

Undergraduate Course Syllabus

IT 340: Network and Telecommunication Management

Center: Online

Course Prerequisites

CE: IT 201; UC: IT 201

Course Description

This course provides an in-depth knowledge of data communications and networking theory concepts and requirements relative to telecommunications and networking technologies, structures, hardware, and software. Emphasis is on the concepts of communications theory and practices, terminology, and the analysis and design of networking applications. Management of telecommunications networks, cost-benefit analysis, and evaluation of connectivity options are covered. Students can design, build, and maintain a local area network (LAN).

Course Outcomes

- Analyze standard network designs and infrastructures for informing optimal support practices
- Explain troubleshooting approaches to network problems for informing potential solutions to network errors and ensuring rapid resolution
- Explain network technology suggestions based on how they support business goals and objectives
- Apply networking concepts to real-world situations for informing management and upgrade suggestions

Required Materials

Using your learning resources is critical to your success in this course. Please purchase directly through the <u>SNHU</u> <u>Online Bookstore</u> rather than any other vendor. Purchasing directly from the bookstore ensures that you will obtain the correct materials and that the IT Service Desk, your advisor, and the instructor can provide you with support if you have problems.

TestOut Network Pro
SKU#: 1496663
Edition 5.0.3
TestOut Corporation
http://www.testout.com

Microsoft Imagine

Southern New Hampshire University students are able to obtain discounted, often free, Microsoft software for technology courses through the Microsoft Imagine program. Go to the SNHU Academic Software Center and

request an account from the right panel to begin managing your software. If you have trouble downloading and installing the software, please request access to SNHU's hosted application from your instructor.

Instructor Availability and Response Time

Your class interaction with the instructor and your classmates will take place on a regular, ongoing basis. Your instructor will be actively engaged within the course throughout the week. You will normally communicate with your instructor in the weekly discussions or the General Questions discussion topic so that your questions and the instructor's answers benefit the entire class. You should feel free, however, to communicate with your instructor via SNHU email at any time, particularly when you want to discuss something of a personal or sensitive nature. Your instructor will generally provide a response within 24 hours.

Grade Distribution

Assignment Category	Number of Graded Items	Point Value per Item	Total Points
Discussions	3	20	60
Scenario-Based Assignments: Interview and Troubleshooting	2	100	200
Activities: TestOut	6	50	300
Final Project			
Milestones	2	75	150
Final Project Submission	1	290	290
	1	1	Total Course Points: 1,000

This course may also contain practice activities. The purpose of these non-graded activities is to assist you in mastering the learning outcomes in the graded activity items listed above.

University Grading System: Undergraduate

Grade	Numerical Equivalent	Points
А	93–100	4
A-	90–92	3.67
B+	87–89	3.33
В	83–86	3
B-	80–82	2.67
C+	77–79	2.33
С	73–76	2
C-	70–72	1.67
D+	67–69	1.33
D	60–66	1
F	0–59	0
I	Incomplete	
IF	Incomplete/Failure *	

Grade	Numerical Equivalent	Points
IP	In Progress (past end	
	of term)	
W	Withdrawn	

^{*} Please refer to the <u>policy page</u> for information on the incomplete grade process.

Grading Guides

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Assignment Guidelines and Rubrics section of the course.

Weekly Assignment Schedule

All reading and assignment information can be found within each module of the course. Assignments and discussion posts during the first week of each term are due by 11:59 p.m. Eastern Time. Assignments and discussion posts for the remainder of the term are due by 11:59 p.m. of the student's local time zone.

In addition to the textbook readings that are listed, there may be additional required resources within each module.

Module	Topics and Assignments
1	Introduction: Networking Basics and Devices
	TestOut, Introduction and Chapters 1, 2, and 3 (Specified Sections within TestOut)
	1-1 Discussion: Introduction
	1-2 TestOut Activity: Getting Started With TestOut (Non-graded)
	1-3 TestOut Activity: Networking Overview
	1-4 Final Project Preview
2	Ethernet and IP
	TestOut, Chapters 4 and 5 (Specified Sections in TestOut)
	2-1 TestOut Activity: Ethernet and IP
	2-2 Scenario-Based Assignment: Interview
3	Networking
	TestOut, Chapters 6, 7, and 8 (Specified Sections in TestOut)
	3-1 TestOut Activity: Switch Management, Routing, and Firewalls
	3-2 Final Project Milestone One: Final Project Sections I and II
4	Wireless Networking
	TestOut, Chapter 10 (Specified Sections in TestOut)
	4-1 TestOut Activity: Wireless Networking
	4-2 Scenario-Based Assignment: Troubleshooting
5	Network Management
	TestOut, Chapter 15 (Specified Sections in TestOut)
	5-1 TestOut Activity: Network Management
	5-2 Final Project Milestone Two: Final Project Sections III and IV

