

Course Title: IST 160 Fundamentals of Security

Course Instructor(s): Steve Shank/Rob Foth

Programs: IST Networking Track I, IST Networking Track II, Forensics

Expected Learning Outcomes

- Think critically
- Communicate effectively with both verbal and written forms
- Produce a presentation utilizing office productivity software
- Review and practice computer and network etiquette and ethics found in working environments
- Troubleshoot problems in an existing network environment
- Evaluate and implement new and future technologies into current system
- Evaluate best practices in security concepts to maintain confidentiality, integrity and availability of computer systems

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

Satisfactory scores on exams and projects.

Satisfactory scores on exams modeled after industry standard certification exams. Models are developed from the following certification exams: Security+..

Completion of Security+ lab sim by TestOut. This includes lectures, labs, and exams.

Participation in class discussion boards. Each student creates a new thread on the current topic and also comments on another student's thread.

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

1. Approval of Information Systems Technology Advisory Council

Course Outcomes Guide

2. Tests comparable to Industry Standard Certification Exam.
3. Faculty Review
4. CyberWatch approved curriculum
5. National Security Telecommunications and Information Systems Security organization approved HCC security curriculum for standards 4011 and 4013
6. Department of Homeland Security and NSA awarded HCC security curriculum CAE (Center of Academic Excellence) status.

Results (What do the data show?)

100% of students completing course requirements successfully complete coursework

Students successfully participate in the Collegiate CyberDefense Competition (CCDC)

Feedback from students going on to take the CompTIA Security+ exam say the labsim by TestOut is very helpful in passing the exam.

The Advisory group advises to incorporate more practical concepts into the curriculum when possible.

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

Include Security+ lab sim from TestOut in curriculum

Add practical hands-on lab assignments

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

Course Management software

Classroom Management system software

Computer based Portfolio system