

IT2400 Syllabus: Introduction to Networking (CRN 41576)

Fall 2023 Syllabus

This is an introductory networking course for students in Computer Information Systems or in Computer and Information Technologies programs, or students having general interest in computer networking.

Prerequisites: IT1100 should be taken prior to enrolling in this course (and completed with a passing grade)

Course fee: \$20, used to assist in maintaining lab infrastructure.

Sections:

- IT2400-01 TTh 3pm-4:15pm Smith Computer Ctr 107

Final Exam Schedule * IT2400-01 Tuesday December 12 @ 3pm in Smith Computer Ctr 107

Instructor:

- [Jay Sneddon](#)
- Office: Burns 235
- Office hours: MW 12:00pm-12:50pm, TTh 1:30pm-2:20pm or by appointment. Zoom appointments may be arranged.

Objectives

At the end of the course, students will be able to:	Outcome is Measured through
Be able to design, connect and implement a computer network, including subnets. (IT PLO 1,2,3)	Assignments, Quizzes, and Exams
Be able to define and use several different Internet protocols. (IT PLO 1,2,3)	Assignments, Quizzes, and Exams
Be able to describe the TCP/IP and OSI protocol stacks and what happens at each layer. (IT PLO 1,2,3)	Assignments, Quizzes, and Exams
Be able to use basic networking tools to troubleshoot basic network problems. (IT PLO 1,2,3)	Assignments, Quizzes, and Exams
Understand the differences between setting up wired and wireless networks. (IT PLO 1,2,3)	Assignments, Quizzes, and Exams
Implement routing protocols for interconnecting LANs and WANs. (IT PLO 1,2,3,4)	Assignments, Quizzes, and Exams

Resources

REQUIRED Text

The readings will come from the course textbook, *Managing and Troubleshooting Networks, 6th Edition Exam N10-008* by Mike Meyers, ISBN 978-1264269037. Some supplemental online resources may be used such as [Professor Messer](#).

Cisco Packet Tracer is software used throughout the semester. Students will need to register with [Cisco's Networking Academy](#) to be able to use Packet Tracer. Packet Tracer may be installed on personal computers and laptops, with Windows, Linux and Mac versions available.

Computer Resources

It is expected that students provide their own computers for class use.

Course Information

You are responsible for being informed regarding announcements, the schedule, and other resources posted on this website. Grading and assignments are managed on [Canvas](#).

Assignments and Exams

Reading

The student is responsible for reading the material in the textbook. A reading schedule is provided with the class schedule on the course website. The student is expected to read the material before the class in which it is discussed. The book also includes material beyond what we will discuss in lecture, which you are encouraged to study on your own. Feel free to bring questions from the reading to lectures or to office hours.

Assignments

Expect a weekly assignment. Working with other students (but not cheating) is encouraged; to dialogue the process with other students helps master the concepts. Practical exam tasks will be based on previous assignments, so understanding the homework is important.

All assignments for the week are due Saturday night at 11:59pm, unless otherwise noted on Canvas. I have the option to reject any late assignments.

Some assignments are done in class as a group supported activity and cannot be rescheduled for absences. Missed in class assignments cannot be made up.

Exams

This course will have approximately four exams and one comprehensive final exam, along with end of chapter quizzes. Quizzes are largely based on end of chapter questions found in your text, although other questions will be asked depending on the subject.

Testing Out of the Class

Students may test out of the class with an A grade if they are able to become Network+ Certified before the *third* week of the semester. By becoming Network+ Certified you have proven that you have mastered this course material. If you are already Network+ Certified, the certification must be active (meaning passed within the last three years) and I must see a copy of your certificate.

If you become Network+ Certified before the final exam, you will not be required to take the final and will automatically receive 100% for your final exam scores.

Contact me if you have any questions about this.

Grading

Assignments, quizzes and exams each contribute to your point total.

- Assignments/Labs = 30%
- Quizzes = 20%
- Exams = 25%
- Comprehensive Final Exam = 25%

Here is the grading scale: $\geq 94 = A$ $\geq 90 = A-$ $\geq 87 = B+$ $\geq 84 = B$ $\geq 80 = B-$ $\geq 77 = C+$ $\geq 74 = C$ $\geq 70 = C-$ $\geq 67 = D+$ $\geq 64 = D$ $< 64 = F$

Tentative Topic Schedule

Week of	Reading	Tests, Holidays
Aug 20	Chapter 1 - Network Models, also pages 155-157 (Decimal to Binary Conversion)	
Aug 27	Chapter 2 Cabling & Topology, Chapter 5 Installing a Physical Network	Quiz (Ch 1, Binary conversion)
Sep 03	Chapter 3 Ethernet Basics, Chapter 4 Modern Ethernet	Quiz (Ch 2, Ch 5), Labor Day
Sep 10	Review	Quiz (Ch 3, Ch 4)
Sep 17	Chapter 6 TCP/IP Basics & Subnetting	Exam 1 (Ch 1 thru 5), Practical Exam
Sep 24	Chapter 6 TCP/IP Basics & Subnetting continued	Quiz (Ch 6)
Oct	Review	Exam 2 (Subnetting), Practical

