Developing an articulation agreement with the
University of Northwestern Ohio’s,
Colleges of Business, Health Professions, and Occupational Professions

**Step One- Exploration:** Examine the UNOH course descriptions, requirements, and learning outcomes (listed below) of the courses we currently offer for articulated credit and determine if your high school has a program/course or combination of courses that meet these articulation requirements and learning outcomes.

**Step Two- Documentation:** Complete a Course Equivalency Sheet indicating the high school program/course or course combination which matches the UNOH course articulation requirements and learning outcomes.

Note: To request the articulation of a 100 level, UNOH course not on the approved list, complete and send to the UNOH articulation contact listed below, a Course Equivalency Documentation form with your attached learning outcomes, and either a copy of the final exam, which covers the entire course, or copies of exams assessing the complete course. University faculty and administrators will evaluate the course documentation for articulation approval. Questions, clarifications, etc... will be channeled through the UNOH contact person.

**Step Three- Evaluation:** Send the completed Course Equivalency Sheet and high school course description information; include syllabi if possible, to the articulation contact listed below. These documents allow UNOH to create an articulation agreement based on your high school’s college level offerings.

**Step Four- Signing:** A three-year duration articulation agreement, listing the approved courses, will be sent to the secondary school for administrator signing. The signed document is to be returned to UNOH for signing by the Vice President of Academic Affairs and Provost. A copy of the agreement, signed by both parties, will be mailed to the secondary school.

Articulation Contact:

College Credit Plus
University of Northwestern Ohio
Attention: Admissions- College Credit Plus
1441 N. Cable Road
Lima, OH 45805
ccp@unoh.edu
University of Northwestern Ohio
Articulated Courses: Descriptions, Requirements, and links to Learning Outcomes

AC114 Accounting I (5 credits)
Students receive a basic knowledge in double-entry accounting theory. Instruction will be given in journalizing and posting accounts, periodic adjustments, closing entries, statement preparation, special journals, and cash controls.

Requirement: Two years of accounting with a B or better in each accounting course. AC111 Learning Outcomes

AG106 Agribusiness Fundamentals (3 credits)
Students should learn the methods and procedures used by agribusiness in decision making. The scope, personal characteristics, and skills used in agribusiness will be taught.

3.0 or better in one year of Ohio Agricultural and Environmental Systems course Business Management for Agricultural and Environmental Systems, plus score 70% or higher on the Webxam end of course exam. Send a copy of the student's Webxam results to document a 70% or higher score.

AG106 Learning Outcomes

BU120 Introduction to Business (3 credits)
Students should develop an understanding of the broad areas of activity known as business. A vocabulary of terms, the varied careers available in the business world and an understanding of the methods and procedures used by business in decision making will be discussed.

Requirement: Graduated from a high school business program with a GPA of 3.0 in business courses and meet learning outcomes.

BU120 Learning Outcomes

DM121 Web Page Design Concepts (3 credits)
HTML documents are a major component of the WWW on the Internet as well as Electronic Commerce web sites. Students will learn how to develop web pages for use on the Internet or on an Intranet for organizations that are using HTML. Students will use various HTML test editors to enhance and create dynamic HTML web pages

Requirement: Graduate of a digital multimedia curriculum, a GPA of 3.0 or better in DP courses and meet learning outcomes. Student must also pass a UNOH course proficiency test. Dm121 Learning Outcomes

DM125 Graphic Imaging (3 credits)
This course will give the students the skill necessary to select and manipulate images. Students will develop skills in proper color modes, resolution, DPI, and image optimization. Students will also learn about file types and what their purposes are. Further discussion will include creating work that is easily edited in the future. Software: PhotoShop CS5

Requirement: Graduate of a digital multimedia curriculum (with this specific course and version), a GPA of 3.0 or better in DP courses and meet learning outcomes. Student must also pass a UNOH course proficiency test. DM125 Learning Outcomes

DM180 Applied Digital Drawing (3 credits)
The student will explore the fundamentals of digital art design, creation, and manipulation. Students will create artwork, such as logo, for various media in a digital format using drawing design skills and software of the digital drawing trade. Illustrator CS 5 software.

Requirement: Graduate of a digital multimedia curriculum (with this specific course and version), a GPA of 3.0 or better in DP courses and meet learning outcomes. Student must also pass a UNOH course proficiency test. DM180 Learning Outcomes
DM190 Interactive Graphic Animation (3 credits)
This course covers the basics of creating interactive and animated presentations utilizing graphics, sound and video. The basic scripting techniques learned will be used to create vector tweens and frame-by-frame animation. These interactive presentations will be incorporated into web pages. Flash CS 5 software.

