

CoSci 453 SYLLABUS
A+ Certification Preparation

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Section: 3104 Fall 2012

The CompTIA A+ essentials examination measures necessary competencies for an entry level IT professional with the equivalent knowledge of at least 500 hours of hands-on experience in the lab or field. Hands-on experience or equivalent knowledge includes installing, building, upgrading, repairing, configuring, troubleshooting, optimizing, diagnosing, and performing preventive maintenance of basic personal computer hardware and operating systems.

Student Learning Content Knowledge and Outcomes: Upon completion of this course students will have an understanding of, or be able to apply, the following principles and concepts.

1. Analyze and evaluate basic computer hardware/software problems;
2. Diagram logical and physical memory resources including IRQ's and DMA addresses.
3. Categorize network problems and solutions following the to the OSI model.
4. Demonstrate use of internet resources for hardware/software problem identification, solutions, analysis, and upgrades;
5. Evaluate future computer developments and analyze computer requirements

Exit Skills:

1. Demonstrate ability to build, repair, configure, optimize, upgrade and install hardware
2. Demonstrate ability to troubleshoot, upgrade and install software
3. Distinguish between hardware and software problems
4. Successfully complete A+ certification essentials examination

Assessment Tools:

Pre/Post Test

- At the beginning of the semester a pre-test is given. This pre-test is designed to determine the students' current level of knowledge and reveal the areas where more work is needed. A percentage of required knowledge for the course is determined.
- This pre-test helps the student to identify their weak areas and spend the most time concentrating on them.
- At the end of the semester an exit test (post-test) is given. This exit test is designed to evaluate the students' progress since the beginning of the year. A percentage of required knowledge for the course is determined.
- The overall improvement in the required knowledge can be shown by comparing the percent difference in the pre-test and post-test scores.

Skill Demonstration:

- In the lab, students will work physically with a computer. Each lab exercise has a list of instructions and a sign-off sheet. The student will demonstrate the skill indicated in the lab exercise to either the instructor or a lab-assistant.

On-line Assessment:

- Students will be registered in the Cisco Academy IT/A+ Technician course work. This course is the first level of CISCO certification. Students are responsible for going on-line to read the material and take the practice quizzes. These practice materials may be accessed from home.
- Each chapter in the Cisco course has an on-line assessment. This assessment test will be opened for use in the CSIT lab at designated times.

Determination of Grade:**1. Attendance:**

The class meets from 5:40pm to 10:00pm Thurs. evening. Attendance will affect your grade in a negative manner only. You may miss two class meetings without penalty. If you miss more than two meetings, one point will be subtracted from your final grade for each additional class missed. Three cases of tardiness equal one absence.

2. Homework: (10%)

- Homework assignments will be given each week. These assignments will constitute 10% of your final grade. Homework must be turned in the following week to be counted.
- If lab work (hands-on) is not completed within the regular lab time, the student is expected to come to the computer lab and complete the assignment.
- Computer aided instructional/testing software is available in the computer lab. Student homework may consist of completing these computer aided instructional/testing procedures.

3. Tests/quizzes: (40%)

- Tests/quizzes will be given each week. These will constitute 30% of your grade. Practice tests are available in the lab.
- The goal of the class is to increase the students' knowledge of the course material. Students may spend extra time studying the material and re-take the quizzes to show an increase in knowledge and understanding.
- The key is not to memorize, but to understand the topics

4. Mid-Term (25%)**5. Final Exam: (25%)**

Grading Scale: A total number of points from homework, tests/quizzes, midterm and final exam is used to determine the following. The scale used is the 60% scale used by CompTIA.

A = 90-100, B = 81-89, C= 70-79, D = 60-69, F = below 60

Materials and resources:

Comptia A+ Certification Exam Guide – Seventh Edition ; Meyers; McGraw Hill
978-0-07-170133-4
Toolkit, flash drive, 3 blank CD's

Office Hours:

Tues/Thur 12:30 – 2:30 Mon/Tue/ Thu – 4:30 – 5:30 pm

Or by appointment – 818.470.8419

Or by email - rettkem@lamission.edu or samusher@aol.com