Program Outcomes Guide #3 (POG #3)

Program Title: AAS Cyber Security
Program Team: Steve Shank

Expected Learning Outcomes
- Think critically
- Communicate effectively with both verbal and written forms
- Perform and share cooperatively in teams or groups
- 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?)

Think Critically
Satisfactory scores on exams modeled after industry standard certification exams. Models are developed from the following certification exams: IC^3, CompTia A+, CompTia Net+, CompTia, Security+, Microsoft MCP, and Microsoft MCSA
Successful completion of exams and lab assignments .
Analysis of packets captured in network traffic

Communicate effectively with both verbal and written forms
- Completion of an individual project
- Completion of a group project
- Journal submission of readings in the field
- Participation in discussion boards

Perform and share cooperatively in teams or groups
Completion of group project

Review and practice computer and network etiquette and ethics found in working environments
Completion of group project
Journal submission of readings in the field

Administer and troubleshoot a network infrastructure
Completion of vmware (virtual) project

Evaluate best practices in security concepts to maintain confidentiality, integrity and availability of computer systems
- Journal submission of readings in the field
- Completion of individual project
- Completion of group project
- Successful completion of exams and lab projects

Validation (What methods are used to validate your assessment?)
1. Program maps to the National Security Telecommunication and Informatino Systems Security (NSTISSI) 4011 and 4013 Standards.
2. Approval of Information Systems Technology Advisory Council
3. Tests modeled after industry standard Certification Exams
4. Program curriculum mirrors CyberWATCH consortium curriculum
5. Faculty Review
6. Textbook Authors

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Results (What do the data show?)
CyberWATCH suggests inclusion of case studies into curriculum
Follow-up (How have you used the data to improve student learning?)
Reduced curriculum to 60 credits improving chances of student completing program.
Adding virtual netlab labs to curriculum
Introducing additional online learning source – LabSim by Testout. These allow students greater opportunity to work on course material including labs through the Internet
Budget Justification
(What resources are necessary to improve student learning?)
PC lab hardware; projection unit, cabling, tools, printers, PCs
Simulation software, Virtual PC licenses.
Internet based curriculum
Course Management software
Classroom Management system software