Requirement: Graduate of a digital multimedia curriculum (with this specific course and version), a GPA of 3.0 or better in DP courses and meet learning outcomes. Student must also pass a UNOH course proficiency test. DM190 Learning Outcomes

DP117 Database Applications (3 credits)
The concepts of relational databases and their manipulation will be presented. Microsoft Access is used to illustrate relational database concepts. The application of relational databases to typical business problems, especially on microcomputers in small businesses, is extensively discussed. (This course provides preparation for Microsoft® Application Certification Testing.) Students taking this course via Virtual College must have access to a computer with appropriate software installed.

Requirements: Graduate of a data processing curriculum (with this specific course and in Office 2007 or 2010), a GPA of 3.0 or higher in DP courses and meet learning outcomes. Student must also pass a UNOH course proficiency test. DP117 Learning Outcomes

DP150 Spreadsheet Applications (Microsoft Excel 2010) (3 credits)
This introductory course exposes students to a wide variety of fundamental electronic spreadsheet operations and functions through business related applications. (This course provides preparation for Microsoft® Application Certification Testing.) Students taking this course via Virtual College must have access to a computer with appropriate software installed.

Requirement: Two years in a business program with 3.0 or better in program grades, use of MS Office 2007 or 2010 and meet learning outcomes. Student must also pass a UNOH course proficiency test. DP150 Learning Outcomes

DP155 Developing Business Presentations (5 credits)
In this course students develop audio-visual business presentations using Microsoft PowerPoint. The course begins with introductory software instruction, continues with the completion of practice presentations and finishes with the development of a comprehensive presentation utilizing the full range of features available in the software. (This course provides preparation for Microsoft® Application Certification Testing.) Students taking this course via Virtual College must have access to a computer with appropriate software installed.

Requirement: Two years in a digital multimedia program with 3.0 or better in program grades, use of MS Office 2007 or 2010 and meet learning outcomes. Student must also pass a UNOH course proficiency test. DP155 Learning Outcomes

DP175 Software Applications (Previously IT114) (3 credits)
This is an introductory course in the use of Microsoft Word, Excel, and PowerPoint. Students will be introduced to the Word functions of creating, editing, and formatting documents and tables. The students will also be introduced to PowerPoint functions of slide layouts, applying themes, inserting media objects, adding animations, transitions, pictures, and videos. This course continues with the completion of exposing students to a wide variety of fundamental electronic spreadsheet operations and functions through business-related applications.

Requirements: Graduate of a data processing curriculum and a GPA of 3.0 or better in DP courses, meet learning outcomes. Student must also pass a UNOH course proficiency test. DP175 Learning Outcomes
KY146 Keyboarding I (5 credits)
Students are given a review of the keyboard and are introduced to vertical and horizontal centering, tables, placement and style of letters, reports and memoranda.

Requirement: Two years of keyboarding with 3.0 or better in the typing courses and meet learning outcomes. Student must also pass a UNOH course proficiency test.
KY146 Learning Outcomes

MO120 Medical Terminology I (3 credits)
A vocabulary course for students enrolled in the medical field. It is designed to aid in the spelling, definition and pronunciation of the terminology related to human anatomy/pathophysiology.

Requirement: Graduate of a medical program with a GPA of 3.0 or better in medical courses and meet learning outcomes. Students cannot articulate MO163 and MO140 together. MO163 required in Medical Office Management major. MO163 Learning Outcomes

MO134 Human Anatomy, Pathophysiology, and Terminology I (3 credits)
Students are introduced to the medical language. The course begins with a strong emphasis on the division of words into prefixes, root words, suffixes and building medical words from these components as well as learning the definitions. This course encourages active student participation in the learning process through regular class discussion and written textbook assignments. Introduction to human anatomy begins at the cellular level through tissues, organs and systems. The digestive system, including structure and function, related disease processes, clinical procedures and tests, and medical terminology are discussed.

Requirement: Graduate of a medical program with a 3.0 or better in program grades and meet learning outcomes. Students cannot articulate MO163 and MO140 together. MO140 required in Medical Assistant Technology major. MO140 Learning Outcomes

MO137 Clinical I (3 credits)
This course is an introduction to the profession and practices of a Medical Assistant. Legal, moral, and ethical issues related to the medical field, as well as patient education, are discussed. Emphasis on universal precautions and aseptic procedures are included. Clinical competencies are practiced and evaluated in the clinical lab. Relevant patient/family education and documentation are emphasized.

