

Advisory Committee Minutes Fall 2019
Computer Information Science
Vernon College – Skills Training Center
Thursday, November 21, 2019 4:30pm

Deanna Scheffe – Chair
Christopher Wilton - Vice Chair
Zac Scheffe - Recorder

Members Present:

Robin Amos, Vernon College CIS Student
Stephen Caldwell, Retired VISD
David Tittle, RunBiz
Deanna Scheffe, Sealed Air
Zac Scheffe
Darla Silva, Workforce Solutions
Christopher Wilton, NCTCHC

Guests Present:

Scott Essary, Workforce Solutions

Faculty and Staff Present:

Shana Drury
Jeffery Griner
Chelsey Henry
Mark Holcomb
Donna Turney
Sharon Wallace

Members Not Present:

Karen Fite
Anthony Kirby
Troy Mckenzie
Jeffery Petterson
Matthew Prescott

With no old business to discuss Deanna Scheffe began the meeting discussing new business.

Review program outcomes, assessment methods/results, and workplace competency

Deanna Scheffe asked the committee to review the program outcomes listed below.

1. Identify all internal/external hardware components of computer systems (PC's, laptops, servers) and demonstrate the ability to assemble/disassemble these systems.
2. Assess the operating efficiency of various computer systems and provide preventative maintenance, upgrades, and replacement components as needed.
3. Install, maintain and upgrade the various operating software on computer systems, including the IOS software used by high-end networking devices (routers & switches).
4. Install and maintain all networking connectivity devices typically found within the normal operations of the home or business.
5. Identify common problems affecting computer systems; troubleshoot and present solutions which improve daily operations and the quality of networking connectivity.
6. Develop and implement security protocols (policies and procedures) at all levels of computer use and networking to ensure daily business operations will not be compromised.
7. Provide customer support and maintain a professional working relationship with customers and co-workers.

Deanna Scheffe asked the faculty member, Sharon Wallace, to elaborate on the program outcomes.

*Deanna Scheffe asked for a motion to approve the program outcomes as presented.
Christopher Wilton made the motion to approve the program outcomes as presented.
Darla Silva seconded the motion.*

The motion passed to approve the program outcomes as presented.

Assessment methods and results:

Deanna Scheffe asked Mrs. Wallace to discuss the assessment methods and results.

The student will demonstrate proficiency in the objective listed in the program outcomes, through participation in class activities/projects and performance on quizzed and/or examinations. (Course outlines/rubrics noted grading computations).

Students will be required to complete all Projects labs that pertain to the goals of this course. Throughout this course, review of follow-up reports, during this course will outline their progress on projects and goals and will be reviewed by both the Instructor and students upon completions of all assign projects. Their grade will be based upon how well they accomplish the special projects, written questions, tests and the evaluations process to accomplish what is needed with the workforce. (Grading Rubrics attached).

*Deanna Scheffe asked for a motion to approve the assessment methods and results.
Darla Silva made the motion to approve the assessment methods and results.
Christopher Wilton seconded the motion.*

The motion passed to approve the assessment methods and results.

Workplace competency:

ITNW 2335 Application Problem Solving (and/or)
ITSC 2364 Practicum – Computer and Information Science

Program Outcome	Number of students who took course or licensure exam	Results per student	Use of results
The program learning outcomes for Computer and Information Science have been changed to reflect more to student-centered education instead of the prior outcomes which focused on program goals and initiatives. These outcomes describe important and critical learning that program students accomplish during training and are able to significant contribute to the workforce through their abilities (skills) and attitudes (values) after graduation. These outcomes are	(Fall 2018) 5 APS 5 Practicums	2 students @ 100% 1 students @ 85% 2 students @ 75% 4 students @ 100% 1 students @ 85%	The result from the Workforce Competencies indicated the abilities of the students to perform the various duties/skills needed to succeed in the IT field. All results of the (7) program outcomes were analyzed

