# Syllabus for Introduction to Computers and Application Software Mercy Cohort (32 hours)

Contact: Dr. Z Chen Office: E-mail: zchen10522@yahoo.com

## Description

This course provides an introduction to computers and computing including the fundamentals of computer nomenclature, particularly with respect to personal computer hardware and software and the World Wide Web. Students learn to make use of the World Wide Web as a repository of the latest information and an integrated learning and research tool, and develop an in-depth understanding of why computers are essential components in the business world and society in general. Students are introduced to important and current issues in the field of computing as related to business and society in general, including computer and information security, information privacy and protection, ethics and intellectual property rights, computers and health, the environment, and emerging technologies as they relate to organizations and society. Students also focus on the computer as a valuable productivity tool and learn strategies for purchasing and maintaining a personal computer system. The computer lab component includes an introduction to and actual use of word processing, spreadsheet, presentation, database (or html) and Internet browser software. **3 semester hours; 3 credits**.

## **Pre-Requisites**:

None.

# **Student Learning Goals:**

- 1. Students will recognize the role that computers play in our technological society, and understand important and current issues facing the field of computers and computing, including computer and information security, information privacy and protection, ethics and intellectual property rights, computers and health, the environment, and emerging technologies.
- 2. Students will understand the main parts of a computer and the ways these parts interact.
- 3. Students will understand the role of the World Wide Web as a repository of the latest information and as an integrated learning and research tool.
- 4. Students will utilize, at a basic level, the following application programs: a word processor (Microsoft Word), a spreadsheet (Microsoft Excel), presentation software (Microsoft Power Point), database software (or html) and browser software (Internet Explorer/Firefox/Chrome).

## **Student Learning Outcomes:**

At the completion of the course, students will be able to:

- 1. identify and describe important and current issues facing the field of computers and computing, including computer and information security, information privacy and protection, ethics and intellectual property rights, computers and health, the environment, and emerging technologies.
- 2. identify and describe the different hardware and software components of a computer and explain how these parts interact.
- 3. browse and search the World Wide Web, and search different databases to get scholarly and trade articles as well as other information as required for assignments, research papers, or other projects.

- 4. interact with a computer to issue the most common operating system commands (using Microsoft Windows 10).
- complete assignments and projects that need the use of a word processor (Microsoft Word), a spreadsheet (Microsoft Excel), presentation software (Microsoft Power Point), database software (MS Access) or html, and browser software (Internet Explorer/Firefox/ Chrome).

## **Textbooks (Need to discuss on this)**

ISBN for the book bundle - 1323482687

- 1. Technology in Action, Introductory Version, 13<sup>th</sup> edition Evans, Martin and Poatsy, Pearson Higher Education, 2016
- 2. GO! with Microsoft Office 2016, Volume 1, Custom Edition for Mercy College Pearson Higher Education, 2016

3. myITlab – a learning management system.

*Note to all instructors:* the use of myITlab for both in-class and online sections is mandatory. Also, the bundle comes with a 180-day trial period for Microsoft Office 2016.

## **Course Content:**

# I. Theory and Concepts (Technology in Action):

1. Using Technology to Change the World	Chapter 1	
2. Looking at Computers: Understanding the Parts	Chapter 2	
3. Using the Internet: Making the Most of the Web's Resources	Chapter 3	
4. Application Software: Programs That Let You Work and Play	Chapter 4	
5. System Software: The Operating System, Utility Programs,		
and File Management	Chapter 5	
6. Understanding and Assessing Hardware: Evaluating Your System	Chapter 6	
7. Networking: Connecting Computing Devices	Chapter 7	
8. Digital Devices and Media: Managing a Digital Lifestyle		
9. Securing Your System: Protecting Digital Data and Devices	Chapter 9	

# II. Software Applications (Windows 10 and Microsoft Office 2016):

- 1. Microsoft Windows 10
- 2. Internet Browser Microsoft Internet Explorer
- 3. Word Processor Microsoft Office Word 2016
- 4. Spreadsheet Microsoft Office Excel 2016
- 5. Presentation Software Microsoft Office PowerPoint 2016
- 6. Database Software Microsoft Access 2016 (or html)
- 7. Microsoft Office 2016 Integration

## Format of the Course:

The class includes a theory session and a lab session. The theory session will be used for lecture and discussion of important current topics relevant to the field of computing. Students are required to come prepared to the class for the discussions by reading relevant chapter material and doing research on the Web. In the lab session students will get "hands-on" practice on the computer to learn various application software packages, acquire basic computer skills, solve problems and conduct projects. Students should be encouraged to learn to use the Library as well as the Internet for their present and future projects. Distance Learning (DL)

students should also have a theory component and a lab component as part of their weekly work. **myITLab**, the online learning platform for Office 2016 applications and theory concepts, can be used for both in-class and DL students. The instructor has the choice of using both Blackboard and myITlab or just myITlab for all work, including classwork, homework assignments and discussions.

