Course Title: IST 154 Networking Basics **Course Instructor(s):** Karen Weil-Yates

Programs: IST Computer Support Services, IST Networking Track I, IST Networking Track II, Forensics, CYB Cybersecurity

Expected Learning Outcomes

- Students will be able to demonstrate knowledge of network architecture through drawing and site assessment through written documentation
- Students will be able to install, configure, use and manage TCP/IP on both wired and wireless Per-to-peer networks
- Students will be able to use critical thinking skills in troubleshoot problems in an existing network environment
- Students will be able to prepare for CompTIA's vendor-independent networking certification exam, Network +

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

Satisfactory scores on exams and hands-on projects.

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

Completion of Net+ Lab Sim by TestOut. This includes lectures and exams.

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

- 1. Approval of Information Systems Technology Advisory Council
- 2. Tests comparable to Industry Standard Certification Exam.
- 3. Faculty Review

Results (What do the data show?)

100% of students completing course requirements successfully complete coursework: this includes two HOPs, Making Cable and Subnetting Challenge

The following data was collected on the Exam assessments:

	Net+ CP	Transcender
	Exam	Exam
Before removing	42%	
Walk-Aways		
After removing	45%	61%
Walk-Aways		

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

Course Outcomes Guide

Student feedback from students in other program courses state IST 154 is helpful in their understanding and completing of later courses.

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?)

Place a greater focus on completing simulated CompTIA Net+ exams. Include assignments that utilize real and/or simulated network operating systems

Budget Justification (What resources are necessary to improve student learning?)

PC lab hardware; switches, routers, projection unit, cabling, tools, printers, PCs, servers Wireless hardware and software Security hardware and software Simulation software, Virtual PC licenses. LabSim Software. Course Management software Classroom Management system software Computer based Portfolio system