**Alabama
Department of
Postsecondary Education**

Representing the Alabama Community College System

STATEWIDE CAREER/TECHNICAL EDUCATION COURSE ARTICULATION REVIEW MINUTES

Articulation Agreement Identifier:_CIS/DPT149-2005-2_____ Identifier is the postsecondary course prefix followed by Plan-of-Instruction version number (e.g.; INT 100 (2007-1)).

Applicable CIP code(s):__11.0101_____

Postsecondary course prefix, number, and title: __CIS/DPT 149 Introduction To Computers_____

Secondary Education course(s) title and number: __460301/520005 - Information Technology Fundamentals **OR** 540203/450006 - Business Technology Applications_____

Initial Review: _____October 8, 2009_____   ___Annual DPE Review: February 14, 2012

Effective date: **Fall Semester 2011**.

Course Content Analysis (all postsecondary course objectives must be sufficiently addressed in the secondary courses):
Notes:

1 **Skills and knowledge contained in the postsecondary course objectives must be present in the corresponding secondary objectives for a "match" to occur.**
2. **Postsecondary and Secondary objectives must reflect similar content and performance levels before the course articulation agreement will be recommended to the TEDAC Oversight Committee.**
3. **More than one Secondary Course may be used in order to articulate to a Postsecondary course.**

Articulation Agreement Identifier: ___CIS/DPT149 – 2005-2____ _

Postsecondary Course Objectives	Secondary Objectives and Location(s)	TEDAC Comments
MODULE A – COMPUTER CONCEPTS **Competency:** A1.0 Explain basic computer concepts. **Performance Objective** – None **Learning Objectives:** A1.1.1 Define computer terms A1.1.2 Explain the historical development of computers A1.1.3 Explain the evolving impact of computers on society A1.1.4 Explain the importance of computer literacy A1.1.5 Describe categories of computers and their uses A1.1.6 Identify types of computer users A1.1.7 Identify common programming languages A1.1.8 Differentiate between common programming languages	**Information Technology Fundamentals** **Unit – Computer Basics** **Content Standard(s)** 1. Distinguish between input and output devices, including monitor, keyboard, mouse, and scanner. 2. Utilize mathematics skills to convert between two number systems, including decimal, binary, and hexadecimal. **Learning Objective(s)** 1. Identify various types of input devices. 2. Demonstrate proper installation and configuration of input devices. 3. Demonstrate proper installation and configuration of output devices. 4. Identify the types of output devices. 5. Convert two number systems including decimal, binary and hexadecimal.	

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MODULE B – COMPUTER COMPONENTS AND SOFTWARE **Competency:** B1.0 Use computers to accomplish specified tasks. **Performance Objective:** B1.1 Use various types of computer components and software to accomplish specified tasks. **Learning Objectives:** B1.1.1 Explain the purpose and function of common computer components. B1.1.2 Describe procedures for safely starting and terminating computer activity. B1.1.3 Describe common features of specified computer operating systems. B1.1.4 Describe the attributes and function of various types of	**Unit – Hardware Installation** **Content Standard(s)** 3. Perform computer maintenance and upgrading of computer components and portable devices. 4. Practice basic procedures of installing configuring, optimizing, and upgrading printers and scanners. **Learning Objective(s)** 1. Successfully install portable devices. 2. Use the troubleshooting process to assess various problems and determine necessary upgrades. 3. Upgrade or recommend upgrades of computer hardware to improve functionality. 4. Demonstrate the procedures for installing and configuring printers.	

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software. B1.1.5 Differentiate between storage and memory. B1.1.6 Describe the function and purpose of various types of storage media and storage devices.	5. Demonstrate the procedures for installing and configuring scanners. **Unit – Software Installation** **Content Standard(s)** 5. Identify fundamentals of using operating systems. 6. Perform basic configuration and optimization by updating and upgrading operating systems. **Learning Objective(s)** 1. Analyze the functions and purposes of an operating system. 2. Describe the evolution of operating systems. 3. Describe the primary types of operating systems. 4. Perform basic functions to configure or upgrade the operating system.	

