**SDCCD**: **C**ontinuing **E**ducation

**Comp 608: Basic Network Configuration N+**

Course Syllabus

Dates: CRN: **16163** September 6, 2022 – January 28, 2022

Days: Saturday

Hours: 9:30 am – 3:30 pm

Location: ECC, Room B101; Zoom: sdccd-edu.zoom.us

Instructor: Ron Runyan, adjunct

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**Course Description:** This course provides students with the technical and industry skills required to begin an exciting career installing, configuring, and troubleshooting computer networks. Students will begin to prepare for the CompTIA Network + N10-007 exam. The course will focus on the fundamentals of protocols, topologies, hardware, and network design. We will explore TCP/IP, ethernet, wireless transmission, security concepts, and virtual networks with practical case studies, real-world problem solving, and hands-on projects.

**Course Goals and Objectives**

Specific Topic Coverage Includes:

* An introduction to Networking
* Networking standards and the OSI Model
* Transmission basics and the Networking media
* Introduction to TCP/IP Protocols
* Topologies and Ethernet standards
* Network Security
* Troubleshooting Network Problems
* Ensuring Integrity and Availability
* Network Management

**Student Learning Outcomes**

Upon successful completion of this course, students will be able to demonstrate their knowledge of theory and practical application by using problem solving, critical thinking, written and oral communication and mathematical skills to be able to:

1. Use various test instruments
2. Demonstrate the use of Windows and Command line prompts
3. Demonstrate the ability to communicate orally and in technical terms
4. Use diagnostic software to interpret and solve software and hardware malfunctions
5. Demonstrate the ability to configure a computer system
6. Identify and demonstrate the use and troubleshooting of peripheral devices
7. Describe and manage memory
8. Demonstrate basic knowledge of electricity
9. Demonstrate knowledge of installing maintaining and troubleshooting Windows
10. Demonstrate a basic knowledge of Networks and the Internet
11. Demonstrate a basic knowledge of Multimedia technology
12. Demonstrate professional ethics, personal integrity, good business practices and consumer relation skills
13. Assess customer needs, analyze possible configurations, and provide solutions or recommendations for hardware, operating systems, networking, and security

By the end of the course students will have produced a functional Network Repair Notebook and prepared for the CompTIA N+ certification.

**Course Text Books and Suggested Tools**

1. *Network + Guide to Networks* (Course Book) 6th Edition
   1. ISBN: 13: 978-1-133-60819-6
   2. ISBN: 10: 1-133-60823-X
2. *Network + Guide to Networks* (Lab Manual) 6th Edition
   1. ISBN: 13: 978-1-133-60823-3
   2. ISBN: 10 1-133-60823-X

Suggested tools:

1. Tools of the Trade - Must Haves

[ ] Tiny Flathead Screwdriver

[ ] Small Phillip s Screwdriver

[ ] Medium Phillips Screwdriver

[ ] Medium Flathead Screwdriver (just in case)

2 Other Suggested Tools

[ ] Grounding Wrist Strap [ ] Small Mirror

[ ] Needle-Nose pliers [ ] Penlight (LED flashlight)

[ ] A Bent Paper Clip [ ] Can of O2 – compressed air

[ ] Sticky Labels

1. Most Important Tool

**PATIENCE**---don’t be in a hurry; relax; don’t rush things. Be patient with yourself, your clients, and your instructor.

**Method of Instruction and Learning Modalities**

Lecture, PowerPoint, YouTube, Labs, and input from fellow students will form most of the instruction. Professor Messer and other known experts will be looked at through computer Websites.

**Attendance**

It is important to attend all class sessions as knowledge is built by layers and each class will contain its own topics and learning objectives. Please be here and on time. Students will be dropped for excessive absences. The district policy is absence from two or more classes and/or accumulative student hours equal to ten percent of the total course hours.