Requirements: Graduate of a medical program with a 3.0 or better in program grades and meet learning outcomes. MO164 Learning Outcomes

OP149 Records Management (3 credits)
Students will study the principles and procedures of records storage, retrieval and disposition. The filing methods introduced include: alphabetic, numeric, geographic, subject and chronologic. Manual and computerized simulation projects will be completed.

Requirement: Graduate of a business office program with a 3.0 or better in program grades, completion of a records management simulation that uses ARMA records management rules, principles and rules for indexing, coding, cross-referencing, and storing (filing) of documents, retrieval of documents from files, the principles and rules for Alphabetic, numeric and subject filing, plus meet learning goals and course objectives highlighted in learning outcomes file. OP149 Learning Outcomes
WP138 Introduction to Word Processing Applications (3 credits)
This is an introductory course in the use of Microsoft Word. Students will also be introduced to Windows and file management concepts. The functions will include creating, editing and formatting documents, tables, and labels. (This course provides preparation for Microsoft® Application Certification Testing.)
Students taking this course via Virtual College must have access to a computer with appropriate software installed.

Requirement: Graduate of a business office program with a 3.0 or better in program grades, using of MS Word 2007 or 2010, meet learning outcomes and pass a UNOH proficiency test. WP138 Learning Outcomes
After two years of accounting with a B or better in each accounting course, the student will be able to:

**Manually** perform a debit/credit analysis

Journalize transactions

Post to the general ledger

And

Prepare a trail balance worksheet and financial statements.
University of Northwestern Ohio

AG106 Agribusiness Fundamentals

Students will need to complete the Ohio, Agricultural Career Pathway course, Business Management for Agricultural and Environmental Systems, with a “B” or better course grade and score 70% or higher on the Webxam end of course exam.
Course Description:
Students should develop an understanding of the broad areas of activity known as business. A vocabulary of terms, the varied careers available in the business world and an understanding of the methods and procedures used by business in decision making will be discussed. Credit Hours: 3
No prerequisite.

Course Objectives

The objective of this course shall be to make the student aware of the operations of both large and small businesses. This will allow the student to comprehend the full impact of decisions made in their workplace and how these decisions affect every aspect of the business. The course covers 7 areas for learning outcomes:

Upon completion of BU120, students will be able to do the following:

Business Environment
Define and explain business and its basic terms.
Explain the evolution of business in the U.S.
Describe different classifications of business.
Describe the five elements of the business environment.
Understand your options in the world of business in the future.

How Economics affects Business
Understand the basics of economics, including supply and demand.
Describe free-market capitalism and degrees of competition.
Understand the differences between socialism and communism.

Discuss the major indicators of economic conditions.

Business in Global Markets

Understand the importance of global trade.

Discuss the roles of comparative and absolute advantage in global trade.

Discuss the two indicators for measuring global trade.

Explain the different types of trade protections and trade agreements.

Discuss the different strategies for reaching global markets.

Explain the forces affecting trade in the global market.

Entrepreneurship and Starting a Small Business

Explain the traits of a successful entrepreneur.

Describe the alternatives to starting a business from scratch.

Discuss the legal forms of business ownership, and the advantages and disadvantages of each.

Describe the five main areas of focus when starting a small business.

Explain why businesses fail and how they succeed.

Leadership and Motivation

Understand the difference between management and leadership.

Describe the qualities of a leader and the differing leadership styles.

Understand the importance of motivation.

Describe the key principles of employee improvement theories.
Money, Financial Institutions, Securities Markets

Understand the importance of money and explain the differences between stocks and bonds.

Describe the steps in the accounting cycle and explain the different areas of accounting.

Explain how the major financial statements differ.

Explain the importance of ratio analysis in reporting financial information.

Personal Finance

Describe the importance of education in making money and six steps to developing financial discipline.

Explain the strategies for building a financial base.

Define the different types of insurance and how they can protect your financial base.

Describe strategies for effective retirement planning.
DM121 Web Page Design Concepts (3 credits)

Students should able to create and understand HTML code structure and use any basic text editor. See below for more specific requirements.

