Syllabus: INT 695 – Advanced Routing

Instructor:

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Required Learning Resources and Texts:

Cisco Networking Academy – “CCNP: Building Scalable Internetworks v5.0”
Curriculum access is provided on-line to students enrolled in the course. No textbooks required.

Objectives:

This course deepens and broadens our knowledge of data communications in Scalable Internetworks. Specifically exploring Enterprise Network Architectures, this course primarily focuses on the topics of routing and routing protocols. Other topics also covered in the course include IP Multicasting and IPv6.

Activities:

Students in this course will study the CCNP: Building Scalable Internetworks v5.0 curriculum. Chapters 2 through 8 will have associated formative assessments. Additional knowledge will be gained through hands-on laboratory exercises. For summative assessment, there will be one written Final Exam along with three Skills Exams in this course.

Additional readings may be provided throughout the semester as supplemental information to the text. Any supplemental material provided has a potential of becoming lab exercise(s) and/or a quiz subject.

Undergraduate Student Assignments:

Undergraduate students - The course requirements for undergraduate students will include the following:

Seven equally weighted Chapter Exams
Three Lab Skills Exams
Final Exam
Lab Reflection Journal (or) Cisco certification exam: 642-901 (BSCI)

The grade a student earns is based on the following percentage scale:
Graduate Student Grading:

Graduate Students must complete a term paper (in three parts) in addition to all of the assignments listed for undergraduate students. At the conclusion of this course, Graduate students are also expected to sit for the current CCNP Certification Exam (642-901 BSCI).

The term paper has three assignments. Overall there are 100 points possible and the final paper should be between 12 and 20 pages.

- Literature review (20 points)
- Idea Paper (20 points)
- Formal Term Paper (60 points)

Choose one of the following topics:

- Routing Protocols: Issues and Future
- Comparison of OSPF and IS-IS Routing Protocols
- IPv6 Adoption and Integration

Policies and Procedures:

Policies and procedures printed in the student hand book apply to this class. Students should carefully read the policies. In particular, policies on academic honesty, the ethical use of computing resources and student discipline should be read by each student.