CS80.15: IT Essentials 1: PC Hardware and Software: Section 4277: Rosen S

Fall 2017 - Night Section

Class begins: August 22, 2017

Class ends: December 12, 2017

Final Exam: December 19, 2017
Location: PC 643 Call, Petaluma Campus
Days/times: Tuesdays from 5:30 - 9:30pm

Description

This course covers the fundamentals of computer hardware and software as well as advanced concepts. Students who complete this course will be able to describe the internal components of a computer, assemble a computer system, install an operating system, and troubleshoot using system tools and diagnostic software. Students will also be able to connect to the Internet and share resources in a network environment. New topics included in this version include laptops and portable devices, wireless connectivity, security, safety and environmental issues, and communication skills.

Hands-on lab activities will continue to be an essential element of the course. In support of this, virtual learning tools have been integrated into this course. The Virtual Laptop, Virtual Desktop, and Virtual Printer and Scanner are stand-alone tools designed to supplement classroom learning and provide an interactive "hands-on" experience in learning environments with limited physical equipment.

Target Audience

IT Essentials: PC Hardware and Software is intended for students in high school, technical school, community college, or a four-year institution who want to pursue careers in IT and gain working knowledge of how computers work, how to assemble computers, and how to troubleshoot hardware and software issues.

Prerequisites

There are no prerequisites for this course, accept a desire to learn, study and get your hands dirty!

Target Certifications

IT Essentials: PC Hardware and Software v6.0 helps to prepare students for the CompTIA A+ certification exams 220-801 and 220-802. CompTIA A+ 220-801 covers the fundamentals of computer technology, installation and configuration of PCs, laptops, related hardware, and basic networking. CompTIA A+ 220-802 covers the skills required to install and configure PC operating systems and configure common features, such as network connectivity and email for Android and Apple iOS mobile operating systems. Students must pass both exams to earn the CompTIA A+ certification. (**http://** ⧉ **(http://www.comptia.org/) www.comptia.org** ⧉ **(http://www.comptia.org/)**).

Objectives

The primary objective of this course is to prepare students for entry-level positions in the IT field within several different working environments

- A corporate or mobile environment with a high level of face-to-face client interaction. Job titles include enterprise technician, IT administrator, field service technician, and PC technician.
- A remote-based work environment where client interaction, client training, operating systems, and connectivity issues are emphasized. Job titles include remote support technician, help desk technician, call center technician, IT specialist, and representative.
- Settings with limited customer interaction where hardware-related activities are emphasized. Job titles include depot technician and bench technician.

In addition, students will gain confidence with the components of desktop and laptop computers by learning the proper procedures for hardware and software installations, upgrades, and troubleshooting.

Student Learning Outcomes

- Define information technology (IT) and describe the components of a personal computer.By the end of the course, students will be able to complete the following objectives:
- Protect herself or himself against accidents and injury, protect equipment from damage, and protect the environment from contamination.
- Perform a step by step assembly of a desktop computer tower.
- Explain the purpose of preventive maintenance and identify the elements of the troubleshooting process
- Explain, install, and navigate an operating system; upgrade components based on customer needs and perform preventive maintenance and advanced troubleshooting.
- Describe, remove, and replace select components of a laptop; upgrade components based on customer needs and perform preventive maintenance and advanced troubleshooting.
- Describe, remove, and replace select components of a printer/scanner; perform preventive maintenance and troubleshooting.
- Describe and install a network; upgrade components based on customer needs and perform preventive maintenance and advanced troubleshooting.
- Apply good communication skills and professional behavior while working with customers.
- Perform advanced installation of a desktop computer tower; select components based on customer needs and perform preventive maintenance and advanced troubleshooting.
- upgrade security components based on customer needs and perform preventive maintenance and advanced troubleshooting.

Instructor Contact

Dr. Scott Rosen
Office: 654 Call Hall Petaluma
Phone/Text: (707) 478-8649 (text is fastest)
Fax: (707) 778-3910

[srosen@santarosa.edu (mailto:srosen@santarosa.edu)](mailto:srosen@santarosa.edu)

Text is the fastest but I usually respond to emails within 48 hours.

