

PROGRAM ASSESSMENT PLANNING FORM

Program to be assessed:

Title: Computer Network Operating System I (CVCNO)
 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 four of the required courses associated with this program – CNT 201, CNT 211, CNT 223, and CNT 224	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 four of the required courses associated with this program – CNT 201, CNT 211, CNT 223, and CNT 224	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 four of the required courses associated with this program – CNT 201, CNT 211, CNT 223, and CNT 224	All (approx. 10 – 15 students)

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Office of Curriculum & Assessment

Approved by the Assessment Committee 10/10/06

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Distinguish the steps in administration and management of the Windows 10 Client Operating System including installation, device configuration, networking, storage, data access, App installation, remote management, updates, monitoring, system and data recovery	CNT 224 final exam	Once every three years starting in the Fall of 2020	Students who have completed all four of the required courses associated with this program – CNT 201, CNT 211, CNT 223, and CNT 224	All (approx. 10 – 15 students)
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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 making up the CVCNO Certificate. The 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.

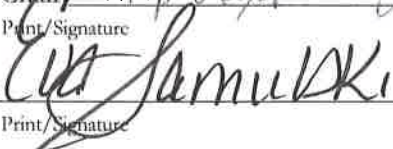
For each outcome/objective not being met, the following will take place:

- 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: Chris Samurki  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 Networking Operating Systems I (CVCNO)
 Division: Business Department: CNT 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 setting up and managing a Windows Server 2003 Active Directory Environment including identification of the Policies and Procedures associated with implementation	Department Exam – Part I	Once Every Three Years, starting in the Winter of 2008, on the Last Day of Class in the Fourth (Capstone) Course which is CNT224, Internet and Acceleration Server.	Students who have completed all the previous three of the required Courses associated with this program including CNT201, CNT211, CNT221, and who are presently completing the fourth course in the Program, CNT224	10 – 12 Students
Distinguish the Management Tools and their functions necessary to properly install and maintain Windows XP Professional Workstations – the tools include Control Panel, Registry Editor, Computer Management, and other Administrative Tools	Department Exam – Part II	Once Every Three Years, starting in the Winter of 2008, on the Last Day of Class in the Fourth (Capstone) Course which is CNT224, Internet and Acceleration Server.	Students who have completed all the previous three of the required Courses associated with this program including CNT201, CNT211, CNT221, and who are presently completing the fourth course in the Program, CNT224	10 – 12 Students
Identify the main Networking Server Services which can be implemented on Windows Server 2003 and their functions/options including TELNET, FTP, HTTP(Web), DNS, DHCP, WINS, RRAS, VPN, Routers, IPSEC NAT.	Department Exam – Part III	Once Every Three Years, starting in the Winter of 2008, on the Last Day of Class in the Fourth (Capstone) Course which is CNT224, Internet and Acceleration Server.	Students who have completed all the previous three of the required Courses associated with this program including CNT201, CNT211, CNT221, and who are presently completing the fourth course in the Program, CNT224	10 – 12 Students

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Identify the steps in Installing and Configuring ISA (Internet Security and Acceleration Server) Firewall & Proxy Server, including establishing and implementing various Access Control Policies/Firewall Rules as well as Web Publishing, Web Page Caching, VPN pass-through, Remote Management, and Monitoring.	Department Exam – Part IV	Once Every Three Years, starting in the Winter of 2008, on the Last Day of Class in the Fourth (Capstone) Course which is CNT224, Internet and Acceleration Server.	Students who have completed all the previous three of the required Courses associated with this program including CNT201, CNT211, CNT221, and who are presently completing the fourth course in the Program, CNT224	10 – 12 Students
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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 departmental multiple choice exams made up by all instructors teaching the four courses making up this Program.. Test is divided up into four parts, each part reflecting one of the outcomes listed above. Each Outcome reflects one of the four courses in the Program. Questions/Answers are chosen based on key concepts of the Course Objectives which make up each of the Outcomes listed above and which are described in the Course Syllabus. Tests will be scored using a Scantron machine and results (right/wrong) for each question asked will be tabulated.

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

A Rubric will be used here to measure the standard of success. The Rubric:

For each major part (Four Parts reflecting the four courses which are part of the Program.)

- Outcome will be considered successful if the average of all Student scores for that Part of the test was equal to or exceeded 70%
- Individual Questions answered correctly by more than 70% of the class in each of the four parts will be considered appropriate to the particular Objective and therefore the Outcome associated with that Objective..

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

Instructors in our Department who are not directly associated with teaching the courses in this program will be used to score and tabulate the results. These will be reviewed with all Instructors in our Department, those directly teaching the courses as well as those not teaching it. The above rubric will be used as the standard of measurement during the analysis period.

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4. Explain the process for using assessment data to improve the program.

1. For Outcomes not meeting the 70 % mark, **all** questions will be reviewed, to determine which key outcomes/objectives from the assessment plan for that course were not being successfully understood.
 - After determination is made on which items need to be addressed, the following will be done.
 - First the assessment questions themselves are then checked to insure that:
 - They are worded such that students are able to interpret the meaning correctly.
 - Example of what would be looked for in the wording of actual question/answers leading to mis-interpretation is shown below.
 - “Increased Collision Domains” was a possible answer to a sample test question. Some students interpreted “increased” as the size of the domains while others interpreted it as the number of the domains. Both interpretations would lead to correct answers, but opposite ones. (The size decreases as the number increases).
 - They actually address the desired objective’s concept.
 - If changes in the questions themselves are needed, these are then made.
 - Assuming the questions are found to accurately reflect the learning objective of the outcomes from that particular course, actual course materials are then reviewed.
 - Lecture notes and Lab Projects used to meet those particular objectives of the Outcome from that course will be reviewed to find shortcomings which may have caused a lack of understanding by the students.
 - Revisions for both Lectures and Lab Projects will then have to be made better explain the concept involved thereby addressing the shortcoming.
2. For individual questions not meeting the 70% mark, even though the overall Outcome results did exceed 70%, a similar assessment procedure is performed.
 - First the assessment questions themselves are then checked to insure that:
 - They are worded such that students are able to interpret the meaning correctly.
 - They actually address the desired objective’s concept.
 - If changes are found to be needed these are made.
 - Assuming the questions are found to accurately reflect the learning objective of the outcomes from that particular course, actual course materials are then reviewed.
 - Lecture notes and Lab Projects used to meet those particular objective(s) of the Outcome(s) from that course will be reviewed to find shortcomings which may have caused a lack of understanding by the students.
 - Revisions for both Lectures and Lab Projects will then have to be made better explain the concept(s) involved thereby addressing the shortcoming.

Submitted by:

Name: William J. Richert Date: _____
Print/Signature

Dept. Chair: GARY DOWNEN Gary Downen Date: 12/18/06
Print/Signature

Dean: Jeanne Wilson Date: 1/5/07
Print/Signature

Please return completed form to the Office of Curriculum & Assessment, SC 247.