose of a browser in accessing information on the World Wide Web
• Identify different elements of a Web site by their extensions, and the purposes of different types of sites
• Identify the difference between secure and unsecure Web sites (such as password-protected sites or sites secure for online transactions) and how to tell if a Web site is secure
• Identify different ways of communicating and corresponding via the Internet

Duty AA: Be Able to Use a Web Browsing Application
• Identify the make-up of a Web address/Uniform Resource Locator (URL)
• Navigate the Web using a browser
• Reload/Refresh the view of a Web page
• Show a history of recently visited Web sites and delete the list of recently visited Web sites
• Find specific information on a Web site
• Manage Bookmarked sites/Favorite sites
• Save the content of a Web site for offline browsing
• Copy elements of a Web site including copying text or media to another application
• Print all or specified parts of a Web site
• Download a file from a Web site to a specified location
• Identify settings that can be modified in a Web browser application
• Identify problems associated with using a Web browser

Duty BB: Be Able to Search the Internet for Information
- Identify the ways a search engine classifies and looks for Web sites
- Identify other ways of searching for information on the Web
- Use a search engine to search for information based on specified keywords
- Search effectively
- Identify issues regarding the quality of information found on the Internet
- Identify how to evaluate the quality of information found on the Web

**Duty CC: Identify How Computers Are Used in Different Areas of Work, School and Home**
- Identify how computers and the Internet are used to collect, organize, and evaluate information and promote learning
- Identify the technology and processes involved with computers operating “behind the scenes” in everyday activities
- Identify the impact of electronic commerce (e-commerce) on business, individuals and governments
- Identify technologies that support or provide opportunities to the disabled and disadvantaged such as voice recognition

**Duty DD: Identify the Risks of Using Computer Hardware and Software**
- Identify how to maintain a safe working environment that comply with legal health and safety rules
- Identify injuries that can result from the use of computers for long periods of time
- Identify risks to personal and organizational data
- Identify software threats, including viruses and WORMS

**Duty EE: Identify How to Use Computers and the Internet Safely, Legally, Ethically and Responsibly**
- Identify reasons for restricting access to files, storage devices, computers, networks, and certain Internet sites
- Identify concepts related to intellectual property laws including copyrights, trademarks and plagiarism
- Identify the principles regarding when information can or cannot be considered personal, including the difference between computer systems owned by schools or businesses that may have rules and guidelines as to who owns data stored on the system, and computers owned by individuals
- Identify how to avoid hazards regarding electronic commerce, including giving credit card information only to secure sites
- Identify how to protect privacy and personal security online, including understanding how Web sites track your activity online using “cookies” and other “behind-the-scenes” systems, licensing agreements
- Identify how to find information about rules regarding the use of computers and the Internet, including laws, use policies at school, and company guidelines at places of employment
- Identify how to stay informed about changes and advancements in technology
- Identify how to be a responsible user of computers and the Internet

**Duty FF: Conducting a Podcast**
- Plan a podcast
  - Topic
  - Format
    - Number of hosts
    - How many segments and what type of segment
    - Length of podcast
    - Frequency of new podcasts
    - Bandwidth concerns

Fundamentals of Technology – Course Syllabus
Music within the podcast
Intros (theme song)
Transitions between segments
Copyright issues
  o Selecting a podcast recording location
    Quiet and free from distractions
    Consider sound quality (free from echoes, reverberation, etc.)

• Produce the podcast
  o Consider appropriate hardware/software needs:
    A PC with appropriate operating system, RAM, hard drive and sound card
    Microphone input and headphone output on your computer
    Headphones or headset
    Broadband internet connection
    Audio recorder and editor
    MP3 encoder
    Media Player
    File transfer software
    Optional: MP3 player
    Optional: Pop filter
  o Prepare the podcast episode
    Create an outline
    Write a script
    Collect and organize information and audio clips
  o Record the podcast
    Edit
• Publish the podcast to the internet
  o Register a Web Address
  o Find/buy web hosting
  o Start a blog
  o Create an RSS Feed
• Promote the podcast

Duty GG: Understand the place and benefits of handheld computers in the field of computer technology
• Learn the basic skills necessary to start using handheld computers
• Identify the hardware and software that extend the power of a handheld computer
• Demonstrate knowledge of common handheld features
  o Menu area
  o Categories
  o Home/Launcher
  o Hard buttons
  o Soft buttons
  o Navigator
  o Stylus
• Identify common applications across all models of handhelds
  o Calendar
  o Contacts
  o Memos
  o Tasks

• Identify various methods of entering text
  o Soft keyboard
  o Software
  o Synchronizing with desktop software
  o Infrared beaming
  o Bluetooth
  o External keyboard