Instructor Schedule

Monday

- 11:00 - 11:30am   **Office Hours** PC 643
- 11:30am - 1:30pm   **CS 80.15 IT Essentials** PC 643

- 5:15 - 6:00pm **Office Hours**   2921 Maggini (Santa Rosa Campus)
- 6:00 - 9:00pm CS 84.21 **MIS** 2921 Maggini (Santa Rosa Campus)

Tuesday

- 2:00pm - 4:00pm **Department Activities** CS Department

- 5:00 - 5:30pm **Office Hours** PC 643
- 5:30 - 9:30pm **CS 80.15 IT Essentials** PC 643

Wednesday

- 11:00 - 11:30am   **Office Hours** PC 643
- 11:30am - 1:30pm   **CS 80.15 IT Essentials** PC 643

- 3:00 - 5:00pm **Academic Senate**

- 5:00 - 5:30pm **Office Hours** PC 643
- 5:30 - 9:30pm **CS 5** PC 643

Thursday

- 5:00pm - 5:30pm **Office Hours** PC 643
- 5:30 - 9:30pm **CS 84.13 IT Support** PC 643

Hardware & Software

IT Essentials PC v6.0 content focuses on Microsoft Windows 7 and Windows 8/10 operating systems.

Materials and Supplies

Microsoft offers programs for academic institutions to purchase software at a reduced cost. An example of such a program is the MSDN Academic Alliance, which can be found at **http://msdn.microsoft.com/academic** ⤢ **(http://msdn.microsoft.com/academic)**

Textbook & Website

Online Material at Cisco Networking Academy ⤢ **(https://www.netacad.com/) Provided by Instructor**

- pen, paper
- USB Flash drive (at least 2 GB)
- Computer Toolkit

Computer Toolkit

The computer toolkit (**you will need to acquire your own**) should include the following tools:

- Phillips screwdriver
- Flathead screwdriver
- Hex Socket Drivers (various sizes)
- Needle-nose pliers
- Electrostatic discharge (ESD) wrist strap and cord
- Safety glasses (supplied)
- Lint-free cloth
- Electronics cleaning solution
- Flashlight
- Thermal compound
- Multimeter (optional)
- Digital Camera (optional)
- Compressed air service canister
- Software Tools
- Notebook

- Other tools as recommended by instructor

Important Dates

Date Class Begins:	8/22/2017	**Date Class Ends:**	12/12/2017
Last Day Add w/o add code:	8/27/2017	**Last Day Add with add code:**	9/10/2017
Last Day Drop for Refund:	9/3/2017	**Last Day for P/NP option:**	10/1/2017
Last Day Drop w/o W:	9/10/2017	**Last Day Drop with W:**	11/19/2017
FIRST CENSUS DATE:	9/11/2017	**Date Final Exam:**	12/19/2017
		Date Midterm Roster:	10/16/2017 - 11/19/2017

Dropping the Class

If you decide to discontinue this course, it is your responsibility to officially drop it. A student may be dropped from any class when that student's absences exceed ten percent (10%) of the total hours of class time. It is strongly advised that if you need to miss more than one class/homework deadline in a row that you contact the instructor to avoid being dropped from the class.
If you feel you must quit the class, please talk with me first. Together we may find a way for you to complete the course successfully. If you quit without officially dropping, you are still graded on all the remaining work, usually resulting in an "F" grade.**https://www.santarosa.edu/app/admissions/** ↗ **(https://www.santarosa.edu/app/admissions/)**

Attendance

I expect you to attend regularly.
If for any reason you will be absent, late, or leaving early,please let me know in advance (or as soon after as possible in case of emergency). Any absence without notifying me is unexcused. More than three unexcused absences may result in dismissal from class. After any absence, you are responsible for getting class handouts from the class Web page and notes from a classmate. You might also talk with me about when to turn in any assignments you missed.

Note: Students who fail to attend the first class meeting may be dropped by the instructor.

Tests and Exams

There are 12 online exams that you do as homework, an online final and skills final/project.

Grading

Grade Only: A >= 90%, B >= 80%, C >= 70%, D >= 60%

ITEM	PERCENT	COMMENTS
Online Chapter Exams	50%	Homework - Using the Assessment Server. Must be completed within a week of the assignment else points will be deducted.
Online Final Exam	20%	Using the Assessment Server
Skill-Based Final Exam/Project	20%	Rubric to be distributed prior to the exam
Labs	10%	Labs - Using the Assessment Server. Must be completed within a week of the assignment else points will be deducted.

