THE INSTRUCTOR RESERVES THE RIGHT TO AMEND A SYLLABUS AS NECESSARY.

I. COURSE DESCRIPTION:
Multilayer switching teaches about the deployment of state-of-the-art campus LANs. The course focuses on the selection and implementation of the appropriate Cisco IOS services to build reliable, scalable multilayer-switched LANs. Licensing/Certification Agency: Cisco Corporation. (3 Lec., 4 Lab)

II. COURSE PREREQUISITES:
ITCC 1477, ITCC 1478, ITCC 2476 and ITCC 2477 or CCNA certification or instructor’s permission.

III. REQUIRED/RECOMMENDED COURSE MATERIALS:

IV. COURSE OBJECTIVES:
Students will learn how to implement, monitor, and maintain switching in converged enterprise campus networks. Further, students will learn how to plan, configure, and verify the implementation of complex enterprise switching solutions. This course also covers the secure integration of VLANs, WLANs, voice and video into campus networks. To reinforce configuration skills, there are comprehensive labs emphasizing hands-on learning and practice.
The CCNP R&S SWITCH: Implementing Cisco IP Switched Networks course teaches the knowledge and skills that will enable the implementation of complex enterprise switched networks. This course is aligned with the CCNP R&S SWITCH 300-115 certification exam.

This course is also aligned with the Implementing Cisco IP Switched Networks (SWITCH) Foundation Learning Guide from Cisco Press.

V. LEARNING OUTCOMES:
Upon completion of this course, the student will be able to perform tasks including:
1. Implement, monitor, and maintain switching tasks in an enterprise campus network environment.
2. Implement, monitor, and maintain appropriate spanning tree protocols in campus networks.
3. Implement, monitor, and maintain VLANs in campus networks.
4. Be proficient in configuring and optimizing high availability and redundancy on switching networks.
5. Be able to describe and successfully implement appropriate LAN security features.
6. Be knowledgeable in planning and preparing for advanced services in a campus infrastructure.

VI. COURSE OUTLINE:
Part 1: Designing Campus Network
Part 2: Building a Campus Network
Part 3: Working with Redundant Links
Part 4: Multilayer Switching
Part 5: Monitoring Campus Networks
Part 6: Implementing High Availability
Part 7: Securing Switched Networks
Part 8: Final Preparation

VII. EVALUATION PROCEDURES:
Attendance and teamwork .......... 10%
On-line chapter exams ............. 15%
On-line final exam ................. 20%
Lab exercises ..................... 25%
Skills-based final exam .......... 30%

Total ................................. 100%

VIII. EXAMS AND ASSIGNMENTS:
There is an end-of-chapter exam for each of the chapters. These exams are required. At the end of the course, all students will be required to take a comprehensive final exam. All assignments will involve hands-on labs. Specific and representative labs will be announced.
IX. **GRADING SCALE:**
The final course grade is determined as follows:

- **A** .......................... 90 – 100%
- **B** .......................... 80 – 89%
- **C** .......................... 70 – 79%
- **D** .......................... 60 – 69%
- **F** .......................... 59% and below

X. **CLASSROOM POLICIES:**

**Teamwork:**
As in any organization, students should portray themselves as capable of working as a team. The lab setting is such that students will work as teams of various sizes in engaging the assigned labs. Cooperation and agreements are expected for the successful performance of the team.

**Class Participation:**
This is an important part of this course. Your active participation is required to ensure successful assimilation of the course content. You are expected to have read the material scheduled **before** coming to class. The time in class should ideally be spent on reviewing the curriculum, taking the on-line chapter tests and performing the scheduled lab assignments. The on-line curriculum can be accessed at any time via the Internet with your login and password. Plan for a full class time of group work, lab and lecture.

**Environment:**
No food, drinks, or tobacco will be permitted in the classrooms. Students are expected to maintain proper classroom decorum at all times. Students are expected to provide their own individual ethical performance in compliance with the accepted Richland College policies.

XI. **ATTENDANCE POLICIES:**
This class requires 100% attendance. You are expected to attend class regularly. Please notify me if you will be absent. If you are **unable** to complete this course, you must withdraw by **Friday, February 27, 2015**. A grade of **W** will be assigned.

Withdrawing from a course is a formal procedure, which you must initiate. I cannot do it for you. If you stop attending and do not withdraw from the class, you will receive a grade of **F**.

Students sometimes drop courses when help is available that would enable them to continue and finish them. I hope that you will discuss your plans with me if you are considering withdrawing from this course.

XII. **INSTITUTIONAL POLICIES:**
Refer to the Richland College website: [www.richlandcollege.edu](http://www.richlandcollege.edu) or to [www.richlandcollege.edu/syllabusinfo/syllabiInformation.pdf](http://www.richlandcollege.edu/syllabusinfo/syllabiInformation.pdf).
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<tr>
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<th>Chap.</th>
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Note: 1. Students should read the chapter before coming to class.
2. The curriculum version is CCNP R & S SWITCH: Implementing IP Switching, version 7.0.