• Demonstrate basic skills with the Calendar application
  o Launch the Calendar application
  o Switch between views (agenda, day, week, month, year)
  o Change the day view
  o Open any date
  o Make an appointment
  o Change appointment time and/or date
  o Open phone lookup
  o Demonstrate use of details dialog
    Use details to reschedule an appointment
    Use details to delete an appointment
    Repeat events
    Create alarms
    Attach a note to an appointment
  o Demonstrate use of menus
    Purge old events
    Beam events
    Set preferences

• Demonstrate basic skills with the Contacts application
  o Launch Contacts application
  o Add an entry
  o Customize an entry
  o Create categories
  o Look up an entry
  o Edit an entry
  o Creating and beaming an eBusiness card
  o Beam a category of contacts

• Demonstrate basic skills with the Memos application
  o Launch the Memos application
  o Create a memo
  Create a blank memo
Add the title
Categorize the memo
Complete the memo
Navigate through a memo
  • Edit text
    Select text
    Edit with menu commands or by use of the command bar
  • Create private records
    Mark an individual item as private
    Mask or hide a private item from view
    Mark a record as private
    Set current privacy
    View a masked item
  • Establish system security
    Set a password for the handheld
    Set current privacy
    Set when the handheld auto locks
  • Use the functions of the memos menu
    Delete, sort, and beam (single and category) memos
    Set font size preference

• Demonstrate basic skills with the Tasks application
  • Launch the Tasks application
  • Create a new task
    If needed, set priority
    If needed, attach a note
    Enter text
    Complete task entry
  • Create a details dialog box
    Use details to gain control over tasks
    Delete individual tasks
  • Set preferences
    Customize the tasks list
  • Use the functions of the Tasks menu
    Purge completed tasks
    Beam a task or a category of tasks
    Set font size preferences

Duty III: Demonstrate Knowledge of Geographic Information Systems (GIS)
• Define a Geographic Information System and it's possible uses
  • GIS is the software that organizes, analyzes, and maps the geospatial data
  • Possible uses include:
    Scientific investigations
    Resource management
    Development planning
• Demonstrate understanding of the technologies used in geographic inquiry (e.g., Geographic Information Systems)
Systems (GIS, hypermedia)

- Demonstrate an understanding of the methods used to collect, organize, manipulate, and interpret geographic data
  - Spatial/geospatial relationships
- Select and use appropriate technology (e.g., computer-generated maps, graphs, air photos, digital maps) to present geographic information
- Create and use effectively photographs, charts, graphs, models, and diagrams; use different types of maps (e.g., road, topographical, thematic) to interpret geographic relationships, including changes over time in a specific location.
- Use cartographic conventions correctly when describing/constructing maps. (e.g., scale, legend, directions)
- Demonstrate the ability to make observations and collect data in the field
- Identify selected physical features on the earth’s surface (e.g., mountains, rivers, deserts) from different sources (e.g., maps, aerial photographs, satellite images, geographic imaging systems).
- Produce and interpret maps, diagrams, charts, and models.
- Use remote sensing imagery, maps, global positioning systems, and geographic information systems to measure conditions on the ground (e.g., health of vegetation).
- Define meridians and parallels and explain geographic coordinates (latitude and longitude) and rectangular coordinates (x,y)
- Identify important map projections and describe their main properties.
- Demonstrate an understanding of the concept of scale and the distinctions between large and small scale and between data scale and display scale.
- Demonstrate an understanding of the ArcGIS software
  - ArcReader
  - ArcView
  - ArcEditor
  - ArcInfo
- Describe the use of geotechnologies, especially GIS, for such business-related purposes as marketing and advertising, vehicle routing, site selection, and redistri...
- Differential GPS
- Carrier-phase GPS

- Identify uses of GPS technology
  - Location
  - Navigation
  - Tracking
  - Mapping
  - Timing

- Identify GPS competitors
  - GLONASS
  - Galileo

**Duty JJ: Demonstrate Knowledge of a Content Management System (CMS)**

- Define the purpose and features of a Content Management System (CMS)
  - Adds and/or manipulates content on a Web site
  - Web-based
  - Format management
  - Revision control
  - Indexing
  - Search and retrieval

- Identify the two primary elements of a CMS
  - Content Management Application (CMA)
  - Content Delivery Application (CDA)

- Define the purpose of the CMA
  - Allows the content manager or author, who may not know HTML, to manage the creation, modification, and removal of content from a Web site without needing the expertise of a Webmaster

- Define the purpose of the CDA
  - Uses and compiles information to update the Web site

