Course Title: CYB 225 Tactical Perimeter Defense

Course Instructor(s): Steve Shank/Rob Foth

Programs: AAS Cyber Security, AS Cyber Security

Expected Learning Outcomes

- Think critically

- Review and practice computer and network etiquette and ethics found in working environments

- Administer a network infrastructure

- Troubleshoot problems in an existing network environment

- Evaluate and implement new and future technologies into current system

- Install, configure, use and manage network defensive software on a network

- Evaluate best practices in security concepts to maintain confidentiality, integrity and availability of computer systems

- Design a network defense strategy that utilizes the "Defense in Depth" practices.

- Strategically place and configure network hardware: routers, firewalls, intrusion detection systems and intrusion prevention systems to maximize network security.

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

Satisfactory scores on exams and projects.

Satisfactory scores on exams modeled after CyberWatch model curriculum..

Successful completion of labs utilizing firewalls, routers, virtual private networks and intrusion detection systems

Given a scenario of a network system identify vulnerabilities and recommend mitigating these vulnerabilities.

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

1. Approval of Information Systems Technology Advisory Council

2. Tests/labs comparable to Industry Standard Certification Exams (Security Certified Professional).

3. Faculty Review

4. CyberWatch model curriculum

Results (What do the data show?)   N/A (New course)
Since the 2013 spring semester a total of 13 students have taken CYB225 Tactical Perimeter Defense.

12 (92%) of the students completed the course and 12 (92%) were successful.

The grade distribution is as follows:

A	7	54%
B	3	23%
C	2	15%
D	0	0%
F	1	8%

There was 0 audit and 0 withdrew from the course.

Follow-up (How have you used the data to improve student learning?)
N/A (New course)

(To do)
Incorporate NetLab labs into coursework

Continue to develop common assessments

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.
Testing Software.
Course Management software
Classroom Management system software
Computer based Portfolio system