<p>the bases for curriculum design, content delivery, and assessment on an exploration of the incorporated knowledge, skills, and values needed by both students and the workforce environment. They are as followed:</p> <p>1) After graduation, students will be able to recognize key components, internal and external and operate a variety of computer systems used in various environments used to produce efficient, accurate production of data.</p> <p>2) After graduation, students will be able to assemble, install and maintain various computer systems that are used in a variety of application today.</p> <p>3) After graduation, students will be able to understand various internal operating systems used in computer systems as well as maintain and troubleshoot errors.</p> <p>4) After graduation, students will be able to setup, maintain, and troubleshoot high-end networking devices as well as operate the ISO software needed to maintain a LAN/WAN network.</p> <p>5) After graduation, student will be able to troubleshoot and solve problems which impact the level of quality of networking of all levels and present solutions to improve network connectivity.</p> <p>6) During course work, students will development personal attributes, soft-skills desired by today's employers to be successful as leaders, team members, and followers in a diverse labor force population.</p> <p>7) Implement security measures within all aspects of computer systems (end-users, high end systems).</p>	<p>(Spring 2019)</p> <p>4 APS</p> <p>2 Practicums</p>	<p>1 students @ 100%</p> <p>1 students @ 85%</p> <p>1 students @ 75%</p> <p>1 students @ 100%</p> <p>1 students @ 85%</p>	<p>for areas of improvement in the classrooms and/or workplace.</p> <p>The result from the Workforce Competencies indicated the abilities of the students to perform the various duties/skills needed to succeed in the IT field. All results of the (7) program outcomes were analyzed for areas of improvement in the classrooms and/or workplace.</p>
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Deanna Scheffe asked for a motion to approve the workplace competency as presented.

David Tittle made the motion to approve the workplace competency as presented.

Zac Scheffe seconded the motion.

The motion passed to approve the workplace competency as presented.

Review program curriculum/courses/degree plans

Deanna Scheffe asked the faculty member, Sharon Wallace, to discuss the program's curriculum and degree plans

Computer and Information Sciences, A.A.S.

CIP 11.0901

Instructional Location - Skills Training Center

ASSOCIATE IN APPLIED SCIENCE DEGREE (Probable Completion Time - 2 years)

General Education Requirements (15 SH)

<u>ENGL 1301</u>	Composition I	3
<u>GOVT 2305</u>	Federal Government (Federal Constitution and Topics)	3
<u>MATH 1314</u>	College Algebra	3
	or	
<u>MATH 1332</u>	Contemporary Mathematics	3
<u>SPCH 1315</u>	Public Speaking	3
SFF>	Language, Philosophy, and Culture or Creative Arts Elective	3

Major Requirements (45 SH)

<u>CPMT 1451</u>	IT Essentials: PC Hardware and Software	4
<u>ITCC 2443</u>	Network Security	4
<u>ITNW 1325</u>	Fundamentals of Networking Technologies (A)	3
<u>ITNW 1354</u>	Implementing and Supporting Servers	3
<u>ITNW 2312</u>	Routers	3
	or	
<u>ITSE 1306</u>	PHP Programming	3
<u>ITNW 2335</u>	Network Troubleshooting and Support	3
<u>ITNW 2421</u>	Networking with TCP/IP	4
	or	
<u>ITSE 1407</u>	Introduction to C++ Programming	4
<u>ITNW 2305</u>	Network Administration	3
<u>ITNW 2453</u>	Advanced Routing and Switching	4
	or	
<u>ITSE 2459</u>	Advanced Computer Programming	4
<u>ITSC 2335</u>	Application Software Problem Solving	3

	or	
<u>ITSC 2364</u>	Practicum (or Field Experience) - Computer and Information Sciences, General	3
<u>ITSC 2339</u>	Personal Computer Help Desk Support	3
<u>ITSE 1401</u>	Web Design Tools	4
<u>ITSE 1402</u>	Computer Programming (A)	4
	Total Credit Hours:	60

> To be selected from the following: **ARTS 1301, DRAM 1310, DRAM, 2366, ENGL 2322, ENGL 2323, ENGL 2327, ENGL 2328, ENGL 2332, ENGL 2333, HIST 2311, HIST 2312, MUSI 1306** (A) Course included on the State's Advanced Technical Credit list. (See **Advanced Technical Credit.**)

Verification of Workplace Competencies: Capstone Experience –

<u>ITSC 2335</u>	Application Software Problem Solving	3
	or	
<u>ITSC 2364</u>	Practicum (or Field Experience) - Computer and Information Sciences, General	3

Computer and Information Sciences, Level 1 Certificate

CIP 11.0901

Level 1 Certificate

Instructional Location - Skills Training Center

CERTIFICATE OF COMPLETION (Probable Completion Time – 9 months or 32 weeks)

Major Requirements (31 SH)

<u>CPMT 1451</u>	IT Essentials: PC Hardware and Software	4
<u>ITNW 1325</u>	Fundamentals of Networking Technologies (A)	3
<u>ITNW 1354</u>	Implementing and Supporting Servers	3
<u>ITNW 2312</u>	Routers	3
	or	
<u>ITSE 1306</u>	PHP Programming	3
<u>ITNW 2305</u>	Network Administration	3