01		Exam 2
Oct 08	Chapter 7 Routing Applications	Fall Break
Oct 15	Chapter 7 Routing Applications cont	
Oct 22	Chapter 12 IPv6	Quiz (Ch 7)
Oct 29	Chapter 8 TCP/IP Applications,	Quiz (Ch 12),
Nov 05	Chapter 9 Network Naming	Exam 3 (Ch 7, 8, 12) , Quiz (Ch 8)
Nov 12	Chapter 14 Wireless	Quiz (Ch 9)
Nov 19	Chapter 21 Network Troubleshooting	Quiz,(Ch 14), Thanksgiving
Nov 26	Exam 4 (Ch 9,14,21)	
Dec 3	Comprehensive Review	

Finals Tuesday December 12 @ 3pm in Smith Computer Ctr 107

This schedule is subject to change.

Course Policies

Absences

Students are responsible for material covered and announcements made in class. School-related absences may be made up only if prior arrangements are made. The class schedule on [Canvas](#) presented is approximate. The instructor reserves the right to modify the schedule according to class needs. Changes will be announced in class and posted to the website. Exams and quizzes cannot be made up unless arrangements are made *prior* to the scheduled time.

Time

Courses should require about 2 hours of outside work per lecture hour of class. This class will require about 6 hours of work per week on the part of the student to achieve a passing or higher grade. Be sure to evaluate your schedule before committing to this course.

Late work

Assignments, quizzes and exams are due on the date specified in the schedule. Late work will be accepted but penalized.

Late assignments and make up quizzes will be accepted but penalized 10% per day for five days after the due date, with the maximum penalty being 50% for late work. No work will be accepted after the final exam.

Excused absences are happily worked with. Conversely, arranging unexcused make up quizzes and exams is despised by the instructor. It makes me extremely grumpy and moody. The student groveling gets old, and I have heard nearly all of the excuses. That said, clever students come up with new whoppers that get added to an already lengthy list. I am much happier when that cleverness is channeled into coursework learning.

- I reserve the option to reject any late work regardless of the submission date.

Cheating and Collaboration

Limited collaboration with other students in the course is permitted and encouraged. Students may seek help learning concepts and developing programming skills from whatever sources they have available, and are encouraged to do so. Collaboration on assignments, however, must be confined to course instructors, lab assistants, and other students in the course. See the section on cheating.

Cheating will not be tolerated, and will result in a failing grade for the students involved as well as possible disciplinary action from the college. Cheating includes, but is not limited to, turning in homework assignments that are not the student's own work. It is okay to seek help from others and from reference materials, but only if you learn the material. As a general rule, if you cannot delete your assignment, start over, and re-create it successfully without further help, then your homework is not considered your own

work.

You are encouraged to work in groups while studying for tests, discussing class lectures, and helping each other identify errors in your homework solutions. If you are unsure if collaboration is appropriate, contact the instructor. Also, note exactly what you did. If your actions are determined to be inappropriate, the response will be much more favorable if you are honest and complete in your disclosure.

Where collaboration is permitted, each student must still create and type in his/her own solution. Any kind of copying and pasting is *not* okay. If you need help understanding concepts, get it from the instructor or fellow classmates, but never copy another's written work, either electronically or visually. It is a good idea to wait at least 30 minutes after any discussion to start your independent write-up. This will help you commit what you have learned to long-term memory as well as help to avoid crossing the line to cheating.

Policy for Absences Related to College Functions

Students may periodically may miss classes for various college-related functions or military functions; these include athletics, club events, or to fulfill the requirements of a course or a program. Military functions may include: Reserve and Guard activation, activation, special assignments or other approved events or activities. These absences may often conflict with the instruction, assignments, and tests in this course.

Please provide an advanced written notification from your activity supervisor that explains the nature of the activity, and the anticipated time missed.

Disruptive Behavior Policy/Classroom Expectations

The classroom needs an atmosphere of learning and sharing. Class members need to feel safe and able to concentrate. Disruptive behavior that seriously detracts from this environment or inhibits the instructor's ability to conduct proper instruction will not be allowed. Disruptive behavior includes:

- Physical violence, verbal abuse, or harassment
- Intoxication or illegal drug use
- Use of profanity
- Failing to respect others when expressing their own viewpoints
- Talking while the instructor or another student is talking
- Constant questions or interruptions that interfere with classroom presentation

Disruptive class members will be warned. Continued misbehavior may lead to dismissal from class or the course. If necessary, Campus Police may be called.

Disability/Accessibility Resources

Utah Tech welcomes all students and strives to make the learning experience accessible. If you are a student with a medical, psychological, or learning disability that may require accommodations for this course, you are encouraged to contact the Disability Resource Center (DRC) as soon as possible. You may request reasonable accommodations at any time during the semester; however, they are not retroactive. The DRC is located next door to the Testing Center in the North Plaza Building (435 652-7516, drc@utahtech.edu, drcenter.utahtech.edu).

