



Purpose: It is the intention of this Administrative-Master Syllabus to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by the faculty of Wharton County Junior College, regardless of who teaches the course, the timeframe by which it is instructed, or the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in the improvement of instruction.

Course Title – Fundamentals of Networking Technologies

Course Prefix and Number – ITNW 1325

Department – Computer Science

Division – Technology & Business

Course Type: (check one)

- Academic General Education Course (from ACGM – but not in WCJC Core)
- Academic WCJC Core Course
- WECM course (This course is a Special Topics or Unique Needs Course: Y or N)

Semester Credit Hours #: Lecture Hours #: Lab/Other Hours #: 3:2:2

Equated Pay hours for course - 3

Course Catalog Description - - Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software.

Prerequisites/Co-requisites – None

List Lab/ Other Hours
Lab Hours 2
Clinical Hours 0
Practicum Hours 0
Other (list) 0

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Date: 8/29/2014

Reviewed by Department Head: Donna Schilling

Date: 6/24/2015

Accuracy Verified by Division Chair: David Kucera

Date: 8/12/15

Approved by Dean or Vice President of Instruction: Leigh Ann Collins

Date: 3-4-16



I. Topical Outline – Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, clinical or other non-lecture instruction):

- Network Technologies
- Networking Concepts
- Network Installation and Configuration
- Network Media and Topologies
- Network Management
- Network Security

II. Course Learning Outcomes

This course incorporates the National Workforce Center for Emerging Technologies Programming/Software Engineering skill standards recognized by the Texas Skill Standards Board.

Learning Outcomes	Methods of Assessment
<p>Upon successful completion of this course, students will: 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.</p>	<p>All outcomes will be assessed by one or more of the following:</p> <ul style="list-style-type: none"> Artifact Reflection Journal Lab Assignments Projects Test Quizzes Final Exam Outside Certification Examination

III. Required Text(s), Optional Text(s) and/or Materials to be Supplied by Student.

- Microsoft Windows Networking Essentials. Daryl Gibson. SYBEX. 2011. ISBN #: 978-1-11801-685-5
- USB Flash Drive
- High-speed Internet Connection

IV. Suggested Course Maximum - 14

V. List any specific spatial or physical requirements beyond a typical classroom required to teach the course.

Enough personal computers, network switches, Cat5e cable, and Cat5e cabling tools to create a small physical computer network. Will require Windows and /or Linux operating systems.

VI. Course Requirements/Grading System – Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course

- Tests and Comprehensive Final Exam (partial multiple choice, fill in the blank, etc. with a hands-on component)
- Weekly Short Answer and Hands-on Lab Assignments

Grading System –

10% Attendance and participation	100 -90	= A
40% Lab Assignments	89 - 80	= B
50% Examinations	79 - 70	= C
	69 - 60	= D
	and below	= F

VII. Curriculum Checklist

- **Academic General Education Course** (from ACGM – but not in WCJC Core)
No additional documentation needed

- **Academic WCJC Core Course**
Attach the Core Curriculum Review Forms

- Critical Thinking
- Communication
- Empirical & Quantitative Skills
- Teamwork
- Social Responsibility
- Personal Responsibility

- **WECM Courses**
If needed, revise the Program SCANS Matrix & Competencies Checklist.