**Student Rights and Responsibilities**

All students have the right to a campus learning environment free from interference or disruption. Students are expected to adhere to all policies and procedures of the district as well as all federal, state and local laws. Student policy 3100 establishes a zero-tolerance policy for weapons, drugs and alcohol.

**Student Code of Conduct**

Students are subject to charges of misconduct and removal for violation of the Student Code of Conduct including, but not limited to the following acts:

• Academic misconduct or dishonesty; cheating.

• Forgery, alteration, falsification, or misuse of campus/district documents.

• Theft or damage to district property.

• The physical or verbal disruption of instructional or student activities.

• The physical, verbal, or written intimidation or harassment of such severity or pervasiveness as to have the purpose or effect of creating an intimidating, hostile or offensive educational environment.

• Any expression which is obscene, libelous, or slanderous.

• Physical altercation or threats of violence including assault, or battery upon some student or district personnel on district premises.

• Unlawful conduct of a sexual nature.

• Possession of weapons, explosives, or objects which may be used as weapons or to threaten bodily harm.

• Failure to comply with directions of staff members of the district who are acting within the scope of their employment.

• Use, possession, distribution, or sale of alcoholic beverages on campus.

• Use, possession, distribution, manufacture or sale of narcotics or other hallucinogenic drugs is prohibited on district premises.

ATTENTION: We have made every effort to ensure that this course is accessible to all students, including students with disabilities. If you encounter a problem accessing any portion of this course, please contact your instructor or a DSPS Counselor.

**Grading / Evaluations**

To qualify for a certificate of completion, students will need a grade of at least 80% based on the following scale:

* + 20% Labs - hands-on labs. Instructor will sign off successful completion of labs
  + 20% Unit Tests - unit quizzes also available for checkup
  + 20% Hands-on Final
  + 20% Final Exam
  + 20% Attendance/Participation

**Assignments**

1. Readings/Lectures/Tests: This will consist on some handouts, some Web material and some lab work in class. Students are responsible for all terms and concepts covered
2. Labs: much of the course will be lab time to complete assignments and experience hands-on learning.
3. Collaborative learning will create real world simulation.

**Personal Bio**

After graduating from Helix High School in 19\*\*, I went to Grossmont College, but left after one year to travel with a musical show called "Up with People." However, the Vietnam War was on and I was drafted into the Army. After getting out of the Army and married in 1970, I graduated from Bethany College in Santa Cruz with a dual major in Psychology and Bible/Theology. I worked for Coca Cola of San Diego for about 8 1/2 years and then helped a startup business called The Parts Dept., Inc. The business folded after two years and I found myself looking for a job over the next two years. In 1988 I trained Real Estate agents for Creative Computer Consulting and in 1990 I started teaching at Kelsey-Jenney Business College. I taught computer and business courses and students earned an AA degree with a specific focus like business or accounting.

In 1994 I opened my own business called Computing Made Easy (CMe) under the umbrella of Ron Runyan Enterprise. I built PC computer systems and repaired the same. I also did small office networking and trained corporations and individuals on MS Office and other software programs.

I started teaching ROP Business and Computer Applications at Madison High School in September 1999. In 2002 Madison opened two sections of AP Psychology which I taught and in 2008 I taught Introduction to Marketing. I also taught two years of computer repair at Madison. I really enjoy teaching and always desire to have a positive impact on students.

Because of my great love for photography, I have contributed at least 75 percent of the sports and candid shots for Madison’s Yearbook. In 2008 my daughter, Rachelle, and I opened a photo business called **Captured Memories**. Outdoor family portraits, children's photography, nature shots, and sports have made up the most of my pictures.

In 2013 I started working with Continuing Education in their BIT lab with computer applications. I later added Computer Care and IT Essentials. In 2018 I started teaching Networking Basics (N+).

I am always open to suggestions on how to improve the class. I may not be able to implement all ideas, and some may need to be reviewed by the college. I believe in shared information so thanks for being a part of the sharing and learning process. Thanks also for being part of this awesome network of technicians.

For the love of learning,

Ron Runyan

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