



Course Information

Course Title	Fundamentals of Networking Technologies
Course Prefix, Num. and Title	ITNW 1325 - Fundamentals of Networking Technologies
Division	Technology and Business
Department	Computer Science
Course Type	WECM Course
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.
Pre-Requisites	None
Co-Requisites	None

Semester Credit Hours

Total Semester Credit Hours (SCH): Lecture Hours:	3:2:2
Lab/Other Hours	
Equated Pay Hours	3
Lab/Other Hours Breakdown: Lab Hours	2
Lab/Other Hours Breakdown: Clinical Hours	0
Lab/Other Hours Breakdown: Practicum Hours	0
Other Hours Breakdown	0

Approval Signatures

Title	Signature	Date
Prepared by:		
Department Head:		
Division Chair:		
Dean/VPI:		
Approved by CIR:		

Additional Course Information

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

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

Course Learning Outcomes:

Learning Outcomes – 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.

Methods of Assessment:

All outcomes will be assessed by one or more of the following:

Artifact Reflection Journal
Lab Assignments
Projects
Test Quizzes
Final Exam
Outside Certification Examination

Required text(s), optional text(s) and/or materials to be supplied by the student:

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

Suggested Course Maximum:

14

List any specific 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.

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

10% Attendance and participation
40% Lab Assignments
50% Examinations

Grading System:

100-90 = A

89-80 = B

79-70 = C

69-60 = D

and below = F

Curriculum Checklist:

Administrative General Education Course (from ACGM, but not in WCJC Core) – No additional documents needed.

Administrative WCJC Core Course. Attach the Core Curriculum Review Forms

Critical Thinking

Communication

Empirical & Quantitative Skills

Teamwork

Social Responsibility

Personal Responsibility

WECM Course -If needed, revise the Program SCANS Matrix and Competencies Checklist