

# Fundamentals of Networking Technologies

## ITNW-1325

Spring 2019 Section 320 CRN-22481 3 Credits 01/14/2019 to 05/09/2019 Modified 01/23/2019

### Meeting Times

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#### Discussion

Monday, Wednesday, 12:00 PM to 1:50 PM, Student Center F-241

A minimum of one (1) hour per week is set aside for lab work.

### Contact Information

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#### Instructor: Ms. Kelli Adam, M.S.

Email: [kelli.adam@blinn.edu](mailto:kelli.adam@blinn.edu)

Office: Student Center F-241

Phone: 979-324-8985

#### Office Hours

Tuesday, Thursday, 12:00 PM to 12:30 PM

### Description

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

#### Requisites

None

### Core Curriculum Statement

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This course is not a core curriculum course.

### Outcomes

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1. Identify and use network transmission media
2. Explain the OSI model
3. Identify the characteristics of network topologies and protocols
4. Identify the functions of a network operating system and distinguish between centralized, client/server, and peer-to-peer systems

5. Distinguish between Local Area Networks (LANs) and Wide Area Networks (WANs) and identify the components used to expand a LAN into a WAN

## Materials

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### CompTIA Network+ Cert Guide

**Author:** Anthony Sequeira

**Publisher:** Pearson

**Edition:** N10-007

**ISBN:** 9780789759818

**Availability:** Campus Bookstore and Online

## Course Requirements

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CompTIA Network+ certification exam.

Transfers to BAAS degree at SHSU.

Transfers to BAS-IT degree at UHCL.

## Evaluation

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### Criteria

Type	Weight	Topic	Notes
Exams	40%		Three major exams and a comprehensive final exam including hands-on troubleshooting
Labs	30%		Hardware and software assignments
Course Project	20%		Small teams design a local area network
Class Participation	10%		Daily contributions to discussion and labs

### Breakdown

A [90, 100] Exceptional knowledge of the material covered

B [80,90] Above average knowledge of the material covered

C [70,80] Average knowledge of the material covered

D [60,70] Less than average knowledge of the material covered

F [0,60] Very little knowledge of the material covered

## Blinn College Policies

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All policies, guidelines, and procedures in the [Blinn College Catalog \(http://catalog.blinn.edu/\)](http://catalog.blinn.edu/), [Blinn College Board Policies \(http://pol.tasb.org/Home/Index/1204\)](http://pol.tasb.org/Home/Index/1204), and the [Blinn College Administrative Regulations \(https://www.blinn.edu/administrative-regulations/\)](https://www.blinn.edu/administrative-regulations/) are applicable to this course.

[Specific information on civility, attendance, add/drop, scholastic integrity, students with disabilities, final grade appeal, alternative retailers, campus carry and proctoring arrangements and cost. \(http://www.blinn.edu/syllabus-policies/\)](http://www.blinn.edu/syllabus-policies/)

Notice of any action taken under these protocol and procedures, by Blinn College or its employees, may be delivered by hand, through the U.S. Postal Service, or electronically to the student's Blinn Buc e-mail account. Notice shall be deemed received upon actual

receipt, on deposit in the U.S. Mail, or upon entering the information processing system used by Blinn College for Blinn Buc e-mail accounts, whichever first occurs.

## \* Course Policies

[Student Email](#), [Exam Review Procedures](#), [Deadlines for Assignments and Labs](#), [Make-up Policy](#), [Reading and Research](#), [Lab Hours and Decorum](#), [Removable Hard Drives](#), [Professional Disclaimer](#), and [Learning Activities](#) are found here.

## Schedule

Week	Date	Class Details	Contact Hours
1	Mon Jan 14	Course Syllabus, Assignment 0	4
	Wed Jan 16	Lesson 1: Computer Network Fundamentals	
2	Mon Jan 21	<i>Holiday – No School</i>	4
	Wed Jan 23	Lesson 2: The OSI Reference Model	
3	Mon Jan 28	Lesson 2 cont.	4
	Wed Jan 30	Lesson 3: Network Components	
4	Mon Feb 04	Lesson 3 cont.	4
	Wed Feb 06	Lesson 3 cont.	
5	Mon Feb 11	Lesson 4: Ethernet Technology	4
	Wed Feb 13	Lesson 4 cont.; <b>EXAM 1</b>	
6	Mon Feb 18	Lesson 5: IPv4 and IPv6 Addresses	4
	Wed Feb 20	Lesson 5 cont.	
7	Mon Feb 25	Lesson 5 cont.	4
	Wed Feb 27	Lesson 6: Routing IP Traffic	
8	Mon Mar 04	Lesson 6 cont.; Project Intro	4
	Wed Mar 06	Lesson 7: Wide-Area Networks	
x	Mon Mar 11	<i>Spring Break – No School</i>	
	Wed Mar 13	<i>Spring Break – No School</i>	

9	Mon Mar 18	Lesson 7 cont.; <b>EXAM 2</b>	4
	Wed Mar 20	Lesson 8: Wireless LANs	
10	Mon Mar 25	Lesson 8 cont.; Course Project Brief 1	4
	Wed Mar 27	In-Class Network Build	
11	Mon Apr 01	Lesson 9: Network Optimization	4
	Wed Apr 03	Lesson 9 cont.	
12	Mon Apr 08	Lesson 10: Command-line Tools	4
	Wed Apr 10	Lesson 11: Network Management	
13	Mon Apr 15	Lesson 11 cont.	4
	Wed Apr 17	Lesson 12: Network Security	
14	Mon Apr 22	Lesson 12 cont.; <b>EXAM 3</b>	4
	Wed Apr 24	Lesson 13: Network Troubleshooting	
15	Mon Apr 29	<b>Course Project Presentations</b>	4
	Wed May 01	<b>FINAL EXAM Part 1</b>	
16	Mon May 06	<b>FINAL EXAM Part 2 12:45pm-3:00pm</b>	4