<u>ITNW 2335</u>	Network Troubleshooting and Support	3
<u>ITSE 1401</u>	Web Design Tools	4
<u>ITNW 2421</u>	Networking with TCP/IP	4
	or	
<u>ITSE 1407</u>	Introduction to C++ Programming	4
<u>ITSE 1402</u>	Computer Programming (A)	4
	Total Credit Hours:	31

(A) Course included on the State's Advanced Technical Credit list. (See **Advanced Technical Credit.**)

Computer and Information Sciences Occupational Skills Award (14 Semester Hours):

<u>CPMT 1451</u>	IT Essentials: PC Hardware and Software	4
<u>ITNW 1325</u>	Fundamentals of Networking Technologies (A)	3
<u>ITNW 2312</u>	Routers	3
	or	
<u>ITSE 1306</u>	PHP Programming	3
<u>ITSE 1402</u>	Computer Programming (A)	4

(Students are eligible for Comp TIA A+, Comp TIA Security+, and/or Comp TIA Networking+ Certifications)

Verification of Workplace Competencies: Capstone Experience -

<u>ITNW 2335</u>	Network Troubleshooting and Support	3
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CPMT 1451 IT Essentials: PC Hardware and Software - An introduction to the computer hardware and software skills needed to help meet the growing demand for entry-level information and communication technology (ICT) professionals. The curriculum covers the fundamentals of PC technology, networking, and security, and also provides an introduction to advanced concepts addressed by CISCO CCENT, CCNA, AND COMPTIA certifications. Hands-on labs and Virtual Laptop and Virtual Desktop learning tools help students develop critical thinking and complex problem-solving skills. Cisco Packet Tracer simulation-based learning activities promote the exploration of network and networking security concepts and allow students to experiment with network behavior.

Explain the internal components of a computer; assemble a computer system; install and operating system; and troubleshoot using system tools and diagnostic software. Use simulation and virtual software to investigate networking concepts and analyze network behavior.

ITCC 2443 Network Security - Overall security processes with particular emphasis on hands-on skills in the following areas: security policy design and management; security technologies; products and solutions; firewall and secure router design, installation, configuration, and maintenance; AAA and VPN implementation using routers and firewalls.

Explain network threats, mitigation techniques, and the basics of securing a network; secure administrative access on routers using AAA; implement firewall technologies to secure the network perimeter; configure IPS to mitigate attacks on the network; implement endpoint and Layer 2 security features; and implement secure virtual private networks.

ITNW 1325 Fundamentals of Networking Technologies - Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software.

Identify and use network transmission media; explain the OSI model; Identify the characteristics of network topologies and protocols; identify the functions of a network operating system and distinguish between centralized, client/server, and peer-to-peer systems; and distinguish between Local Area Networks (LANs) and Wide Area Networks (WANs) and identify the components used to expand a LAN into a WAN.

ITNW 1354 Implementing and Supporting Servers - Implement, administer, and troubleshoot information systems that incorporate servers in a networked computing environment.

Configure peripherals and devices; set up servers; configure directory replication; manage licensing; create and manage system policies and profiles; administer remote servers and disk resources; create and share resources; implement fault-tolerance; configure servers for

interoperability; install and configure Remote Access Service (RAS); and identify and monitor performance bottlenecks and resolve configuration problems.

ITNW 2312 Routers - Router configuration for local area networks and wide area networks. Includes Internet Protocol (IP) addressing techniques and intermediate routing protocols.

Install, configure, and manage switches, routers, and subnets; create and apply access control lists in TCP/IP and multi-protocol internetworks; and configure variable-length subnet masking and intermediate routing protocols.

ITSE 1306 PHP Programming - Introduction to PHP including the design of web-based applications, arrays, strings, regular expressions, file input/output, e-mail and database interfaces, stream and network programming, debugging, and security.

Design and write PHP programs; and identify and resolve security-related issues.

ITNW 2335 Network Troubleshooting and Support - Troubleshoot and support networks with emphasis on solving real world problems in a hands-on environment. Topics include troubleshooting and research techniques, available resources, and network management hard/software.

Utilize research tools to assist in network support; create or revise documentation of network physical layouts, software installations, licensing, and network operation logs; demonstrate capability to identify and resolve network problems.

ITNW 2421 Networking with TCP/IP Set up, configure, use, and support Transmission Control Protocol/Internet Protocol (TCP/IP) on networking operating systems.

Configure IP addressing and routing; design and implement a domain name server; static and dynamic IP addressing; subnets and supernets; and use network management utilities to maintain and troubleshoot IP networks.

ITSE 1407 Introduction to C++ Programming- Introduction to computer programming using C++. Emphasis on the fundamentals of object-oriented design with development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files.

Use object-oriented programming techniques; develop executable programs; create appropriate documentation; incorporate pointers and/or arrays to manipulate data; and create programs using classes and objects.