Note – the myITlab simulation platform does not substitute the instructor's lecture or hands-on work in the classroom. myITlab is designed to be a supplemental learning aid for the students.

#### **Discussions:**

Both in-class and DL students are expected to participate in online discussions conducted on Blackboard and/or myITlab. The instructor will introduce the fundamentals of Blackboard and myITlab within the first two weeks of the semester. Then, regular discussions will be conducted on interesting and relevant topics from the textbook, from the Web and other external sources. Discussions should not account for more than 10% of the final grade.

#### **Assignments:**

Homework assignments should be assigned regularly in the theory portion and the lab portion of the course. Students should be encouraged to use Blackboard/myITlab to submit their assignments. No more than 25% of the final grade should be given for assignments.

#### **Term Project:**

A term project is required for the class. Students will conduct research on a topic that is of interest to them in the field of computers and/or explore the role of computer technology, the Internet and the World Wide Web in their respective disciplines. They will write a paper (no more than 600 - 800 words) using MS Word and incorporate tables and/or graphs/charts created in MS Excel into the Word document. They will also present their project in class using MS PowerPoint. DL students are not required to do the presentations, but may be required to prepare the presentation and submit it to the instructor. The project must not count for more than 20% of the final grade. A sample term project guideline is attached.

## Exams:

There must be at least two (2) exams in the semester. All exams will be closed book exams and consist of two parts – a theory part and a hands-on part for the in-class students. For DL students, the hands-on portion of the exam can be designed on myITlab. It is recommended that the theory part of the exam comprise of both multiple-choice questions and short-essay questions. It is also recommended that the students be tested on MS Word and MS Excel in the midterm and final exams respectively. Exams should not count for more than 60% of the final grade. Online (DL) students have to take proctored exams scheduled according their locations. For details go to <a href="https://www.mercy.edu/academics/mercy-online/student-resources/">https://www.mercy.edu/academics/mercy-online/student-resources/</a>

## **Other Notes:**

- 1. The class must be conducted for the entire class period. No class must be let go early (not earlier than 10 15 minutes before the end of class time).
- 2. Typical class work
  - a. If the class is held once a week, then the typical class work would be the theory (concepts) lecture in the first part of the class (1 hour 20 minutes) and the lab (hands-on work) in the second part of the class (1 hour 20 minutes). Recommended break time is 10 minutes, which usually stretches to 15 minutes.
  - b. If the class is held twice a week (M-W or T-R for 1 hour 20 minutes each), then the typical class work would be the theory (concepts) lecture on one day (1 hour 20 minutes) and the lab (hands-on work) on the second day (1 hour 20 minutes). No break will be given in these small class times.

- c. In a B or C term, the class is held twice a week for 2 hours and 50 minutes each. Follow the schedule as in (a).
- 3. It is recommended that the instructor do the hands-on projects (as given in the lab book) in class along with the students to show them how the projects are done. The problem given in the chapter may be chosen or another problem (such as the ones given at the end of every chapter under Assessment) may be chosen for the class-work.
- 4. It is recommended that every instructor give practice homework on myITlab so that the students become familiar and comfortable with the learning platform before giving graded assignments. It is also recommended that the instructor introduce these platforms (Blackboard and myITlab) on the first and second days of class. A representative from the publisher is available to introduce myITlab to the students during these times, if necessary. Instructors are encouraged to avail themselves of this.
- 5. It is recommended that every instructor arrange with the librarian at the respective campus to take the class for a library instruction session. This session usually lasts about 45 minutes to one hour and is part of the class (theory portion). This session will be arranged after the instructor gives the term project details to the students.
- 6. It is recommended that a term project be given in the course. A sample term project guideline is attached. Students should write a report on their research as well as do a presentation in class (not to exceed 10 minutes per student).
- 7. It is recommended that there be a hands-on section in the exams. Recommended structure of an exam:
  - a. Section I multiple-choice questions 40 to 50 points
  - b. Section II short answer questions 30 points
  - c. Section III hands-on problem 20 to 30 points could be in MS Word for the midterm exam and MS Excel for the final exam.
- 8. Students should be advised to bring USB flash drives to class to save and backup all their work and for submission of assignments.

## Attendance and Lateness:

Absence from more than three (3) classes may result in an automatic failure, or a lower grade. Written notes (medical or legal) for absence or lateness must be submitted by the student. If a student is absent from class for an in-class assignment or test, he/she must present a medical or legal note to entitle a make-up assignment or test. DL students are expected to log on to Blackboard and/or myITlab at least three times a week to check on lesson and assignment postings, participate in discussions, and look for announcements.

## **Competency Assessments:**

Mercy College has adopted six areas in which students must satisfy a minimum level of achievement. These are: written communication, oral communication, critical thinking, critical reading, quantitative reasoning and information literacy.