University Policies

OTHER UNIVERSITY SUPPORT SERVICES

NAME	SERVICE
Utah Tech Resources Overview	Visit this site to see many student resources in one place.
Academic Advisement	Helps students make decisions about their courses and degree path.
Academic Performance and Tutoring Center	Offers one-on-one tutoring, study hall, and online tutoring to help students in many subjects ranging from Math to Foreign Language.
Booth Wellness Center	Provides acute health care, referral services, health education, and brief mental health services.
Campus Life	The Utah Tech University Student Association offers a variety of ways to get involved socially at the university.
Career Services	Assists students with career exploration, choosing a major, writing a resume, and getting a job.
Center for Inclusion	Increases diversity through scholarship opportunities, community outreach, academic

& Belonging	advisement, and diversity club participation.
Dean of Students Office	Serves as a primary advocate and support network for students. Assists students who are facing personal challenges, including financial, food, and housing concerns.
Disability Resource Center	Serves students with disabilities by providing equal access to academic programs, non-academic activities, and campus facilities
DRC Accessibility	A list of DRC services including exam accommodations, ASL interpreting, materials in alternative format, and more.
Help Desk	Provides assistance for Canvas, Student Email, Student Services, Trailblazers wireless configuration, laptop assistance, and any other technical troubleshooting you may need help with.
Library	Provides the resources necessary to facilitate research and enhance university curriculum and programs.
Math Tutoring Center	Students can drop in to work on homework, take tests, and receive individualized or group tutoring. Online tutoring is also available.
Student Support Services	Provides a variety of free services to help first-generation, low-income, or students with disabilities to complete an associate degree and move on to a bachelor degree.
Testing Center	Provides all proctored exams on campus and can make accommodations for remotely proctored exams.
Utah Health Scholars	Provides tutors for upper-division, health-related courses. Students must register into the UHP program to qualify for this free tutoring.
Veterans Services	Offers tutoring for some classes and arranges tutoring in other centers for other classes. Must have VA benefits to qualify.
Writing Center	Offers students personalized attention from tutors for writing.

UTAH TECH POLICIES & STATEMENTS

PRIVACY

It is your responsibility to protect your data and privacy online. Be careful and use discretion when using any of the course technologies to complete required learning activities. If you are unsure about how to protect your data and privacy online, please use the resources provided to understand your responsibility.

[101 Data Protection Tips: How To Keep Your Passwords, Financial, and Personal Information Safe](#)

Harper, E. (2018). [9 Simple Ways To Protect Your Privacy](#)

[Canvas Privacy Policy](#)

[Google Privacy Policy](#)

[YouTube Policies](#)

[Vimeo Privacy Policy](#)

Utah Tech Policy Links

[Code of Student Rights and Responsibilities \(Academic dishonesty / academic integrity policy, student academic conduct policy\)](#)

[Financial Aid](#)

[Registration](#)

[Student Association](#)

[Student absence related to college function](#)

[Sexual Harassment](#)

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door to the Testing Center in the North Plaza Building (435-652-7516, drc@utahtech.edu).

TITLE IX STATEMENT

Utah Tech University affirms its commitment to the promotion of fairness and equity in all aspects of the educational institution. Harassment and discrimination—including sex/gender discrimination, gender identity, gender expression, sexual harassment, sexual misconduct, gender-based violence, dating violence, domestic violence, stalking, pregnancy or parental , family or marital status and or retaliation—not only disrupts our commitment to maintaining an environment in which every member of the University community is treated with respect and dignity, but may also violate University policy and federal, state, and/or local law.

Should you or someone you know experience behavior that is coercive, discriminatory, harassing, and or sexually violent in nature, or if you or someone you know has questions about their rights and options regarding such behavior, you are encouraged to contact:

[Title IX Coordinator](#) 435.652.7747 (ext. 7747)

Incidents may also be reported directly to law enforcement, either separately or in conjunction with any report made to the University's Title IX Coordinator, and the University will aid in making contact if requested.

Utah Tech University Police 435.275.4300 or by calling 9-1-1

Maintaining a safe and inclusive University community is a shared responsibility. For more information on how Title IX protections can benefit you and help us keep a productive campus environment, visit titleix.utahtech.edu to learn more.

STUDENT EMAIL

You are required to frequently check your university email account. Important class and university information will be sent to your university account, including Utah Tech bills, financial aid/scholarship notices, notices of cancelled classes, reminders of important dates and deadlines, and other information critical to your success at Utah Tech and in your courses. To access your university-sponsored account, visit helpdesk.utahtech.edu/about-dmail. Your username is your digital ID (e.g. D00111111).

NON-STUDENT

Non-student in the classroom and other designated study areas: It is expected that only bona fide students as defined and classified by the Utah Tech University catalog, will attend classes, unless specific prior permission for guests has been obtained from the instructor.

ACADEMIC GUIDELINES REGARDING COVID-19

For Utah Tech's [up-to-date COVID-19 Emergency Response Plan](#), please visit the university website.