ITNW 2305 Network Administration- Topics include network components, user accounts and groups, network file systems, file system security, and network printing.

Describe the components of a local area network and their relationship; create and administer user accounts and groups; plan and set up network file systems; create effective file system security; and implement and administer network printing.

ITNW 2453 Advanced Routing and Switching - Advanced concepts for the implementation, operation, and troubleshooting of switched and routed environments. Emphasizes advanced routing protocols, Multi-Protocol Label Switching (MPLS), and advanced security.

Implement advanced routing protocols; configure route filtering and redistribution, advanced security, and scalable multilayer-switched LANs; implement appropriate technologies to build a scalable routed network; implement campus networks using multiplayer switching technologies; and analyze traffic flow, reliability, redundancy, and performance for campus LANs, routed and switched WANs, and remote access networks.

ITSE 2459 Advanced Computer Programming- Advanced programming techniques including file access methods, data structures, modular programming, program testing and documentation.

Develop, write and document programs containing data structures; and incorporate input/output file handling techniques.

ITSC 2335 Application Software Problem Solving - Utilization of appropriate application software to solve advanced problems and generate customized solutions.

Evaluate project parameters; design and document a solution based on the project parameters; implement the solution; and present the project.

ITSC 2339 Personal Computer Help Desk Support - Diagnosis and solution of user hardware and software related problems with on-the-job and/or simulated projects.

Demonstrate rapport with users in problem-solving situations; analyze user problems and lead them through solutions; maintain problem logs; and formulate problem-solving methodologies.

ITSE 1401 Web Design Tools - Designing and publishing Web documents according to World Wide Web Consortium (W3C) standards. Emphasis on

optimization of graphics and images and exploration of tools available for creating and editing Web documents.

Develop Web pages using industry standard software; develop and manage a website; and identify how the Internet functions with specific attention to the World Wide Web and file transfer.

ITSE 1401 Computer Programming - Introduction to computer programming including design, development, testing, implementation, and documentation. Design, write, test, and document computer programs.

Approve program revisions (if applicable)

2020-2021						
Certificate Level 1, Change CIP 11.0901						
CIP	Course	Title	SCH	Lec	Lab	Contact Hrs
47.0104	CPMT 1451	-	-	2	4	-
47.0104	CPMT 1351	-	3	2	4	96
11.0901	ITNW 1458		4	2	4	96
11.1002	ITNW 1325		3	2	2	64
11.0901	ITNW 1354	-	-	2	2	-
11.0901	ITNW 2454		4	3	2	80
11.0901	ITNW 2312		3	2	2	64
	or					
11.0201	ITSE 1306		3	2	2	64
11.1001	ITNW 2305	-	-	2	2	-
11.0901	ITNW 1316		3	2	2	64
11.0901	ITNW 2335	-	-	2	2	
11.0801	ITSE 1401		4	3	2	80
11.0901	ITNW 2421	-	-	3	2	-
	or					
11.0201	ITSE 1407		4	3	2	80
11.0201	ITSE 1402		4	3	2	80
			35			736
workplace competency						
ITNW 1458						
		Degree				
CIP	Course	Title	SCH	Lec	Lab	Contact Hrs
	ENGL 1301	Comp I	3	3	0	48

	GOVT 2305	Fed Govt	3	3	0	48
	MATH 1314	College Alg	3	3	0	48
	SPCH 1315	Public Spk	3	3	0	48
	Humanities		3	3	0	48
47.0104	CPMT 1451	-	-	2	4	-
47.0104	CPMT 1351	-	3	2	4	96
11.0901	ITNW 1458		4	2	4	96
11.1002	ITCC 2443	-	-	3	2	-
11.1002	ITNW 1325		3	2	2	64
11.0901	ITNW 1354	-	-	2	2	-
11.0901	ITNW 2454		4	3	2	80
11.0901	ITNW 2312		3	2	2	64
	or					
11.0201	ITSE 1306		3	2	2	64
11.0901	ITNW 2335	-	-	2	2	-
11.0901	ITNW 2421	-	-	3	2	-
-	or	-	-	-	-	-
11.0201	ITSE 1407		4	3	2	80
11.1001	ITNW 2305	-	-	2	2	-
11.0901	ITNW 1316		3	2	2	64
11.0901	ITNW 2453	-	-	3	2	-
	or					
11.0201	ITSE 2459		4	3	2	80
11.0101	ITSC 2335		3	2	4	80
-	or	-	-	-	-	-
11.0101	ITSC 2364	-	-	-	-	-
11.0101	ITSC 2339					
11.0101	ITSC 2439		4	4	0	64
11.0801	ITSE 1401		3	3	0	48
11.0201	ITSE 1402		4	3	2	80
			60			1200
Occupational Skills (13 hrs)						
CPMT 1351						
ITNW 1325						
ITNW 2312						
or						
ITSE 1306						
ITSE 1402						
Workplace Competency						
ITSC 2335						