To reinforce written communication and critical thinking competencies, at least two word processing assignments and the term project are expected.

To reinforce the quantitative reasoning and critical thinking competencies, at least two assignments using the spreadsheet program are required.

To reinforce information literacy and critical thinking competencies, at least two assignments using the World Wide Web and the term project are required.

To reinforce the oral communication, written communication, and critical reading competencies, class discussions and the term project are required.

The instructor will be required to assess if the level of achievement of the students in each of the competencies is below a minimum standard for college work. A standard form will be provided together with the roster.

**Students With Disabilities**. Mercy College is committed to achieving equal educational opportunities and full participation for persons with disabilities. Persons with disabilities who may need classroom accommodations are encouraged to contact the Office of ACCESSibility before the semester begins to learn about the different accommodations available and the process for obtaining reasonable accommodation(s). Please contact the Office at (914) 674-7523, <u>accessibility@mercy.edu</u> or visit our website at <u>www.mercy.edu/student-affairs/access</u>.

Letter Grade	Numerical Range	Quality Point Value	Description
Α	93-100	4.00	Excellent
A-	90-92	3.67	Very Good
B+	87-89	3.33	Very Good
В	83-86	3.00	Good
B-	80-82	2.67	Good
C+	77-79	2.33	Satisfactory
C	73-76	2.00	Satisfactory
C-	70-72	1.67	Passing but Unsatisfactory
D	60-69	1.00	Passing but Unsatisfactory
F	0-59	0.00	Failure
FW	0-59	0.00	Failure due to unofficial withdrawal

Grading and Assessment: (changes are subject to approval by the Department Chairperson)

## Sample Evaluation:

Midterm Exam – 25% Discussions – 10% Term Project – 20% Final Exam – 25% Assignments – 20%

## **TERM PROJECT GUIDELINES**

For the term project you will explore the roles of computer technology and the Internet in your discipline/major, such as business, psychology, behavioral sciences, health sciences, criminal justice, fashion, music technology, etc. You may also choose other topics, such as the roles of computer technology and the Internet in medicine, airport and flight security, land, sea and air navigation, banking and financial systems, immigration, online shopping, the environment, promoting personal and child safety, and personal health.

You will do the following:

- a. Write a 600-800 word report on your research using MS Word.
- b. Prepare a PowerPoint presentation of your research and present it in class (10 minutes per student). *Note: DL students can post their presentations on Blackboard.*

The paper should be an original paper. If I see that you have copied and pasted from any source, then I will reject the paper and you will lose your grade. Go to the Learning Center for help with writing your paper.

#### Deadlines (please adjust according to your classes):

- 1. Choice of topic due October --, 2016
- 2. Report and Presentation due December --, 2016

For your research paper, you must use at least three (3) different articles – trade articles and/or research articles. You can choose from several sources – books (including the textbook), trade magazines, print journals, online journals, online databases (the Library has several), websites, etc. Make sure you cite any and all sources used. *You may not plagiarize any work!! You will get an F grade if you plagiarize any work.* 

## Style Guide for Written Submissions

- Prepare a single, consistent, integrated, professional looking document.
- Use MS Word.
- Use Times New Roman font, 12 point.
- Use double spacing.
- Use page numbers.
- Use headings and sub-headings for different topics.
- Prepare a cover (title) page and a table of contents.
- Use a cover sheet with: your name; the class number and section; the instructor's name; the date.
- Make the report readable and pleasant looking. Leave plenty of white space and make good use of paragraphs and indented sections.
- Use bold type and underlining for emphasis, but don't overdo it.
- Do not overload the text with details. Present what is necessary for clarity in the body of the report and place supporting material in appendices.
- In sentences use numerals for values of 11 and over and write them out for values of ten and under. Exceptions: don't start a sentence with a numeral; use numbers for page, figure, and table references.
- Avoid run-on sentences, wordiness, and incomplete sentences.
- Be consistent in your use of tense.
- Make sure subjects and verbs agree.
- To make your sentences more interesting, use synonyms.
- Use proper punctuation.
- SPELLING AND GRAMMAR COUNT. You may use a spell-checker, but don't rely on it. Grammar-checkers are not reliable they often give erroneous advice. So,
- PROOFREAD
- For additional guidance, consult a style manual the library has several.

## **Style Guide for Presentations**

- Prepare a single, consistent, integrated, professional-looking presentation.
- Use a title slide.
- Every slide must have a title.
- Do not write paragraphs on a slide. Use bullet points and write short phrases.
- Use a design that is appropriate to the topic.
- Use relevant pictures and diagrams.
- Use some animation and slide transition. Do not overdo it.
- Use two or three levels of bulleted lists. Do not overdo it.
- Again, spelling and grammar count.