

Course Outcomes Guide

Course Title: IST 254 Network Design and Defense

Course Instructor(s): Steve Shank

Programs: Network Administration

Expected Learning Outcomes

- Think critically
- Communicate effectively with both verbal and written forms
- Perform and share cooperatively in team projects
- Review and practice computer and network etiquette and ethics found in working environments
- Administer and troubleshoot a network infrastructure
- Evaluate best practices in security concepts to maintain confidentiality, integrity and availability of computer systems

Assessment (How do students demonstrate achievement of these outcomes?)

Capstone project

Group Project

Satisfactory scores on exams and projects.

Hands-on labs

Case Studies

Validation (What methods are used to validate your assessment?)

1. Approval of Information Systems Technology Advisory Council
2. CyberWATCH curriculum guidelines

Course Outcomes Guide

3. Faculty Review

4. International Council of Electronic Commerce Consultants

Results (What do the data show?)

85% of students completing course requirements successfully complete coursework

Advisory group advises to incorporate more practical exercises into the curriculum when possible. Also include group project to promote teamwork.

A course at this level is better served with more hands-on experience and a team network design project. The team worked well this semester and completed a network design and improvement project.

The securing of an NSF grant for computer labs will provide environment a greater hands-on experience.

This course serves as the capstone course for the Network Administration program.

Follow-up (How have you used the data to improve student learning?)

Include more structured exercises and lab assignments

Redesign capstone project

Redesign group project

(To do)

Build library of exercises

Budget Justification

(What resources are necessary to improve student learning?)

PC lab hardware; switches, routers, projection unit, cabling, tools, printers, PCs, servers

Security hardware and software

Simulation software, Virtual PC licenses.

Course Management software

Classroom Management system software