CMPT 1351 IT Essentials: PC Hardware and Software - An introduction to the computer hardware and software skills needed to help meet the growing demand for entry-level

information and communication technology (ICT) professionals. The curriculum covers the fundamentals of PC technology, networking, and security, and also provides an introduction to advanced concepts addressed by CISCO CCENT, CCNA, AND COMPTIA certifications. Hands-on labs and Virtual Laptop and Virtual Desktop learning tools help students develop critical thinking and complex problem-solving skills. Cisco Packet Tracer simulation-based learning activities promote the exploration of network and networking security concepts and allow students to experiment with network behavior.

Explain the internal components of a computer; assemble a computer system; install and operating system; and troubleshoot using system tools and diagnostic software. Use simulation and virtual software to investigate networking concepts and analyze network behavior.

ITNW 1458 Network + - Assists individuals in preparing for the Computing Technology Industry Association (CompTIA) Network+ certification exam and career as a network professional.

Identify and define terminology, hardware, and software components of computer networks; utilize equipment, protocols, and topologies to differentiate between various network systems; demonstrate skills in installing network hardware, software, and cable; troubleshoot network connectivity; configure network protocol; and install and configure network client software.

ITNW 2454 Internet/Intranet Server- Advanced concepts in the designing, installing, and administration of an Internet/Intranet server.

Design and establish domain relationships; implement internal and external security; install and configure network services; and maintain an existing server.

ITNW 1316 Network Administration - An introduction to the basic concepts of network administration. Describe a network; explain the role of directory services; set up and manage users; distributed print services; file system and directory services security.

ITSC 2439 Personal Computer Help Desk Support - Diagnosis and solution of user hardware and software related problems with on-the-job and/or simulated projects.

Demonstrate rapport with users in problem-solving situations; analyze user problems and lead them through solutions; maintain problem logs; and formulate problem-solving methodologies.

There was discussion with Christopher, Donna and Mark about working with the students on ticket systems.

Christopher Wilton also recommended leaving the practicum in the catalog. Shana Drury stated that if we leave it in the catalog but not part of the degree plan they can use it as a course substitution.

Deanna Scheffe asked for a motion to approve the program revisions as presented.

Christopher Wilton made a motion to approve the program revisions as presented.

David Tittle seconded the motion.

The motion has passed to approve the program revisions as presented.

Review Secretary’s Commission on Achieving Necessary Skills (SCANS), General Education, and Program Outcomes Matrices

Deanna Scheffe asked Sharon Wallace to discuss the matrices below with the committee.

SCANS Matrix: The SCANS (Secretary’s Commission on Achieving Necessary Skills) Matrix represents the 8 Federal requirements that must be taught. The matrix shows how we are mapping them back to each of the courses in the program.

Program: Computer and Information Sciences								Credential: Associate in Applied Science (AAS) Degree	
Award: Computer and Information Sciences Associate in Applied Science Degree									
Cip: 11.0101									
LIST OF ALL COURSES REQUIRED AND IDENTIFIED COMPETENCIES									
SCANS COMPETENCIES								Course Number	Course Title
1	2	3	4	5	6	7	8		
x	x	x	x	x	x	x	x	CPMT 1451	IT Essentials: PC Hardware and Software
x			x	x		x	x	ITCC 2443	Network Security
x		x	x	x			x	ITNW 1325 or	Fundamentals of Networking Technologies
x		x	x	x		x	x	ITNW 1354	Implementing and Supporting Servers
x		x	x	x		x	x	ITNW 2312	Routers
x	x	x	x	x	x	x	x	ITNW 2335	Network Troubleshooting and Support
x		x	x	x		x	x	ITNW 2312	Networking with TCP/IP
x	x	x		x			x	ITSE1407	Introduction to C++ Programing
x	x	x	x	x	x	x	x	ITNW 2305	Network Administration
x		x	x	x		x	x	ITNW 2453	Advanced Routing and Switching
x	x	x		x			x	ITSE 2459	Advanced Computer Programming
x	x	x	x	x	x	x	x	Either ITSC 2335 or	Application Software Problem Solving
x	x	x	x	x	x	x	x	ITSC 2364	Practicum (or Field Experience)-Computer and Information Sciences, General
x		x	x	x	x	x	x	ITSC 2339 or	Personal Computer Help Desk Support
x	x	x	x	x		x	x	ITSE 1401	Web Design Tools
x	x	x	x	x			x	ITSE 1402	Computer Programming
								8. BASIC USE OF COMPUTERS	
								7. WORKPLACE COMPETENCIES	
								6. PERSONAL QUALITIES	
								5. THINKING SKILLS	
								4. SPEAKING AND LISTENING	
								3. ARITHMETIC OR MATHEMATICS	
								2. WRITING	
								1. READING	

General Education Matrix: The General Education Matrix is state mandated. You will see the 6 requirements that the college is tasked with teaching and how they map back to the courses.