**HTML**

- File organization (all images in one folder, proper file names)
- Consistent and efficient layout/design
- Discuss the key concepts surrounding using tables and forms
- Insert and format images and apply them as a background style
- Discuss the different forms of CSS style sheets and how to apply them to HTML objects
- Creating, editing, and formatting hypertext
- Relative versus absolute paths (file locations and proper page hierarchy)
- Understand the key parts of an HTML document (head versus body)
- Create and edit map and area elements as well as all other basic HTML elements including (but not limited to) the following:
  - Empty elements
  - Containers
University of Northwestern Ohio
DM125 Graphic Imaging

DM125 Graphic Imaging (Adobe Photoshop CS-5) (3 credits)

Photoshop

- Create a new image for print, web, or video
- Change color mode (RGB, Index, CMYK, etc...)
- Remove a background from an object (put a person on a different background)
- Change colors of images (class project is to change the color of the car...just the car, not the background, windows, lights...etc...)
- Able to manage and effectively use layers (copying and building layers)
- Use layer masks
- Understand a path and how to use it
- Resize an image with the transform tool (always use the shift key)
- Adjust levels to change the lightness/darkness of an image
- Understand and effectively use the clone stamp tool.
- Understand what resolution is and how relates to the type of project you are creating/editing
- Blending Options (drop shadows, strokes, glows, etc....) to enhance text/images
- Using images from the web and stock photography...what rights you have and don’t have
- Names and uses for tools
- Must be able to use industry related tools (interpolation, pixelization, gamma, etc...)
University of Northwestern Ohio

DM180 Applied Digital Drawing

DM180 Applied Digital Drawing - Illustrator CS5

Learning Outcomes:

**Students will be able to:**

- Draw paths and basic shapes with Illustrator tools and format them with fills and strokes
- Reshape, scale, add and subtract anchor points. Average and join points, slice and dice an object for reshaping
- Create logos and complex illustrations by using custom paths, graphic styles, and special effects
- Add, format, and apply gradients to type
- Effectively use clipping masks to enhance text.
- Import graphics to enhance and edit them in Illustrator
- Export a graphic for the web
- Design an advertisement
- Create and edit Vector graphics
- Understand the implications of using resolution independent graphics
- Create and edit Bezier
- Draw with the pen tool, geometric objects, freeform objects
- Select, move, hide, lock and copy objects
- Create new documents; change artboard dimensions; change the view; navigate around your document; change and customize the view sizes
- Basic transformation and creating blends
- Understand color modes and when to use them
- How to properly use Live Trace and Live Paint
- Use create and activate layers
- Work with groups, restack layers, duplicate, and delete layers
- Properly manage, merge, and flatten, and trace images using layers
- Use, create and modifying brushes
When students complete DP117 Database Applications (using Access 2010), they will be able to:

1. **Create a new database.**

2. **Create a table**
   a. Determine what fields are necessary to convey the outcome intended for the table.
      i. Assigning an appropriate name to the field
      ii. Assigning the correct data type for the field
      iii. Assigning an appropriate primary key
   b. Maintaining a table
      i. Adding and deleting records
      ii. Adding/deleting/moving fields
      iii. Sorting records
      iv. Compact and Repair a database
   c. Using the Input Mask Wizard
   d. Using the Lookup Wizard

3. **Apply and maintain relationships between tables and queries.**
   a. One-to-many relationship
   b. One-to-one relationship

4. **Creating queries**
   a. Creating queries with Query Wizard
   b. Creating calculated fields
   c. Creating queries with aggregate functions
   d. Creating crosstab queries
   e. Creating find duplicates queries
   f. Creating unmatched queries

Continued next page
5. Creating forms
   a. Using the Form button
   b. Using the form wizard
      i. Maintaining the forms
      ii. Adding/deleting records
      iii. Sorting records
   c. Creating forms with related tables
   d. Apply conditional formatting
   e. Creating split forms
   f. Creating multiple item forms

6. Creating reports
   a. Using the Report button
   b. Use the Report Wizard
   c. Maintaining a report
      i. Sizing and moving objects
      ii. Changing column widths and order
      iii. Sorting records
   d. Customizing a report
      i. Conditional formatting
      ii. Totals
      iii. Formatting
      iv. Grouping and sorting records

7. Creating mailing labels

8. Filter Data
   a. Using the filter button
   b. Filter by selection
   c. Filter by shortcut menu
   d. Filter by form
   e. Removing a filter

9. Summarizing data using different views
   a. PivotTable view
   b. PivotTable form
   c. PivotChart view

10. Exporting data to other Microsoft applications
11. Merging data with Word documents
12. Importing data with other Microsoft applications
13. Linking data to other Microsoft applications
When students complete **DP150 Introduction to Spreadsheets (using Word 2010)**, they will be able to:

