

CS 101 – Introduction to PC Applications

Credit Hours: 4

Scheduled hours per week

Lecture: 3

Lab: 1

Other:

Catalog Course Description: Students learn to use computer applications as tools for problem solving and data analysis using four different Microsoft Office applications, with primary focus on using Excel and Access to analyze and explore real world data.

Pre-requisites: Math 120 or Math 125 or Math 126 or Math 128 or Math 129 or Math 150 or Math 155 or Math 156 or Math 211 must be passed with a grade of C or better or taken concurrently

Co-requisites: Math 120 or Math 125 or Math 126 or Math 128 or Math 129 or Math 150 or Math 155 or Math 156 or Math 211 must be passed with a grade of C or better or taken concurrently

Course Learning Outcomes:

Students should have an understanding of and be able to apply the following concepts:

- Use Microsoft Excel to perform calculations, conduct data analysis, and explore what-if cases to understand real world scenarios
- Design and construct databases to store, extract, and analyze scientific and real world data
- Create scientific and technical documents incorporating equations, images, tables, and bibliographies
- Develop technical and scientific presentations which use charts and visual aids to share data

Topics to be studied:

<ul style="list-style-type: none"> • Computers & Information Processing • Microsoft Windows • Introduction to Microsoft Office 2013 • The Internet • Using IE, Microsoft Cloud Computing, and OneNote • Computer Hardware • Creating documents in Word 2013 • Using Word to create Resumes and Cover Letters • System Software 	<ul style="list-style-type: none"> • Creating Worksheets with Column Charts using Excel 2013 • Creating Tables and Inserting Functions and Charts using Excel 2013 • Networks, Security, and Privacy • Creating and Editing Presentations with Microsoft PowerPoint 2013 • Creating an Access Database and Running Queries • Application Software • Cloud Computing with Google
---	--

Relationship of Course to Program or Discipline Learning Outcomes:

Computer Science

	Ability to understand and use elements of good programming style and best practices
	Understanding of programming paradigms, such as imperative, functional, and object oriented design
✓	Ability to understand and use variables with different data types and control structures
	Ability to perform top-down design, use modular programming, string processing, elementary data structures, basic disk I/O, and recursion
	Ability to use data structures and algorithms to represent data relationships, data manipulation, searching, sorting, and solving complex problems
✓	Ability to design, configure, troubleshoot, and manage database tables, normalize data, and store and retrieve object attributes in a database

For general education courses, a listing of the general education competencies that are met.)

Relationship of Course to General Education Learning Outcomes:	
Composition and Rhetoric Students illustrate a fundamental understanding of the best practices of communicating in English and meet the writing standards of their college or program-based communication requirements.	✓
Science & Technology Students successfully apply systematic methods of analysis to the natural and physical world, understand scientific knowledge as empirical, and refer to data as a basis for conclusions.	✓
Mathematics & Quantitative Skills Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts.	✓
Society, Diversity, & Connections Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication.	
Human Inquiry & the Past Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills.	
The Arts & Creativity Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art.	✓
5/3/2016	

Special requirements of the course:

You will need a computer with an Internet connection, and access to MyITLab from Pearson.

Additional information:

Prepared by:

Date: 10/20/2017