Program: Computer and Information Sciences						Credential: Associate in Applied Science (AAS) Degree	
Award: Computer and Information Sciences Associate in Applied Science Degree							
CIP: 11.0101							
LIST OF ALL COURSES REQUIRED AND IDENTIFIED CORE OBJECTIVES							
GENERAL EDUCATION CORE OBJECTIVES						Course Number	Course Title
1	2	3	4	5	6		
x	x	x	x		x	CPMT 1451	IT Essentials: PC Hardware and Software
x	x	x	x	x	x	ITCC 2443	Network Security
x		x	x			ITNW 1325	Fundamentals of Networking Technologies
x	x	x	x			ITNW 1454	Implementing and Supporting Servers
x	x	x	x	x		ITNW 2312	Routers
x	x	x	x	x	x	ITNW 2335	Network Troubleshooting and Support
x	x	x	x	x	x	ITNW 2321	Networking with TCP/IP
x	x	x	x		x	ITSE1407	Introduction to C++ Programing
x	x	x	x	x	x	ITNW 2305	Network Administration
x	x	x	x	x	x	ITNW 2353	Advanced Routing and Switching
x	x	x	x		x	ITSE 2459	Advanced Computer Programming
x	x	x	x	x	x	Either ITSC 2335 or	Application Software Problem Solving
x	x	x	x	x	x	ITSC 2364	Practicum (or Field Experience)-Computer and Information Sciences, General
x	x			x	x	ITSC 2339 or	Personal Computer Help Desk Support
x	x	x	x			ITSE 1401	Web Design Tools
x		x	x		x	ITSE 1402	Computer Programming
						6. Personal Responsibility	
						5. Social Responsibility (an organization or individual, has an obligation to act to benefit society at large.)	
						4. Teamwork	
						3. Empirical and Quantitative Skills (knowledge by means of observation or experimentation/mass, time productivity)	
						2. Communication Skills	
						1. Critical Thinking Skills	

Program Outcomes Matrix: The Outcomes Matrix represents the Vernon College mandated requirements. They are the Program outcomes just approved and how they map back to the courses.

Program: Computer and Information Sciences							Credential: Associate in Applied Science (AAS) Degree	
Award: Computer and Information Sciences Associate in Applied Science Degree								
CIP: 11.0101								
LIST OF ALL COURSES REQUIRED AND OUTCOMES								
OUTCOMES							Course Number	Course Title
1	2	3	4	5	6	7		
x	x	x	x	x	x	x	CPMT 1451 IT Essentials: PC Hardware and Software	
x		x	x	x	x	x	ITCC 2443 Network Security	
	x			x		x	ITNW 1325 Fundamentals of Networking Technologies	
x	x	x	x	x	x	x	ITNW 1454 Implementing and Supporting Servers	
	x	x	x	x	x		ITNW 2312 Routers	
x	x	x	x	x	x	x	ITNW 2335 Network Troubleshooting and Support	
		x	x	x	x	x	ITNW 2312 Networking with TCP/IP	
		x	x	x	x		ITSE1407 Introduction to C++ Programing	
x	x	x	x	x	x	x	ITNW 2305 Network Administration	
	x	x	x	x	x		ITNW 2453 Advanced Routing and Switching	
		x	x	x	x		ITSE 2459 Advanced Computer Programming	
x	x	x	x	x	x	x	Either ITSC 2335 or Application Software Problem Solving	
x	x	x	x	x	x	x	ITSC 2364 Practicum (or Field Experience)-Computer and Information Sciences, General	
				x		x	ITSC 2339 Personal Computer Help Desk Support	
		x		x		x	ITSE 1401 Web Design Tools	
		x		x			ITSE 1402 Computer Programming	
							7. Customer Relations: <i>Provide customer support and maintain a professional working relationship with customers and co-workers.</i>	
							6. Security: Develop and implement security protocols (policies and procedures) at all levels of computer use and networking to ensure daily business operations will not be compromised.	
							5. Troubleshooting: Identify common problems affecting computer systems; troubleshoot and present solutions which improve daily operations and the quality of networking connectivity.	
							4. Network: Install and maintain all networking connectivity devices typically found within the normal operations of the home or business.	
							3. Software Configuration: Install, maintain and upgrade the various operating software on computer systems, including the IOS software used by high-end networking devices (routers & switches).	
							2. Software: Assess the operating efficiency of various computer systems and provide preventative maintenance, upgrades, and replacement components as needed.	
							1. Hardware: Identify all internal/external hardware components of computer systems (PC's, laptops, servers) and demonstrate the ability to assemble/disassemble these systems.	