1. **Prepare a spreadsheet**  
   a. Create a worksheet  
   b. Enter Data in a cell  
   c. Save a workbook  
   d. Edit data in a cell  
   e. Print a workbook  
   f. Use automatic entering features  
      i. AutoComplete  
      ii. AutoCorrect  
      iii. AutoFill  
   g. Open a workbook  
   h. Insert formulas  
      i. Use Sum Function to add numbers  
      ii. Use Sum Function to average numbers  
      iii. Use the fill handle to copy a formula  
   i. Format using predesigned styles  
      i. Format with Table Styles  
      ii. Format with Cell Styles  
   j. Use Help

2. **Insert Formulas**  
   a. Write Formulas with mathematical operators  
      i. Copy formula with relative cell reference  
      ii. Copy formula with absolute cell reference  
      iii. Copy formulas with fill handle  
      iv. Use trace button  
   b. Insert formulas with functions  
      i. Write formulas with statistical functions  
         1. Finding Averages  
         2. Finding Maximum and Minimum Values  
         3. Counting Numbers in a Range  
      ii. Writing Formulas with Financial Functions
1. Finding the Periodic Payments for a Loan
2. Finding the future value of a series of payments
   iii. Writing formulas with the date and time functions
   iv. Writing Formulas with the IF Logical function

3. Formatting A Spreadsheet
   a. Column widths
   b. Change Row Height
   c. Inserting/deleting cells, rows, and columns
   d. Apply a Theme
   e. Format numbers
   f. Add borders
   g. Add fill and shade
   h. Format using the Format Painter
   i. Hide columns and rows

4. Enhancing a Worksheet
   a. Format a Worksheet page
   b. Change margins
   c. Center a worksheet horizontally and vertically
   d. Change page orientation
   e. Printing column and row titles on multiple pages
   f. Printing gridlines
   g. Insert header and footer
   h. Use spell check
   i. Use undo and redo
   j. Find and replace data
   k. Sort data
   l. Filter data

5. Move Data within and between Workbooks
   a. Workbook with multiple worksheets
   b. Cut, copy and paste selected cells
   c. Hide worksheets
   d. Work with Ranges
   e. Linking data between worksheets
   f. Linking using 3-D reference

6. Maintain Workbooks
   a. Create folder
   b. Rename folder
   c. Delete folder and workbook
d. Send workbooks to different drives or folders
e. Save workbook in different formats
f. Save workbook in previous version of software
g. Apply a style
h. Insert comments
i. Displaying a comment
j. Editing comments
k. Printing comments

7. Create a chart in Excel
   a. Sizing, moving and deleting a chart
   b. Change chart design
      i. Choosing a custom chart style
      ii. Changing a data series
      iii. Changing chart layout and style
   c. Changing chart location
      i. Inserting, moving and deleting chart labels
      ii. Inserting shapes
      iii. Moving sizing and deleting shapes
      iv. Inserting images
   d. Change chart height and width

8. Adding visual interest to workbooks
   a. Creating a Web Page
      i. Creating hyperlinks
When students have completed **DP155 Business Presentations (using PowerPoint 2010)** the students will be able to create and orally present a professional presentation.

1. Create a professional presentation including the information necessary to convey the intended outcome by taking into consideration:
   - Purpose of presentation (inform, educate, sell, motivate, etc.)
   - The audience
   - The size of the room
   - Layout of the room
   - Equipment available to use

2. Orally give the presentation with confidence applying the necessary skills to keep the attention of the audience and utilizing the presentation area to its fullest extent.

3. The students will be able to determine the major points to include on the slideshow and format them to make the presentation professional looking by:
   - Using appropriate slide layout.
   - Adding Transitions and Sound Effects without interfering with the presentation
   - Adding animations
   - Editing the presentation
     - Deleting/adding slides
     - Moving slides
     - Duplicating slides
     - Reusing slides
   - Creating a slide show from more than one presentation
   - Enhancing the presentations by applying shapes, images, image backgrounds, WordArt
   - Creating and modifying tables within the slideshow
   - Creating and modifying SmartArt
   - Creating and modifying charts
   - Appropriately modifying the slide master view
   - Creating presentation as templates
   - Inserting Action buttons
   - Inserting Hyperlinks
   - Importing/Exporting
   - Linking and embedding
Competency 1.7: Create documents using word processing software (Microsoft Word)

