



Course Information

Course Title	Introduction to Networks (CISCO 1)
Course Prefix, Num. and Title	ITCC 1475 - Introduction to Networks (CISCO 1)
Division	Technology & Business
Department	Computer Science
Course Type	WECM Course
Course Catalog Description	Introduce the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of either course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. This course assumes computer literacy
Pre-Requisites	None
Co-Requisites	None

Semester Credit Hours

Total Semester Credit Hours (SCH): Lecture Hours:	4:3:3
Lab/Other Hours	
Equated Pay Hours	4.5
Lab/Other Hours Breakdown: Lab Hours	3
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).

Exploring the Network
Configuring a Network Operating System
Network Protocols and Communications
Network Access
Ethernet
Network Layer
Transport Layer
IP Addressing
Subnetting IP Networks
Application Layer
It's a Network

Course Learning Outcomes:

Learning Outcomes – Upon successful completion of this course, students will:

1. Understand and describe the devices and services used to support communications in data networks and the Internet.
2. Understand and describe the role of protocol layers in data networks.
3. Understand and describe the importance of addressing and naming schemes at various layers of data networks in IPv4 and IPv6 environments.
4. Design, calculate, and apply subnet masks and addresses to fulfill given requirements in IPv4 and IPv6 networks.
5. Explain fundamental Ethernet concepts such as media, services, and operations.
6. Build a simple Ethernet network using routers and switches.
7. Use Cisco command-line interface (CLI) commands to perform basic router and switch configurations.
8. Utilize common network utilities to verify small network operations and analyze data traffic.

Methods of Assessment:

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

Individual Projects
Tests and Quizzes
Lab Assignments
Final Exam
Skills Exam

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

- CCNA Portable Command Guide Third Edition by Empson ISBN-9781587204302 eBook: 9780133381368
 - USB Flash Drive
- High-speed Internet Connection

Suggested Course Maximum:

18

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

Computer for each student, Cisco routers, switches, wireless routers, fiber cable tester, Ethernet cable testers

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

Course Requirements:

Comprehensive Skills Exam: 20-25%

Comprehensive Final Exam: 20-25%

Labs / Homework: 25-30%

Chapter Tests: 20-25%

Attendance / Participation: 0-15%

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