PROGRAM ASSESSMENT PLANNING FORM

Program to be assessed:

Title: Computer Systems and Networking (APCSN) Local & Wide Area Network (NETW) Concentration

Division: BCT   Department: CIS/CNT   Program Code: 14300

Type of Award: ☐ A.A.   ☐ A.S   ☒ A.A.S.
                 ☐ Cert.   ☐ Adv. Cert.   ☐ Post-Assoc. Cert.   ☐ Cert. of Completion

Assessment plan:

Learning outcomes to be assessed	Assessment tool	When assessment will take place	Describe population to be assessed	Number of students to be assessed
Identify the architecture, structure, functions, components, and models of the Internet and computer networks including basic principles of IP addressing, IP addressing schemes, fundamentals of Ethernet concepts, with physical media and frame architecture.	CNT 236 Cisco final exam	Once every three years starting in the Fall of 2020	Students who have completed all requirements for the Computer Systems and Networking Associate Degree including the CVCNA Certificate and the CTCSTC Certificate	All (approx. 10 – 15 students)
Distinguish the architecture, components, and operations of routers and switches in small networks including configuration, basic functionality, and troubleshooting plus the identification of various routing protocols including RIPv1, RIPv2, single-area/multi-area OSPF, virtual LANs, and IPv4/IPv6 inter-VLAN routing.	CNT 236 Cisco final exam	Once every three years starting in the Fall of 2020	Students who have completed all requirements for the Computer Systems and Networking Associate Degree including the CVCNA Certificate and the CTCSTC Certificate	All (approx. 10 – 15 students)
Identify the architecture, components, and operations of routers and switches in large and complex networks including configuration for advanced functionality, troubleshooting to resolve common issues with OSPF, EIGRP, STP, and VTP in both IPv4 and IPv6 networks, plus implementation of DHCP and DNS operations in a network.	CNT 236 Cisco final exam	Once every three years starting in the Fall of 2020	Students who have completed all requirements for the Computer Systems and Networking Associate Degree including the CVCNA Certificate and the CTCSTC Certificate	All (approx. 10 – 15 students)

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Identify and distinguish various WAN technologies and network services required by converged applications in a complex network including the selection criteria of network devices to meet network requirements, configuration and troubleshooting techniques, resolution of common issues with Data Link protocols and implementation of IPSec and Virtual Private Network (VPN) operations in complex networks.	CNT 236 Cisco final exam	Once every three years starting in the Fall of 2020	Students who have completed all requirements for the Computer Systems and Networking Associate Degree including the CVCNA Certificate and the CTCSTC Certificate	All (approx. 10 – 15 students)

Scoring and analysis of assessment:

1. Indicate how the above assessment(s) will be scored and evaluated (e.g. departmentally developed rubric, external evaluation, other). Attach the rubric/scoring guide.

   Exams are departmentally-developed exams made up by all instructors teaching the four courses from the CVCNO Certificate – these courses are the primary focus of this associate degree. Tests and the results there of will reflect competency not only in these four courses, but in all the technical background courses leading up to these four.

   Test is divided into four parts, each part reflecting one of the outcomes listed above. Questions and answers are chosen based on the key concepts of the course objectives, which make up each of the outcomes listed above, and which are described in the course syllabi. The rubric used for the evaluation of the results is shown below:

   Average of all students taking the test should equal or exceed 70% correct answers for all question used in the assessment test.

   70% or greater of the number of students taking the assessment test should equal or exceed that 70% mark for all the question sued in the assessment test.

   Outcome success will be based on the average of all student scores for each particular outcome's part of the test equaling or exceeding 70%.

2. Indicate the standard of success to be used for this assessment.

   The standard of success will be based on meeting the 70% goals listed above – overall student average for the test equaling 70%, 70% of the students getting 70% or above, and each outcome having a 70% success rate as well.

3. Indicate who will score and analyze the data (data must be blind-scored).

   All departmental instructors who teach sections of these courses.
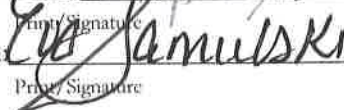
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4. Explain how and when the assessment results will be used for program improvements.

> For each outcome/objective not being met, the following will take place:
>
> a. Test questions themselves will be reviewed to insure proper student understanding.
> b. Test questions actually addressed the outcome/objective's concept.
> c. Review of the lecture notes and lab projects to be sure concept is explained properly
> d. Revision of lecture and labs with changes put in where needed.

Submitted by:

Name: ___William R. Reichert_____ Date: __10/23/2017__
   Print/Signature

Dept. Chair: __Philip Geyer_____ Date: __10/26/2017__
   Print/Signature

Dean: __Ew Samulski_____ Date: __11-2-17__
   Print/Signature

Please return completed form to the Office of Curriculum & Assessment, SC 257.

Reviewed by Assessment Committee 11/30/17

PROGRAM ASSESSMENT PLANNING FORM

Program to be assessed:

Title: Computer Systems and Networking (APCSN) Microsoft Network Operating System (MNOS) Concentration

Division: BCT   Department: CIS/CNT   Program Code: 14300

Type of Award: ☐ A.A.   ☐ A.S   ☒ A.A.S.
                  ☐ Cert.   ☐ Adv. Cert.   ☐ Post-Assoc. Cert.   ☐ Cert. of Completion

Assessment plan:

Learning outcomes to be assessed	Assessment tool	When assessment will take place	Describe population to be assessed	Number of students to be assessed
Identify the steps and procedures for installing the various types of Windows Server 2016 Operating Systems, (Graphical, Server Core, Nano, Docker), storage methods, (Raid storage spaces, ISCSI, and fail-over clustering), and image creation and distribution.	CNT 224 final exam	Once every three years starting in the Fall of 2020	Students who have completed all requirements for the Computer Systems and Networking associate degree including the CVCNO Certificate and the CTCSTC Certificate	All (approx. 10 – 15 students)
Distinguish the steps to install, configure, manage and test the various forms of networking services provided by Server 2016 including IPv4, IPv6, SMB sharing, DHCP, DNS, routing, RRAS, radius, VPNs, NAT, RD gateway, branch caching and DFS.	CNT 224 final exam	Once every three years starting in the Fall of 2020	Students who have completed all requirements for the Computer Systems and Networking associate degree including the CVCNO Certificate and the CTCSTC Certificate	All (approx. 10 – 15 students)
Identify the procedures to setup, configure, and manage a complete Server 2016 Active Directory implementation, including creation, managing user and computer accounts, groups, group policies, (including security, App installation, scripting, folder redirection, inheritance, and publishing), sites, and cross forest trusts.	CNT 224 final exam	Once every three years starting in the Fall of 2020	Students who have completed all requirements for the Computer Systems and Networking associate degree including the CVCNO Certificate and the CTCSTC Certificate	All (approx. 10 – 15 students)
Distinguish the steps in administration and management of the Windows 10 Client Operating System including installation, device configuration, networking,	CNT 224 final exam	Once every three years starting in the Fall of 2020	Students who have completed all requirements for the Computer Systems and Networking associate degree including the	All (approx. 10 – 15 students)

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storage, data access, App installation, remote management, updates, monitoring, system and data recovery.			CVCNO Certificate and the CTCSTC Certificate	

Scoring and analysis of assessment:

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d. Revision of lecture and labs with changes put in where needed.

Submitted by:

Name:__William R. Reichert_____ Date: 10/23/2017
  Print/Signature
Dept. Chair:___Philip Goyer_____ Date: 10/26/2017
  Print/Signature
Dean_____ Date: 11-2-17
  Print/Signature

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