**Duty KK: Demonstrate Knowledge of a Learning Management System (LMS)**

- Define the purpose of a Learning Management System (LMS)

- Identify the characteristics of a LMS:
  - Manages users, roles, courses, instructors, and facilities
  - Generates reports
  - Maintains course calendar
  - Learner messaging and notifications
  - Assessment/testing capability
  - Grading of coursework and roster processing, including waitlisting
  - Web-based or blended course delivery

- Develop a LMS
  - Modify the course menu
  - Input text and upload content into the course
  - Create and participate in an asynchronous threaded discussion
  - Utilize the assignment tool to circulate and collect information
  - Build and deploy a simple test
• Navigate the LMS
  o Differentiate between system and course roles
  o Create, manage, and remove user accounts and courses
  o Designate the availability status of system-wide tools and utilities
  o Establish a default institution brand
  o Perform timely user and course maintenance
  o Secure the application

Duty LL: Demonstrate Digital Video Literacy
• Define and state the skills needed for Digital Video Literacy
  o Critically evaluate digital visual materials (2D and 3D, static and moving)
  o Make decisions using digital visual representations of data and ideas
  o Create effective visual communications with computers
• Create a visual display of information using presentation software
• Design a word processing document using typography and visuals
• Create a spreadsheet document with charts and graphs
  o Define the purpose of the chart (influence vs. inform)
  o Charts and graphs should:
    Present the true picture
    Influence decisions
    Select the type of chart or graph that will give a clear picture
    Clarify the meaning of the data
  o Charts are computer graphics and the following design principles should be applied:
    Contrast
    Repetition
    Alignment
    Proximity
• Identify the importance of Digital Video Literacy in blogs.

Duty MM: Demonstrate Knowledge of Web Accessibility
• Define Web Accessibility and demonstrate understanding of the basic requirements set forth by the World Wide Web Consortium (W3C) and the Web Accessibility Initiative (WAI)
• Demonstrate understanding that Web Accessibility may involve corporate or local, state, and/or Federal government requirements.
• Demonstrate understanding that Web accessibility includes:
  o Web sites and applications:
    that people with disabilities can perceive, understand, navigate, and interact with
  o Web browsers and media players:
    that can be used effectively by people with disabilities
    that work well with assistive technologies that some people with disabilities use to access the Web
  o Web authoring tools and evolving technologies:
    that support production of accessible Web content and Web sites
    that can be used effectively by people with disabilities
• Identify the essential components of Web Accessibility
  o Content
  o Web browsers, media players and other "user agents"
  o Assistive technology
  o User's knowledge, experiences, and in some cases, adaptive strategies using the Web
  o Developers
  o Authoring tools
  o Evaluation tools
• Demonstrate knowledge of key concepts of accessible Web design
Images and animations
  use the alt attribute to describe the function of each visual
Image maps
  use the client-side map and text for hotspots
Multimedia
  provide captioning and transcripts of audio and descriptions of video
Hypertext links
  use text that makes sense when read out of context. For example, avoid "click here"
Page organization
  use headings, lists, and consistent structure. Use CSS for layout and style where possible
Graphs and charts
  summarize or use the longdesc attribute
Scripts, applets, and plug-ins
  provide alternative content if active features are inaccessible or unsupported
Frames
  use the noframes elements and meaningful titles
Tables
  make line-by-line reading sensible (summarize)
Validate
  use tools, checklist, and guidelines at http://www.w3.org/TR/WCAG/

Duty NN: Demonstrate Understanding of Digital Media
  • Define Digital Media and identify different areas of concentration within Digital Media
    o Game design/programming
    o 3D modeling
    o Web design/programming
    o Digital audio
    o Video editing
  • Demonstrate knowledge of film and digital media
    o Digital media principles
    o Foundations of story
    o Cinematic expression/aesthetics
    o Script analysis
    o Foundations of production
  • Demonstrate knowledge of “visual language” (the language of moving image, animation, and cinematic visual effects)
    o Drawing fundamentals
    o Concepts of computer science
    o Study of moving images
    o Artificial environments and effects
    o Artificial characters
    o Visual storytelling and development
    o Writing for digital media
    o Production process
    o Production software
    o Digital imagery (generating and manipulating)
    o Digital audio
    o Sound design
    o Internet interaction
    o Modeling
    o Media design
    o Game design
Duty OO: Demonstrate Knowledge of Security Awareness

