Syllabus

CSCD 330 Computer Networks, Spring (2025)

Class: Mon - Wed 10-10:50. *Lab:* Fri 1-2:50

Description

This course covers fundamental concepts, protocol mechanisms and programming skills for computer networks. It includes a technical overview of telecommunication media and fundamental protocols for the Internet such as ISO/OSI layers, Ethernet, collision detection and channel allocation. Programming projects are required.

NOTE: You must be enrolled in CSCD 330L the co-requisite lab course.

What it really means

We all use computer networks in our daily lives, but how well do you understand them? This course aims to explain the concepts behind computer networks–specifically those that make up the Internet.

Course Textbook

Computer Networking: A Top-Down Approach, 7th Edition

James Kurose, ISBN 9780133594140 (in Canvas Modules)

Instructor information

Instructor: Antonio Espinoza (he/him)

Office: CAT 338

Office hours: Monday-Wednesday 1:00-2:00 and by appointment.

Email: aespinoza17@ewu.edu

Tentative topic schedule

Week	Topics/Labs
1	Chapter 1 - Computer Networks and the Internet
	Lab 1 :Network tool scavenger hunt
2	Chapter 2 - Application Layer
	Lab 2: Use a web API
3	Chapter 2 - Application Layer
	Lab 3: Make a web API
4	Chapter 3 - Transport Layer
	Lab 4: HTTP and Sockets
5	Chapter 3 - Transport Layer
	No Lab: APE exam!
6	Chapter 4 - The Network Layer: Data Plane
	Lab 5: TCP and Wireshark
	Midterm May, 7
7	Chapter 4 - The Network Layer: Data Plane
	Lab 6: Scapy intro
8	Chapter 5 - The Network Layer: Control Plane
	Lab 7: TCP Traceroute
9	Chapter 5 - The Network Layer: Control Plane
	Lab 8: VM networking
10	Chapter 6 - The Link Layer and LANs
	Lab 9: VM networking 2
11	Finals week
Final	June 11, 10:30 - 12:30

Grading

There is a single grade for the lecture and lab portion of this course (i.e., you will get one combined grade taking into account both the lab and lecture).

Grade Distribution

Type	Percent of Final Grade
Labs	55
Exams	35
Homework	10

Letter Grade Conversion

Percent	Grade
92 - 100	A
89 - 91	A-
86 - 88	B+
83 - 85	B
78 - 82	B-
75 - 77	C+
71 - 74	C
68 - 70	C-
65 - 67	D+
62 - 64	D
59 - 61	D-
< 59	F

General Policies

Lectures

If you choose not to come to class then please do not use office hours as a substitute for not attending lectures. Those that attend regularly and participate in class discussion will be rewarded accordingly when final grades are calculated! Classroom activities will complement, not necessarily duplicate, the text. Furthermore, you are accountable for material covered in class, so you miss class at your own risk!

Exams

No makeup exams are given without prior arrangements or in the case of a ***documented*** emergency after the fact. Exam dates are provided at least a week before they occur, and review sessions may occur preceding each exam.

Homework/Labs:

Homework, labs, and assignments will be in the form of; programming projects in class labs, written assignments, *etc.*

- **All written assignments must be in PDF format**.
- You have 2 free late days, use them wisely (not to be used on the last lab)!
- Assignments are due by the required time ***on the due date***. Late assignments ***WILL NOT*** be accepted (unless using late days). Do not email me the code, do not post it in Canvas as a comment, just turn your stuff in on time or earlier. You can submit multiple times and we will grade the last submission. In the case of a documented emergency, the instructor reserves the right to accept late work. A doctor's note may not be considered a documented emergency.
- You must submit all files such that your code can be compiled. If your code does not compile because you did not provide the correct/complete files, then you will receive a maximum of 5 points.

- Incomplete submissions/non-compiling code/unreadable PDF files/etc... will not be accepted. Ensure everything is correct before you submit, and all required files are included. You will receive a score of a 0 for incomplete submissions/non-compiling code/unreadable PDF files/etc.
- If the grader/the instructor make a mistake you must discuss the mistake with the instructor immediately.