Institutional Outcomes Matrix: The Institutional Outcomes Matrix represents the Vernon College mandated requirements. This matrix represents how the program outcomes map back to the institutional outcomes/general education outcomes.

Program: Computer and Information Sciences							Credential: Associate in Applied Science (AAS) Degree
Award: Computer and Information Sciences Associate in Applied Science Degree							
CIP: 11.0101							
LIST OF ALL COURSES REQUIRED AND OUTCOMES							
OUTCOMES							
1	2	3	4	5	6	7	
X	X	X	X	X	X	X	1. Critical Thinking Skills
X	X	X	X	X	X	X	2. Communication Skills
X	X	X	X	X	X	X	3. Empirical and Quantitative Skills (knowledge by means of observation or experimentation/mass, time productivity)
X	X	X	X	X	X	X	4. Teamwork
X	X	X	X	X	X	X	5. Social Responsibility (an organization or individual, has an obligation to act to benefit society at large.)
X	X	X	X	X	X	X	6. Personal Responsibility
							7. Customer Relations: <i>Provide customer support and maintain a professional working relationship with customers and co-workers.</i>
							6. Security: Develop and implement security protocols (policies and procedures) at all levels of computer use and networking to ensure daily business operations will not be compromised.
							5. Troubleshooting: Identify common problems affecting computer systems; troubleshoot and present solutions which improve daily operations and the quality of networking connectivity.
							4. Network: Install and maintain all networking connectivity devices typically found within the normal operations of the home or business.
							3. Software Configuration: Install, maintain and upgrade the various operating software on computer systems, including the IOS software used by high-end networking devices (routers & switches).
							2. Software: Assess the operating efficiency of various computer systems and provide preventative maintenance, upgrades, and replacement components as needed.
							1. Hardware: Identify all internal/external hardware components of computer systems (PC's, laptops, servers) and demonstrate the ability to assemble/disassemble these systems.

Deanna Scheffe asked the committee if they had any discussions or recommendations.

With no recommendations Deanna Scheffe asked for a motion to approve all matrices as presented.

David Tittle made a motion to approve all matrices as presented.

Christopher Wilton seconded the motion

The motion has passed to approve the matrices as presented.

Program statistics: Graduates (from previous year/semester), current majors, current enrollment

- Program Statistics:
 - Graduates 2018-2019: (22)
 - Enrollment Summer 2019: (4)
 - Majors Fall 2019-2020: (74)
 - Enrollment Fall 2019: (39 new/ 165 duplicated)

Local Demand

Christopher Wilton just recently hired 2 new people and they will be expanding to new locations and will need to hire for those locations.

Mark Holcomb stated at conference and he heard that Texas Instruments was in need of employees.

Stephen Caldwell stated that Frito Lay distribution centers were always looking for skilled employees.

Zac Scheffe ended up finally coming to Vernon College to recruit someone for a job.

Sharon Wallace asked about how employers are finding their employees if they are using LinkedIn on Indeed. Chelsey Henry mentioned that the companies could actually post to a software system that Vernon College recently purchased.

Evaluation of facilities, equipment, and technology. Recommendation for acquisition of new equipment and technology.

Deanna Scheffe asked the faculty member, Sharon Wallace, if she had anything to add to the information for new equipment and technology

Perkins funding allow the CIS department to purchase (6) updated Routers/Switches for use within the programs for hands-on training within various courses. This equipment with not replace the existing routers/switches it will provide a wide variety learning on different systems.

Perkins also purchases some much need memory for the computer systems so they can be updated for use in various class projects.

External learning experiences, employment, and placement opportunities

Deanna Scheffe asked the faculty member, Sharon Wallace, to elaborate on the external learning experiences, employment, and placement opportunities.

Currently have (4) possible External Learning facilities:
Community Health Care Center of Wichita Falls
City of Wichita Falls
Jacksboro Hospital
Kell West Hospital

*Due to Perkins transition this is the most recent report

Placement Rate of Program Completers by Reporting Year [1]			
Program	2013-2016 3-Year Average		
	Plc	Cmp	%
11010000-Computer and Information Sciences, General	42	43	97.67%

Professional development of faculty and recommendations

Deanna Scheffe asked the committee to take time to review the professional development opportunities the faculty has taken or will take advantage of.

