Appendix I

INFORMATION TECHNOLOGY (IT)
YOUTH APPRENTICESHIP

COURSE OUTCOME SUMMARY:
OVERVIEW AND TABLE OF CONTENTS

Information Technology (IT) Youth Apprenticeship
Course Outcome Summary

Course Information

Organization Center for Career Development & Employability Training (CCDET)- University of Wisconsin- Oshkosh

Developers Robin Kroyer-Kubicek

Development Date

Description

This curriculum describes the performance-based worksite Competencies, Performance Standards, and Learning Objectives for the Wisconsin Youth Apprenticeship (YA) Program in Information Technology (IT). The Wisconsin IT YA Program is designed to provide students with a working understanding of core industry skills and occupationally specific technical skills that serve as the standard for occupations in the IT industry. This program provides the framework for educators and industry to work together to produce work-ready, entry-level employees that will compete favorably in a global market, as well as, provide for post-secondary educational advancement while integrating work-based learning in the school and worksite.

The Information Technology (IT) competencies are aligned with the learning objectives in the CISCO IT Essentials program (http://www.cisco.com/web/learning/netacad/course_catalog/IT1.html), and the standards and knowledge statements outlined in the National States' Career Cluster Skill Standards (http://www.careerclusters.org/) of the four IT Pathways; Network Systems, Information Support & Services, Web & Digital Telecommunications, Programming & Software Development. IT YA students are required to perform all of the Core and Safety & Security skills for EACH pathway they enroll in. **Level One (one year)** IT YA students are also required to complete additional competencies in a minimum of one unit. **Level Two (two year)** IT YA students are to choose another specific unit based on their area of interest and their worksite placement.

EACH competency (work site skill) is listed with its corresponding Performance Standards and Learning Objectives. The Performance Standards describe the behaviors, ***as applicable***, that employers should look for in order to evaluate the competency. The Learning Objectives describe the classroom learning content for the required related technical instruction.

Curriculum Sources

- Boston Area Advanced Technological Education Connections (BATEC) Draft Model IT Core Learning Curriculum presented at the National Career Pathways Network Conference October 1, 2009.
- CISCO Networking Academy, IT Essentials: PC Hardware and Software v4.0. 2006.
- Dane County YA Consortium meeting with IT professionals regarding YA students and curriculum. Meeting September 18, 2009.
- Fox Valley Technical College, Advisory Committee Meeting discussion and handouts regarding change to existing core courses for IT Core Curriculum. Meeting October 13, 2009.
- Madison Area Technical College Advisory Committee Meeting discussion and handouts regarding change to Help Desk Topics and Courses. Meeting November 6, 2009.
- National Standards for Business Education, Information Technology obtained from Wisconsin Department of Public Instruction, September 2009.
- Reuscher, D. (2009). "Computer Certification: Top 10 Certifications to Begin your IT Career," About.com, www.about.com. Accessed July 21, 2009.
- States' Careers Clusters, Information Technology Career Cluster Knowledge and Skills charts for Network Systems, Information Support & Services, Web & Digital Telecommunications, and Programming & Software Development. http://www.careerclusters.org/. Accessed July 2009.
- U.S. Department of Labor, Employment and Training Administration. Information Technology Building Blocks for Competency Model. www.doleta.gov. Accessed September 2, 2009.
- Walker, M. (2008). "Certification at the Entry Level," Certification Magazine, www.certmag.com. Accessed July 21, 2009.
- Wisconsin Administrative Code, Department of Workforce Development, Chapter 270, Child Labor, and Wisconsin State Statutes Chapter 106, Apprentice, Employment and Equal Rights Program, June 2, 2007.
- Wisconsin Department of Public Instruction, Business Skill Standards Co-op for Information Technology. September 2009.
- Wisconsin Department of Workforce Development IT Youth Apprenticeship Survey dated July 2009, and the subsequent Advisory Committee, formed September 2009 for the purpose of revising and updating the Youth Apprenticeship curriculums.
- Wisconsin Department of Workforce Development, Information Technology- Computer Science and Information Technology- Networking Youth Apprenticeship curriculum dated November 1999.
- Worknet Occupation Task Lists for Computer Systems Analysts, Computer Software Engineers- Applications & Systems Software, Computer Programmers, Computer Operators, Computer Support Specialists, Database Administrators. http://worknet.wisconsin.gov/worknet/default.aspx. Accessed December 2009.

This curriculum was developed through a Grant from the Wisconsin Department of Workforce Development to the University of Wisconsin-Oshkosh's Center for Career Development and Employability Training (CCDET).

Information Technology (IT) Youth Apprenticeship

Table of Contents

APPENDIX L:

Unit 4: Network Systems and Information Support & Services Pathway: Hardware Unit

1. Maintain network records
2. Communicate with vendors
3. Perform basic technical network support duties
4. Assist to monitor network performance
5. Perform routine network system maintenance
6. Assist to apply network upgrades, service packs, and patches
7. Upgrade portable devices
8. Replace inoperable computer components
9. Assist to troubleshoot network system and data communication problems
10. Assist to install or upgrade network equipment
11. Participate on a networking systems evaluation project team

APPENDIX M:

Unit 5: Programming & Software Development and Information Support & Services Pathway: Software Unit

1. Use basic office software applications
2. Assist to maintain database security measures
3. Monitor and maintain data integrity
4. Assist to troubleshoot supplication and database problems
5. Create a database
6. Acquire and install new software
7. Assist to test software programming changes or modifications
8. Evaluate application software packages
9. Write Code
10. Participate on a software development or customization project team

APPENDIX N:

Unit 6: Web & Digital Communications Pathway: Web & Digital Media Unit

1. Maintain web/digital media production and progress records
2. Assist to outline structural content
3. Assist to create verbal content
4. Create or edit images and graphics for website/digital media use
5. Create templates for website layout
6. Write program code for a website
7. Assist to create specialized scripts/motion graphics
8. Perform user testing
9. Assist to finalize a website
10. Assist to maintain a website
11. Participate on website/digital media project team