Descriptors:
1.7.1 Create documents and tables
1.7.2 Format text using basic and advanced formatting functions
1.7.3 Locate/replace text using search and replace functions
1.7.4 Create new forms, style sheets, and templates
1.7.5 Employ word processing utility tools (e.g., spell checker, grammar checker, and thesaurus)
1.7.6 Create tables, columns, outlines, footnotes and endnotes
1.7.7 Create and run macros
1.7.8 Assemble documents using merge functions (e.g., merge address files with letters and envelopes)
1.7.9 Print materials using print functions
1.7.10 Edit documents (i.e., version control)
1.7.11 Access needed information using word processing help screens

Competency 1.9: Create spreadsheets (Microsoft Excel)

Descriptors:
1.9.1 Design a spreadsheet in accordance with written and/or oral specifications
1.9.2 Retrieve existing spreadsheets
1.9.3 Format spreadsheets using basic formatting functions (e.g., page setup)
1.9.4 Perform calculations using simple formulas
1.9.5 Edit spreadsheets (i.e., delete, move, and copy within spreadsheets)
1.9.6 Create charts and graphs from spreadsheets
1.9.7 Group worksheets
1.9.8 Input/process data using spreadsheet functions
1.9.9 Improve spreadsheet display using enhancement features
1.9.10 Protect data using spreadsheet protection features
1.9.13 Resolve function errors as needed
1.9.14 Apply advanced spreadsheet formulas
1.9.17 Save and print spreadsheets
1.9.18 Access needed information using online help features
Competency 1.10: Create presentations using presentation graphics (Microsoft PowerPoint)

Descriptors:
1.10.1 Identify hardware items that support presentation software
1.10.2 Compare/contrast various presentation software packages
1.10.3 Create computer presentation and handouts in accordance with basic principles of graphics design and visual communication
1.10.4 Edit presentations
1.10.5 Copy from one presentation to another
1.10.6 Insert clip art in a slide
1.10.7 Create WordArt objects
1.10.8 Create/modify a graph on a slide
1.10.9 Add/delete a template to a presentation
1.10.10 Create graphics documents using drawing and painting software programs
1.10.11 Add transitions to slide shows
1.10.12 Run slide shows manually and automatically
1.10.13 Save slide show presentations

Competency 1.11: Apply computer office tools (Optional competencies)

Descriptors:
1.11.1 Analyze problems requiring solutions involving the integration of computer applications
1.11.2 Select appropriate productivity tool for solving specific problem
1.11.3 Select source application and destination application
1.11.4 Move/copy information between integrated applications
University of Northwestern Ohio

KY146 Keyboarding I

Learning Outcomes

***Student must meet speed requirement of 45 nwpm.***

1. Students learn how to properly format letters:
   a. Block and modified block letters
   b. Open and standard punctuation
   c. Notations associated with letters (reference, enclosure, attachment)
   d. Proper formatting of lists (numbered/bulleted)
   e. Copy notations to more than one person

2. Students learn how to properly format reports:
   a. Business and academic reports
   b. Side and paragraph headings
   c. Display paragraphs (long quotes)
   d. Insert footnotes
   e. Bibliographies, work cited, and reference pages
   f. Table of contents – how to set proper dot leader tabs

3. Students learn how to properly format tables:
   a. Boxed, open and ruled tables
   b. Proper alignment of text and numbers within tables
   c. Proper alignment of tables on a page alone
   d. Proper alignment of column headings
   e. How to insert formulas within tables

4. Students learn how to properly format memos:
   a. Memo headings
   b. Notations (reference, enclosure, attachment)
   c. Copy notations to more than one person
MO120 is a required course in the Medical Office Management major

CATALOG COURSE DESCRIPTION

A vocabulary course for students enrolled in the medical office area, this class is designed to aid in the spelling, definition and pronunciation of the terminology related to human anatomy/Pathophysiology.

TEXTBOOK


McGraw Hill Medical Dictionary for Allied Health- Have available for reference

Learning Goals:
The learning goals for this course include:

1. Understand word analysis and formation.
2. Understand the pronunciation of medical terms.
3. Terminology related to the structural organization of the body, body cavities, regions, quadrants, directional and positional terms, body planes, the integumentary system, Eye and Ear, Musculoskeletal system, Digestive system, Blood, Cardiovascular system, Respiratory system, and the Nervous system.
4. Learn suffixes, prefixes, and combining forms pertaining to each chapter.
5. Understand the anatomy and physiology of each system covered.
6. Pronunciation and spelling of medical terms.
7. Singular and Plural forms of medical terms.
8. Abbreviations and their meanings.