Standards of Conduct

Respect
The best way to learn is through active participation; therefore, we respect others when talking by being on-time, listening actively, and by being polite even when we disagree with another's viewpoint. Please turn off all electronic devices. If you use a laptop for note taking, please sit in the front row with the sound off. No food in class please.
Students who register in SRJC classes are required to abide by the SRJC Student Conduct Standards. Violation of the Standards is basis for referral to the Vice President of Student Services or dismissal from class or from the College. See the **Student Code of Conduct page** ↗ **(http://www.santarosa.edu/for_students/rules-regulations/student-conduct.shtml)** .

Collaborating on or copying of tests or homework in whole or in part will be considered an act of academic dishonesty and result in a grade of 0 for that test or assignment. Students are encouraged to share information and ideas, but not their work. See these links on Plagiarism:
SRJC Writing Center Lessons on avoiding plagiarism ↗ **(http://srjcwritingcenter.com/research/plagiarism/plagiarism.html)**
SRJC's statement on Academic Integrity ↗ **(http://www.santarosa.edu/polman/3acadpro/3.11P.pdf)**

Emergency Evacuation Plan

In the event of an emergency during class that requires evacuation of the building, please leave the class immediately, but calmly. Our class will meet at a designated spot to make sure everyone got out of the building safely and to receive further instructions. (If the class is on a second or higher floor, provide clear directions to the stairs). If you are a student with a disability who may need assistance in an evacuation, please see me during my office hours as soon as possible so we can discuss an evacuation plan.

Special Needs

If you need disability related accommodations for this class, such as a note taker, test taking services, special furniture, etc., please provide the Authorization for Academic Accommodations (AAA letter) from the Disability Resources Department (DRD) to the instructor as soon as possible. You may also speak with the instructor privately during office hours about your accommodations. If you have not received authorization from DRD, it is recommended that you contact them directly.

Disability Resources Department
Tel: (707) 527-4278 Santa Rosa
Tel: (707) 778-2491 Petaluma
Email: **disabilityinfo@santarosa.edu (mailto:disabilityinfo@santarosa.edu)**

Every effort is made to conform to accessibility standards for all instructor-created materials. Students should contact their instructor as soon as possible if they find that they cannot access any course materials. Students with disabilities who believe they need accommodations in this class are encouraged to contact Disability Resources (527-4278).

Useful Links

[(http://www.santarosa.edu/~eskagerb/itessentials/reference.html)](http://www.santarosa.edu/~eskagerb/itessentials/reference.html) **Cisco Networking Academy** ↗ [(https://www.netacad.com/)](https://www.netacad.com/)

Supplementary Reference Reading [(http://www.santarosa.edu/~eskagerb/itessentials/reference.html)](http://www.santarosa.edu/~eskagerb/itessentials/reference.html) - Arranged by chapter**Cisco Networking Academy** ↗ [(http://cisco.netacad.com/)](http://cisco.netacad.com/) Cisco Online Learning System

Microsoft Dreamspark (MSDNAA): Free Microsoft Software for Students [(http://www.santarosa.edu/~eskagerb/common/msdnaa.html)](http://www.santarosa.edu/~eskagerb/common/msdnaa.html) Fall & Spring only (not Summer); expires end of semester.

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Course Summary:

Date	Details
	📝 **Assignment - Week 1 - Fall 2016** [(https://canvas.santarosa.edu/courses/26682/assignments/171693)](https://canvas.santarosa.edu/courses/26682/assignments/171693)
	📝 **Check-In Discussion** [(https://canvas.santarosa.edu/courses/26682/assignments/171692)](https://canvas.santarosa.edu/courses/26682/assignments/171692)
	📝 **Check-In Discussion - Fall 2016** [(https://canvas.santarosa.edu/courses/26682/assignments/171691)](https://canvas.santarosa.edu/courses/26682/assignments/171691)
	📝 **Discussion - Week 1 - Fall 2016** [(https://canvas.santarosa.edu/courses/26682/assignments/171690)](https://canvas.santarosa.edu/courses/26682/assignments/171690)
	📝 **Quiz - Week 1 - Fall 2016** [(https://canvas.santarosa.edu/courses/26682/assignments/171689)](https://canvas.santarosa.edu/courses/26682/assignments/171689)
	📝 **Roll Call Attendance** [(https://canvas.santarosa.edu/courses/26682/assignments/171694)](https://canvas.santarosa.edu/courses/26682/assignments/171694)