Sharon Wallace and Jeff Griner continue to participate in various workshops at the Region 9 center in Ft. Worth, as needed for certification in Cisco based courses.

This year there will be a convention in Austin Texas we hope to attend involving new Technology for classroom use.

Complete online training for new courses implemented with the Cisco Academy.

Promotion and publicity (recruiting) about the program to the community and to business and industry

Deanna Scheffe asked the committee to take time to review the promotion and publicity opportunities that those leading the program have taken advantage of.

Promotion and publicity about the Computer and Information Science program always ongoing with the business and industry (gender equality).

Some promotions and publicity we do:

- Posters throughout the Skills Center, Century City, and Vernon
- Online video presentations of the programs offered.
- High Schools tours
- Preview Day
- Newspapers, TV and Radio
- Past student's promotion (word of mouth)
- Recruiting Coordinators promoting programs.
- Visit local school events

Serving students from special populations:


Deanna Scheffe asked the committee to note the definition of special populations below. Shana Drury explained a little more about how we are serving these special populations.

1. Special populations new definitions:
 - a. Individuals with disabilities;

- b. Individuals from economically disadvantaged families, including low-income youth and adults;
- c. Individuals preparing for non-traditional fields;
(Currently have 9 females)
- d. Single parents, including single pregnant women;
- e. Out-of-workforce individuals;
- f. English learners;
- g. Homeless individuals described in section 725 of the McKinney-Vento Homeless Assistance Act (42 U.S.C. 11434a);
- h. Youth who are in, or have aged out of, the foster care system; and
- i. Youth with a parent who—
 - i. a. is a member of the armed forces (as such term is defined in section 101(a)(4) of title 10, United States Code);
 - ii. b. is on active duty (as such term is defined in section 101(d)(1) of such title).

Deanna Scheffe if the committee had any further discussion and with no further discussion the meeting was adjourned.

Adjourn

Recorder Signature 	Date 08-26-2020	Next Meeting: Fall 2020
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ZAC SCHEFFE

Skills-Based Assessments Grading Rubric

SBA	*Program Outcome Reference	Section	Point Value	Points Received
Hardware	1	1. Disassemble the Computer System	40	
		2. Reassemble the Computer System	40	
		3. Documentation	20	
		(Total Points Possible)	100	
Mobile Devices	1	1. Configure a mobile tablet or smartphone	80	
		2. Documentation	20	
		(Total Points Possible)	50	
		Printers	1	1. Installing a Printer
2. Sharing a Printer	50			
3. Documentation	20			
(Total Points Possible)	50			
Software	1, 2	1. Install Software (OS, programs)	30	
		2. Windows Configuration	30	
		3. Documentation	20	
		(Total Points Possible)	100	
Web Design & Programming	1,2,3,8	1. Web Page development	30	
		2. Scripting/Programming/Publishing	30	
		3. Troubleshooting Code	20	
		4. Documentation	20	
(Total Points Possible)	100			
System Configuration	1, 2, 3	1. BIOS Setup Program	20	
		2. Troubleshoot Installation/Drivers	40	
		3. Updates/Patches		
		4. Documentation	20	
(Total Points Possible)	100			
Networking	3	1. Build Ethernet Cables	10	
		2. Network Connectivity (Topologies)		
		3. Share Resources	20	
		4. LAN/WAN/MAN	20	
		5. Router/Switch Configuration (Protocols)	20	
		6. LAN/WAN	20	

		7. Documentation	10
		(Total Points Possible)	100
Troubleshooting	1, 2, 3, 4, 5	1. Hardware Troubleshooting	25
		2. Software Troubleshooting (Viruses, Adware, etc.)	25
		3. Networking Troubleshooting	25
		4. Security Troubleshooting	25
		(Total Points Possible)	100
Security	6	1. PC Security	25
		2. LAN/WAN Security	25
		3. Router/Switch Security Configuration	25
		4. Documentation	25
		(Total Points Possible)	100
Systems Monitoring	1, 2, 3, 7	1. Preventive Maintenance Concepts	80
		2. Documentation	20
		(Total Points Possible)	100
Customer Relations	1,2,3,4,5,6,7,8	1. Customer and Technician Interaction	100
		(Total Points Possible)	100
		Overall Total Grade Possible	1000
		Total Grade Received	

* There are (8) Outcomes I want to achieve: 1. Hardware 2. Software 3. System Configurations 4. Network 5. Troubleshooting 6. Security 7. Systems Monitoring 8. Customer Relations

Instructors Signature

Date

Students Signature

Date