Module	Topics and Assignments
6	Network Optimization
	TestOut, Chapters 16 and 9 (Specified Sections in TestOut)
	6-1 TestOut Activity: Network Optimization and Customization
	6-2 Discussion: Optimization and the Business Case
	6-3 Network Errors and Conclusion: Working Toward a Successful Final Project
7	Your Networking Recommendations
	7-1 Final Project Submission: Networking Recommendations
8	Closing and Opening the Loop
	8-1 Discussion: Your Networking Future
	8-2 TestOut Access and Certification (Non-graded)

Attendance Policy

Online students are required to submit a graded assignment/discussion during the first week of class. If a student does not submit a graded assignment/discussion during the first week of class, the student is automatically dropped from the course for non-participation. Review the <u>full attendance policy</u>.

Late Assignments Policy

Meeting assigned due dates is critical for demonstrating progress and ensuring appropriate time for instructor feedback on assignments. Students are expected to submit their assignments on or before the due date. Review the <u>full late assignment policy</u>.

SNHU Student Handbook

Review the student handbook.

ADA/504 Compliance Statement

In accordance with Section 504 of the Rehabilitation Act of 1973, Title III of the Americans with Disabilities Act (ADA) of 1990, and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008, Southern New Hampshire University does not discriminate on the basis of disability, including intellectual disability, in admission, treatment, or access to its programs or activities, nor does it discriminate in employment in its programs or activities.

The university prohibits unlawful discrimination on the basis of disability and takes action to prevent such discrimination by providing reasonable accommodations to eligible individuals with disabilities. A disability is a condition or impairment that impacts a "major life activity" or "major bodily function."

- Major life activities include, but are not limited to, caring for oneself, performing manual tasks, seeing, hearing, eating, sleeping, walking, standing, lifting, bending, speaking, breathing, learning, reading, concentrating, thinking, communicating, and working.
- Major bodily functions include, but are not limited to, functions of the immune system, normal cell growth, and digestive, bowel, bladder, neurological, brain, respiratory, circulatory, endocrine, and

reproductive functions. Disabilities include physical, medical (including pregnancy), mental health, and learning needs.

At the beginning of each term, or as soon as you become aware of a disability or accessibility concern, we encourage you to contact the Online Accessibility Center (OAC) to discuss accommodations for which you may be qualified. Reasonable accommodations are established through an interactive process between the student and the OAC.

Note that accommodations are not retroactive and that disability accommodations are not provided until acceptable documentation of a disability and its impact is received and an accommodation letter has been processed. If you are unsure whether your condition qualifies as a disability or accessibility concern, please contact the OAC for determination.

Contact Information:

Online Accessibility Center Phone: 866-305-9430 Email: oac@snhu.edu

For questions concerning support services, documentation guidelines, or general disability issues, please visit the Online Accessibility Center website.

If you feel you have been denied appropriate disability-related accommodations, including appropriate auxiliary aids and services, you may file a grievance as described in the ADA/504 Grievance Policy found on the <u>Disability and Accessibility Services</u> website.

Academic Honesty Policy

Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic work. Activities such as plagiarism and cheating are not condoned by the university. Review the <u>full academic honesty policy</u>.

Copyright Policy

Southern New Hampshire University abides by the provisions of United States Copyright Act (Title 17 of the United States Code). Any person who infringes the copyright law is liable. Review the <u>full copyright policy</u>.

SNHU Withdrawal Policy

Review the full withdrawal policy.

Southern New Hampshire University Policies

More information about SNHU policies can be found on the policy page.

Student Work Samples

For the purpose of continuous improvement of our educational training, Southern New Hampshire University may, on occasion, utilize anonymous student work samples for internal professional development and staff training. If you would like to withdraw permission for use of your work, please complete the <u>Student Work Sample Survey</u>.