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MODULE C – COMPUTER COMMUNICATION AND NETWORKS **Competency:** C1.0 Explain concepts related to computer communication and networks. **Performance** Objective - None **Learning Objectives:** C1.1.1 Define terms associated with computer communication and networks. C1.1.2 Explain the implications of the impact of computers and related communication technologies on society. C1.1.3 Explain the purpose of a network. C1.1.4 Identify the components required for successful communications. C1.1.5 Describe commonly used communication devices. C1.1.6 Explain communications applications.	**Unit – Troubleshooting and Maintenance** **Content Standard(s)** 7. Utilize troubleshooting techniques for personal computer components and portable devices. 8. Perform preventive maintenance on personal computer components and portable devices, operating systems, and computer security systems. 9. Identify tools, diagnostic procedures, and troubleshooting techniques for operating systems, printers and scanners, and security. 10. Demonstrate the construction of a computer system, including the installation of hardware and software. 11. Demonstrate configuring, upgrading, and optimizing security.	

Postsecondary Course Objectives	Secondary Objectives and Location(s)	TEDAC Comments
C1.1.7 List advantages of using a network. C1.1.8 Differentiate between a local area network and a wide area network. C1.1.9 Describe various communications technologies. C1.1.10 Describe uses of internets and extranets. C1.1.11 Explain the telephone network. C1.1.12 Describe various physical and wireless transmission media	**Learning Objective(s)** 1. Utilize troubleshooting methods for solving problems components and portable devices. 2. Demonstrate use of Windows Safe Mode in identifying problems. 3. Perform preventative maintenance on hardware. 4. Perform necessary software updates. 5. Identify processes needed to troubleshoot printer, scanner or security problems. 6. Describe the benefits of security and anti-virus software. **Unit- Network Basics** **Content Standard(s)** 16. Identify fundamental principles of networks. 17. Demonstrate configuring, optimizing and upgrading networks. 18. Identify tools, diagnostic procedures, and troubleshooting techniques for networks. **Learning Objective(s)** 1. Define terms associated with networks. 2. Explain the purpose of networks. 3. Identify the components of a network. 4. Differentiate between wide are and local area networks. 5. Describe uses of networks.	

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MODULE D – THE INTERNET AND THE WORLD WIDE WEB **Competency:** D1.0 Use the internet to obtain and communicate information.		

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Performance Objective: D1.1 Use various applications to perform various functions through the internet. **Learning Objective:** D1.1.1 Define terms associated with the Internet and the World Wide Web D1.1.2 Explain the uses of the Internet and the World Wide Web D1.1.3 Explain how a user can be a Web publisher D1.1.4 Explain how the Internet works D1.1.5 Explain ways to access the Internet D1.1.6 Describe various types of Web pages D1.1.7 Explain how Web pages use graphics, animation, audio, video, and virtual reality D1.1.8 Identify the tools required for Web publishing D1.1.9 Identify software products available for Web applications D1.1.10 Identify the rules of netiquette.		
Postsecondary Course Objectives	**Secondary Objectives and Location(s)**	**TEDAC Comments**
MODULE E – COMPUTERS AND SOCIETY **Competency:** E1.0 Explain the impact of computers on various aspects of society. **Performance Objective:** - None **Learning Objectives:** E1.1.1 Define terms associated with E-commerce E1.1.2 Describe the uses of electronic commerce (e-commerce) E1.1.3 Explain the impact of e-commerce on global society E1.1.4 Differentiate between various e-commerce models E1.1.5 Identify various e-commerce revenue streams E1.1.6 Identify e-commerce market sectors E1.1.7 Explain issues associated with building an electronic storefront		

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E1.1.8 Explain the impact of computers on daily living		
E1.1.9 Explain how computers are used in the home		
E1.1.10 Describe how computers change interactions with various segments of our society.		
E1.1.11 Describe the digital divide		
E1.1.12 Describe ways virtual reality, intelligent agents, and robots are being used in daily life		
E1.1.13 Describe health-related disorders and injuries due to computer use		
E1.1.14 Explain how to prevent health-related disorders and injuries due to computer use Explain how to design a workspace ergonomically		
E1.1.15 Identify symptoms of computer addiction		
E1.1.16 Explain green computing		
E1.1.17 Explain ethical issues surrounding computer use		
E1.1.18 Explain types of security risks associated with computer use.		
E1.1.19 Describe techniques to ensure personal privacy while operating computers.		
E1.1.20 Explain how common types of viruses affect computers.		
E1.1.21 Explain how to prevent viruses from infecting a computer.		
E1.1.22 Describe computer encryption.		
E1.1.23 Explain the importance of backing up computer information.		
E1.1.24 Describe various careers found in the computer industry.		
E1.1.25 Differentiate between various levels and types of computer certifications.		