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To: Career & Technical Education Administrators

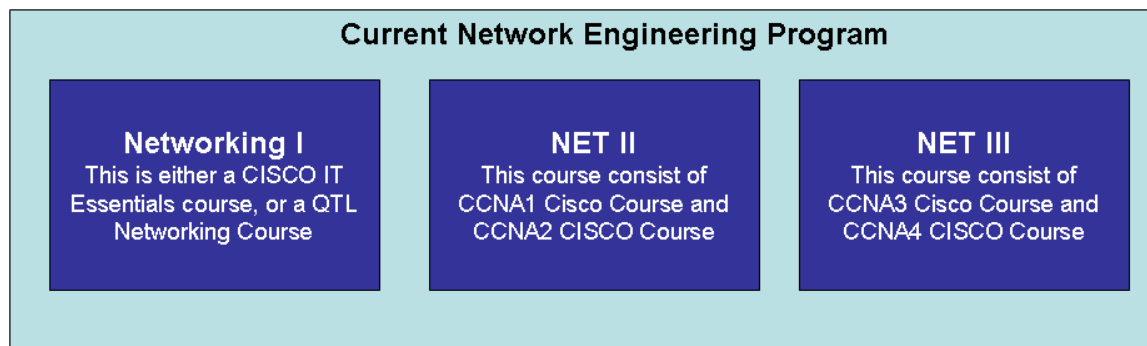
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The purpose of this document is to clarify the curriculum courses and materials to be used in all CISCO Networking Academies in the North Carolina Public high schools starting 2010-2011 school year. Any LEA wishing to follow this course sequencing for the 2009-2010 school year may do so, but it will be mandatory for the 2010-2011 school year.

Current Curriculum Sequencing Situation:

The 2004 Standard Course of Study defined the following curriculum requirements for NET I, II, & III courses for schools with CISCO Academies:



This sequencing of Cisco curriculum materials violate the minimum time requirements for teaching these materials as defined by the Cisco Networking Academy Program's QAP (QUALITY ASSURANCE PLAN and ACADEMY OPERATIONS GUIDE FOR ALL ACADEMY CURRICULUM - Version 4.0, April 2002). Stated on page 17 under the topic **Course and Program Length:**

Instructional quality may suffer if the coursework is accelerated beyond its intended pace or diluted with more time than is necessary. For this reason, ... Cisco also requires that each course have a minimum amount of instructor-led student seat time. At secondary institutions, this minimum is **seventy (70) hours** total per semester...

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The approach of including two separate CCNA courses within one CTE course was acceptable when most LEAs were under the traditional schedule. This allowed 180 hours of possible instruction time to meet the minimum 140 hours of instructor lead course work as required by Cisco. Given that most LEAs have converted to a block schedule and now only have a total of 135 hours of possible instruction time, the 2004 curriculum sequencing must be changed to comply with Cisco's QAP.

In addition to the Cisco QAP issue, the current Networking I course curriculum is redundant. The purpose for the development of this course material was to provide students entering the Cisco Learning Academy with basic networking knowledge prior to beginning their Cisco materials. This has not really been effective. Enrollment continues to drop due to the intensity of the course material and the time allocation for teaching that materials. Additionally, the Cisco Discovery curriculum, implemented by the Cisco Learning Academy in 2008 to target the needs of secondary education, has vastly improved the method of instruction removing the need for students to have any prior knowledge for success.

2010-2011 Cisco Course sequence:

The Cisco Learning Academy is a very vital partner in providing training and materials to support the local Cisco Academies and teachers in North Carolina. Over the past two years, Cisco released a new curriculum to better target specific needs of high school students and industry.

CCNA Discovery

This product focuses on the secondary student and the Small Office/Home office (SOHO) market. Students who successfully complete the Discovery CCNA I & II curriculum qualify to sit for the Cisco Certified Entry Network Technician certification (CCENT).

CCNA Exploration

This product is an updated to their traditional CCNA curriculum and is focused on post-secondary students and professional training institution. Students who successfully complete the Exploration curriculum qualify to sit for the Cisco Certified Network Administration certification (CCNA).

Recommend Cisco Course sequence:

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North Carolina Department of Public Instruction

Course Sequence Recommendation for CISCO

Network Engineering Technology I

7980
CCNA1 Discovery

Network Engineering Technology II

7981
CCNA2 Discovery

Network Engineering Technology III

7409
CCNA3 & CCNA4 Discovery

Network Engineering Technology III

7982
CCNA2 Exploration

Note: Exploration requires advanced problem-solving and analytical skills typically associated with students in engineering, math, or science degree programs and more challenging labs. Exploration courses do not have to be taught in sequence, whereas Discovery courses do.

The recommendation is to split CCNA1 and CCNA2 materials into two separate courses and use the Discovery curriculum. This would provide the teacher with up to 135 hrs to teach the 70 hour professional certification CCNA course. CCNA1 Discovery curriculum would replace the existing 7980 Networking I materials and CCNA2 Discovery materials would be the only materials presented in 7981 NET II.

In addition to the new Discovery Curriculum, Cisco has added a large amount of materials for the instructor to use to help the student understand and apply the necessary skills. Software simulation, gaming, and case studies are only a part of the curriculum materials available for the instructor. Most of these tools are available to the student from anywhere they can access the Internet, allowing homework assignments or out of class assistance. The additional 65 hours available in each course can easily be filled with worthwhile and rewarding activities which will build a better foundation for students.

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This modification would not require any course adjustment for students planning on taking the Cisco Networking Academy program. Students who signed up for Networking I could easily take CCNA1 as the content and CCNA2 for their NET II courses. Teachers would not be required to teach another curriculum to achieve the same level of CCNA course completion. Students that have already enrolled in these courses would not have to be moved in any way. All Cisco Instructors are capable of helping students meet their course sequencing requirements regardless of where they are at in their course sequence.

NET III would provide one of two opportunities: 1) 7982 NET III will follow the remaining Discovery Cisco curriculum and will provide the knowledge needed to test for the Cisco CCNA Certification; 2) 7409 NET III will consist of CCNA2 Exploration (this is a pilot number and will be replaced with another official number for the 2010-11 school year). This material is written at a higher level and is articulated with the Community College System allowing credit for this course at the post-secondary level.

Final Exams for these courses will be conducted through the Cisco Networking Academy Connection as any other CCNA test. The final exam for each module, CCNA1, CCNA2, CCNA3 will be used for the state's measure of technical attainment. These are online test that must be administered by the certified Cisco Instructor and should be proctored to assure proper security and validity to the exams.

Business Course 6341

Teachers who teach students who signed up for 7980 and intend to do the CISCO academy CCNA courses will still use the 7980 for Networking I and the teacher will use the CCNA1 Discovery curriculum in the CISCO academy. Teachers that teach students that are on the business track and do not plan on taking the CISCO CCNA curriculum will use whatever curriculum they are currently using for Networking I and will use the business number for this course 6341. T&I teachers are qualified to teach this course also. This means that there should not be any modification requirements to make these changes. The CISCO teachers should be able to handle whatever issues that may arise. If the teachers have questions they can contact David Barbour, NCDPI T&I Education Consultant, at dbarbour@dpi.state.nc.us to help them resolve any issues.

If you have any questions or concerns related to this recommendation, please contact David Barbour at dbarbour@dpi.state.nc.us or call (919) 807-3885.

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