Course Objectives:

1. Name the organs of the each system covered and identify them.
2. Build medical words using the combining forms, suffixes, and prefixes that are related to each chapter.
3. Define abnormal and pathological conditions of each system covered.
4. Explain laboratory tests and procedures that relate to each body system covered.
5. Explain various lab tests, clinical procedures, and abbreviations that are pertinent to each system covered.
6. Divide medical terms into their component parts.
7. Apply your new knowledge to understanding medical terms in their proper contexts, such as medical reports and records.
MO134 Human Anatomy, Pathophysiology, and Terminology I

MO134 is a required course in the Medical Assistant Technology major

Learning Goals:
The learning goals for this course include:

1. Understand word analysis and formation.
2. Understand the pronunciation of medical terms.
3. Terminology related to the structural organization of the body, body cavities, regions, quadrants, directional and positional terms, body planes, the digestive system, and divisions of the back.
4. Learn suffixes, prefixes, and combining forms pertaining to each chapter.
5. Understand the anatomy and physiology of the digestive system.

Course Objectives:

1. Name the organs of the Digestive system.
2. Build medical words using the combining forms that are related to each chapter including the digestive system.
3. Define abnormal and pathological conditions that relate to the digestive system.
4. Explain laboratory tests and procedures that relate to the digestive system.
5. Explain various lab tests, clinical procedures, and abbreviations that are pertinent to the digestive system.
6. Name the combining forms, prefixes, and suffixes most commonly used in each chapter covered.
7. Learn about the Rh condition as an example of an antigen-antibody reaction.
8. Name and know the functions of the different types of blood cells in the body.
9. Know the structural organization of the body.
11. Divide medical terms into their component parts.
12. Apply your new knowledge to understanding medical terms in their proper contexts, such as medical reports and records.
University of Northwestern Ohio
Medical Assistant Technology Program
MO137 Clinical I

MO134 is a required course in the Medical Assistant Technology major.

Learning Goals

The learning goals for this course include:
1. Common pathology/diseases
2. Diagnostic/treatment modalities.
3. Specimen collection and processing.
4. Diagnostic testing.
5. Patient care and instruction.
7. Asepsis and infection control
8. Principles of venipuncture and capillary puncture
9. Basic psychology principles
10. Developmental stages of the life cycle
11. Hereditary, cultural and environmental influences on behavior
12. Pharmacology

Course Objectives:

1. Describe and demonstrate appropriate techniques of universal precautions, asepsis, and infection control.
2. Describe and demonstrate the routine steps used to maintain a clean clinical area.
3. Describe and demonstrate proper care, handling, and identification of surgical instruments.
4. Define and apply the principles of assisting with routine and special examinations and minor surgery in the medical office.
5. Recognize varied patient learning styles, considering age, heredity, culture and environment.
6. Develop nutritional plans as they relate to specific patient needs.
7. Describe and demonstrate the proper procedures for obtaining an electrocardiogram.
8. Recognize and demonstrate the principles of IV therapy.
9. Understand the common pathological conditions/diseases and well as the diagnostic/treatment modalities to provide appropriate patient care.
10. Describe and demonstrate the proper procedure for performing blood draws via venipuncture and capillary puncture.
11. Demonstrate instruction for health maintenance and disease prevention.
12. Recognize and respond appropriately to basic medical office emergencies.
13. Understand the basic psychological principles and the developmental life cycle as they relate to patient care.
Methods of Instruction and Learning Activities:

Classroom lecture, discussion, demonstration, audiovisual aids, group activities, laboratory experience and skills objectives.

Entry Level Competencies for the Medical Assistant

Taken from the 2003 Standards and Guidelines for the Medical Assisting Educational Programs

This course includes the following competencies:

1. Perform handwashing.
2. Wrap items for autoclaving.
3. Perform sterilization techniques.
4. Dispose of biohazardous materials.
5. Practice Standard precautions.
6. Perform electrocardiography.
7. Perform respiratory testing.
8. Perform telephone and in-person screening.
9. Obtain vital signs.
10. Obtain and record patient history.
11. Prepare and maintain examination and treatment areas.
12. Prepare patient for and assist with routine and specialty examinations.
13. Prepare patient for and assist with procedures, treatments, and minor office surgeries.
14. Apply pharmacology principles to prepare and administer oral and parenteral (excluding IV) medications.
15. Maintain medication and immunization records.
16. Screen and follow-up test results.
17. Perform within legal and ethical boundaries.
18. Establish and maintain the medical record.
20. Demonstrate knowledge of federal and state health care legislation and regulations.
21. Instruct individuals according to their needs.
22. Provide instruction for health maintenance and disease prevention.
23. Identify community resources.
24. Perform an inventory of supplies and equipment.
25. Perform routine maintenance of administrative and clinical equipment.
OP149 Records Management (3 credits)
Students will study the principles and procedures of records storage, retrieval and disposition. The filing methods introduced include: alphabetic, numeric, geographic, subject and chronologic. Manual and computerized simulation projects will be completed.

