Program Outcomes Guide #3 (POG #3)

Program Title: IST Networking

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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+, CISSP, Microsoft MCP, Microsoft MCSA Planet3 CWNA and Cisco CCNA.

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. Network I, II, III, IV curriculum written by Cisco Academy

6. IST 260, 261, 264 curriculum written by Microsoft

7. Faculty Review

8. Textbook Authors

Results (What do the data show?)
95% of students completing course requirements successfully complete coursework

Incorporate updates from Certification Exams, CyberWATCH consortium, Cisco Academy and Microsoft to the curriculum

IST Advisory Council recommends:
- adding scenario based work
- adding group projects

- promoting more independent thinking
- including more problem solving tasks
- designing exams that are ask more than multiple choice questions

CyberWATCH suggests inclusion of case studies into curriculum

Follow-up (How have you used the data to improve student learning?)
Update exams based on industry standard Certificate Exams
Develop exams that include more than multiple choice exams
Include an individual project into assessment
Include a group project into assessment
Develop labs that are scenario based
Include discussion board into two classes

(To Do)
Design and include a case study
Create questions for exams that are scenario based
Continue mirroring CyberWATCH curriculum
Continue enhancing and updating labs
Reinstitute reading journal/discussion board in all classes

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