- Explain the roles of security policies, standards, guidelines, and procedures.
- Examine the general security concepts and relationships as outlined in the Common Criteria
- Describe the concepts of confidentiality, integrity, availability, identification, authentication, authorization, accountability, and non-repudiation
- Define and explain the roles of prevention, detection, and response in cyber security
- Compare and contrast issues associated with host, network, and physical security
- Discuss layered defense-in-depth components and strategies
- Identify and define methods of hardening a computer host (limiting services, securing default configurations, disabling/renaming default accounts, privilege...
- Limited accounts and processes, cryptography, operating system and application patching, host firewall configuration, anti-malware definition updates and scanning)
- Identify and define methods of hardening a computer network (protecting access to sensitive data through the use of zoned firewalls, proxy servers, virtual private networks, access controls)
- Identify and describe common security threats and mitigation techniques, including physical (utilities, environmental, access), malware (Trojans, rootkits, viruses, spyware scripting languages, keyloggers), Internet (browser, e-mail), and social engineering exploits (password compromise, phishing, piggy-backing, dumpster diving discarded media and hard drives)
- Compare and contrast typical attacker profiles (hackers, script kiddies, spies, thieves, insiders, cyber terrorists)
- Identify and discuss contemporary attack styles (DoS, zombies, botnets, MITM, hijacking and spoofing, sniffing)
- Identify and discuss contemporary cyber security issues and related legislation (identify theft, corporate espionage, cyber warfare)
- Identify and discuss typical user behaviors contributing to cyber security issues (connecting to sites where attacks are more prevalent, including e-commerce and social-networking portals, taking phishing links, failing to verify certificates, failing to employ host and network security)
- Identify and discuss components and strategies of disaster recovery, business continuity, and incident response plans

Duty PP: Demonstrate Knowledge of Leadership

- Identify leader characteristics
  - Ethics
  - Intelligence
  - Judgment
  - Objectivity
  - Initiative
  - Take ownership of situations
  - Dependability
  - Cooperation
  - Honesty/Integrity
  - Courage
  - Confidence
  - Stability
  - Understanding
  - Creativity
  - Teamwork
  - Responsibility
  - Flexibility

Fundamentals of Technology — Course Syllabus
• Identify leadership styles
• Identify professional and community organizations
  o Student organizations
  o Civic organizations
  o Professional organizations
  o Social organizations
• Participate in student organization activities and various projects on the local, state, and national levels

Duty QQ: Complete an Employment Process
• Set occupational objectives such as
  o Entrepreneurship
  o Self-employment
  o Full-time
  o Part-time
• Compose a letter of application
• Create a resume
  o Hard copy
  o Electronic format
• Create a portfolio
  o Hard copy
  o Electronic format
• Review potential interview questions and techniques
• Formulate responses to simulated situations
  o Mock interview
  o Prepare questions for prospective employers
• Participate in job interview
  o Job interview etiquette
  o Application form
  o Appropriate dress
  o Submit an original copy of resume
  o Research company history
• Complete post-interview activities
  o Follow-up thank you letter
  o Follow-up inquiry call
• Demonstrate knowledge of available employment services
  o Online searches
  o Private
  o State
  o Federal
• Complete job acceptance
  o Negotiate salary
  o Negotiate benefits
  o Complete benefits forms
• Discuss legal issues
• Drag screen
• Discrimination
• Harassment
• Compare and evaluate career and training opportunities
  • Networking
  • Professional organizations
  • Educational requirements
  • Salaries
  • Projected labor market
  • Career/job ladder
  • Self-initiative
  • Transfer skills
  • Flexibility
  • Major functions of a company and job levels within these functions
• Demonstrate knowledge of resignation, termination, and exit interview practices

Instruction: 30 Hours Theory
80 Hours Lab
10 Hours Certification Preparation and Attainment

Methods of Instruction include:
Lectures, class discussions, hands-on training, demonstrations, projects and performance evaluation

Course Textbooks and Instructional Resources:
• Shelly Cashman Series. Microsoft Office 2010 (Introductory, Advanced, Post-Advanced)

Online Instructional Resources:
• Skills Assessment Manager Online Training/Testing (SAM) by Cengage Learning
  www.sam2010.course.com
• Office 2010 Shelly Cashman Online Resources www.sesite.com/office2010
• GCF Learn Free www.gflearnfree.org

Grading Scale:
Exams − 40%
Projects/Assignments − 30%
Attendance/Performance/Time Management − 30%

Alliance Credit Offered: OSU Institute of Technology
Rose State College

Required Certifications: (select one from the following options)

• ODCTB (choose one):
  • Fundamentals of Technology or
  • Business and Computer Technology/ OD30901 (All Core Duties)

• Industry:
  • IC³ Certifications (Duties A-F)
• Brainbench (choose one):
  o Computer Fundamentals or
  o Computer Literacy (Duties A-F)