In this course:

- The student will develop problem solving skills and analytical and critical thinking skills by analyzing sample documents, applying ARMA filing rules, and determining correct filing order by completing simulation activities.
- The student will develop work and social skills by meeting assigned deadlines while at the same time producing accurate and quality results as measured by the output on Finding Tests and Report Sheets in the simulation.
- The student will develop research and information retrieval skills by researching and locating information for an informational paper.

LEARNING OUTCOMES

The learning goals of this course include:

- ARMA records management rules.
- Principles and rules for indexing, coding, cross-referencing, and storing (filing) of documents.
- Retrieval of documents from files.
- Principles and rules for Alphabetic, numeric and subject filing.

COURSE OBJECTIVES

- The student will be able to explain the significant role that effective record management plays in business activities.
- The student will be able to apply the life cycle of a record to their projects.
- The student will be able to describe how technology is changing record management today.
- The student will be able to organize the files correctly according to the method and system used including alphabetic, numeric, and subject.
When students complete WP138 Introduction to Word Processing (using Word 2010), they will be able to:

1. **Create and edit a document**

2. **Format the documents**
   a. Apply styles
   b. Apply themes
   c. Paragraph alignment
   d. Line spacing

3. **Customize Paragraphs**
   a. Apply Numbers/bullets
   b. Borders and shading
   c. Tabs
   d. Sort text

4. **Formatting Pages**
   a. Page numbering
   b. Headers/footers
   c. Find/replace
   d. Borders
# Course Equivalency Sheet

University of Northwestern Ohio

and

School: ___________________________________________________

Career Technical Education Program: ___________________________________________________

<table>
<thead>
<tr>
<th>UNOH ID</th>
<th>UNOH Course Name</th>
<th>High School Course/s or Program meeting the UNOH Requirements and Learning Outcomes (Please list as it will appear on high school transcript)</th>
<th>High School Clock Hours of Instruction meeting UNOH outcomes*</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC114</td>
<td>Accounting I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AG106</td>
<td>Agribusiness Fundamentals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BU120</td>
<td>Introduction to Business</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DM121</td>
<td>Web Page Design Concepts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DM125</td>
<td>Graphic Imaging</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DM180</td>
<td>Applied Digital Drawing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DM190</td>
<td>Interactive Graphic Animation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DP117</td>
<td>Database Applications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DP150</td>
<td>Spreadsheet Applications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DP155</td>
<td>Developing Business Presentations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DP175</td>
<td>Software Applications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KY146</td>
<td>Keyboarding I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO120</td>
<td>Medical Terminology I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO134</td>
<td>Human Anatomy, Pathophysiology, and Terminology I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO137</td>
<td>Clinical I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OP149</td>
<td>Records Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WP138</td>
<td>Introduction to Word Processing Applications</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Access Learning Outcomes at: https://www.unoh.edu/files/admissions/articulation/agreement.pdf

* Matching Curriculum Hours of Instruction: Clock Hours aligned with UNOH course learning outcomes.
Use this form only to articulate courses not listed above.

Based on 2016/2017 UNOH Course Requirements and Objectives

The University of Northwestern Ohio
Colleges of Business, Health
Professions, and Occupational
Professions- 100 level courses only

High School /Career Center Name

UNOH course: ___________________________
Credits: _______
Software Version (if applicable): ____________
______________________________________
Secondary Course: ___________________________
As it will appear on transcript
Instructional Hours & Credit: _____________
Software Version (if applicable): ____________
______________________________________

To help determine the equivalency of the articulated courses, the appropriate faculty and administrators of each school will evaluate the equivalency of the college and secondary course learning outcomes, length of course and credits, plus the secondary school’s assessment instruments.

The secondary school’s learning outcomes are to be attached to this document, along with either a copy of the final exam, which covers the entire course, or copies of exams assessing the complete course.

______________________________________   ________________________
High School Principal / Career Center Director      Date