Final Grade

Your final grade will be calculated based on the percentages described above.

Preparation

You are expected to read material from the chapter in the book that is being discussed in class *ahead* of time. Examples given in class and by the authors should be confirmed by the student, to guarantee complete understanding of the subject.

Academic Integrity Policy

Students are expected to uphold a code of ethics and professional behavior that promotes the highest standards of integrity, honesty, trustworthiness, and professionalism when exploring cybersecurity-related topics and exercises. Students are required to sign the NCAE-C Student Code of Ethics and Professional Conduct during the first week of class to proceed in the course. Copies are available by emailing kriddle2@ewu.edu.

Academic Integrity is the cornerstone of the university. Any student who attempts to gain an unfair advantage over other students by violating the Academic Integrity policy may be reported to the university and may receive a sanction up to and including XF for the course, suspension, or expulsion from the university. This policy is on the EWU web site. https://inside.ewu.edu/policies/knowledge-base/wac-172-90-student-academic-integrity-3/

Examples of academic dishonesty include misrepresenting others' work as your own, failure to provide proper citations in written text, stealing or destroying material intended for the use of other students, using notes or cell phones during exams, taking photographs of exams, assisting others during exams, copying someone else's work, letting his or her work be copied, and sharing course content without permission.

Cheating Policy

You are allowed to discuss your thoughts with and help other classmates; however, you must do your own work, meaning ALL work should be your own. Plagiarism and cheating **WILL NOT BE TOLERATED**. Plagiarism includes using someone else' programs or parts of programs as your own; copying another person's work; handing in another person's work for your own. If you work with someone else to understand the content, it is important that each person does the assignment separately. Should any of your work be duplicated from another person or any other source, you will be asked to leave the class and not return. Your final grade will be 0.0. Any infractions will be handled in accordance

with the academic integrity policy of Eastern Washington University. This includes the use of large language models to write code.

Americans with Disabilities Act

Eastern Washington University is committed to providing support for students with disabilities. If you are a student with physical, learning, emotional, or psychological disabilities needing an accommodation, you are encouraged to stop by Student Accommodation and Support Services (SASS), HAR 019 or call 509-359-6871.

Religious Accommodations

If you would like to request an accommodation for reasons of faith or conscience, please refer to EWU's policy on Holidays and Religious Accommodations available at https://inside.ewu.edu/policies/. Accommodations must be requested within the first two weeks of this course using the Holidays and Religious Accommodations Request form available at https://inside.ewu.edu/student-life/resources/holidays-and-religious-accommodations-request/.

Equal Opportunity

Eastern Washington University does not discriminate in its programs and activities on the basis of race, color, creed, religion, national origin, sex, pregnancy, sexual orientation, gender identity/expression, genetic information, age, marital status, families with children, protected veteran or military status, HIV or hepatitis C, status as a mother breastfeeding her child, or the presence of any sensory, mental, or physical disability or the use of a trained guide dog or service animal by a person with a disability, as provided for and to the extent required by state and federal laws.

EWU Title IX Policy

Eastern Washington University recognizes the inherent dignity of all individuals and promotes respect for all people. Sexual misconduct will NOT be tolerated at EWU. If you have been subjected to sexual misconduct, we encourage you to report this matter promptly. As a faculty member, I am interested in promoting a safe and healthy environment, and should I learn of any sexual misconduct I must report the matter to the Title IX Coordinator. Should you want to report to a confidential source you may contact the following:

- Sexual Assault Family Trauma (SAFeT) – 509-624-7273 – 24 hours
- YWCA Domestic Violence Crisis Line – 509-326-2255 – 24 hours
- Suicide and Mental Health – 509-838-4428 – 24 hours
- Employee Assistance Program (EAP) – 360-407-9490 (employees)
- Counseling and Psychological Services (CAPS) – 509-359-2366 (students)