CIS150-01: Data Communications and Networks
Fall 2019-20

Instructor	Sasithorn Zuge		Phone	715-346-2879
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Office Hours	10:00am – 10:50am Mondays, or 7:30am – 7:50am Wednesdays, or by appointment			

Class Time:
08:00am – 09:50am Monday and Wednesday, Room SCI B348 or SCI D226

Rental Text:
Kurose & Ross. Computer Networking - A Top Down Approach, 7^h Edition.

Course Description:
"Introduction to fundamental concepts in the design and implementation of computer communication networks, their protocols, and architectures. Students understand how popular network applications such as Web browser, FTP client, remote connection, and email work on computer networks. Topics to be covered include: TCP-IP and OSI architecture, application layer (Web, FTP, remote connection, email, client and server interaction), transport layer (TCP-UDP), network layer (IP), data link layers, and concept of local area network (LAN) and wide area network (WAN)."

Welcome to the course! The topic for our CIS 150 section is in Data Communications. The course goal is to help you understand the "how" and "why" behind data communication technologies by surveying various protocols and functions through different layers of the OSI and the Internet Models. I hope that by taking this course, it will give you a deeper understanding when reading about new communication technologies, give you a reference framework when troubleshooting your issues related to networking, and be more prepared, in general, to not just use networking technologies but also have at least a basic understanding of why and how it works behind the scene.

Throughout the course, there will be in-class activity, homework assignments, and quizzes given. **No make-up class activities, labs, quizzes, or examinations will be given** unless approved by me before the scheduled lab or exam date, or for validated medical or personal emergencies.

I am looking forward to working with you this semester!

Class Communication:
You can contact me via email, see me in person during the scheduled office hours, or by appointment. When contacting me via email, to ensure a timely response, please make sure you also **include "CIS150:" in the subject line,** followed by the nature of your email. I usually try to get back to you within 72 hours, except on holidays and weekends.

Besides the announcements made in class or written on the board, I will also communicate with you via email and/or Canvas course homepage. Therefore, it is important that you also check these regularly.

Class Attendance and Participation:

You are expected to attend class regularly and are responsible for catching up with any materials you missed. In addition, please also refer to the university policy on student attendance from https://www.uwsp.edu/regrec/Pages/Attendance-Policy.aspx.

Please note: Excessive absence may result in you not being able to participate in the mid-term and/or final exam.

Lectures

During each class, you will earn class attendance point(s) based on your attendance and participation.

Class Attendance Evaluation	% of possible point(s) earned per class period
Present and Participate	100%
Present	60%
Tardy	20-60%
Excused Absent	20%
Absent	0%

At the end of the semester, additional bonus points (no more than 10% of the Class Attendance category) may be awarded by the instructor based on your class conduct throughout the semester (attendance, participation during class, quality of work done).

It is **highly recommended that you take notes in class**. There will be supplemented materials and additional exercises during the lectures and labs that are not in the book or in the PowerPoint slides. These materials are especially important because they are designed to help reinforce and test your understanding of new materials presented during class. It is also advisable that you complete the Review Problems (posted on Canvas) as you go along, instead of at the end of each module, so that any topics or questions that you may have can be addressed in a timely manner. Course materials, such as PowerPoint handouts and required assignments are available on Canvas for you to print out before class time.   Any handouts not available from Canvas will be handed out during class.

Some of the lectures might have in-class activities. Some of these activities may have points assigned to them. Therefore, it is important to come to class regularly since there will be **no makeup points given for missed class activities**.

Class Work:

Assignments, Labs, and Exercises

Each module will have required assignments, and/or labs with the due date clearly stated on Canvas (see screenshots below). You are responsible for remembering these due dates, and make sure that you submit your original work on time. **No late assignments or labs are accepted unless approved by me in advance.** In case your late work can be submitted, it must be done within one week of the due date with penalty points deducted from the graded score. No late work will be accepted after one week from the due date.

In addition to the assignments and/or labs, occasional exercises will be announced, completed, and/or graded during class time. Therefore, it is important that you attend class regularly. There will be no make up for exercises that are completed during class, unless an arrangement has been made in advance.

Submission Requirements

All assignments and labs are **due at the beginning of class on the due date,** unless stated otherwise on Canvas. Please observe the time of the due date carefully and include your name at the beginning of the printout. The due date for required assignments and labs are available on both the calendar, the Assignments section, and the Course Homepage on Canvas.

Canvas Calendar showing upcoming events including Assignments' due dates
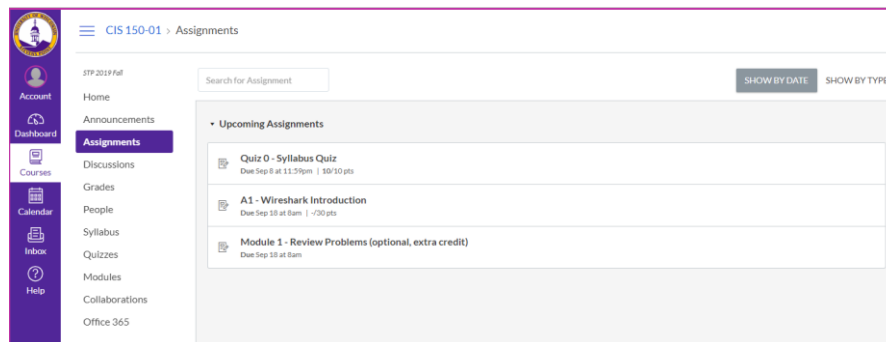
Course Assignments Section on Canvas showing upcoming Assignments and due dates
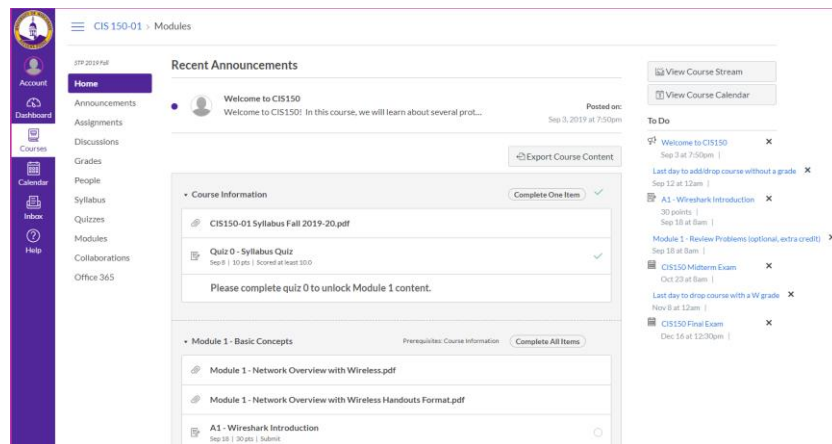
Canvas Course Homepage showing upcoming activities, ToDo, and due dates

Most classwork will have an associated template document that, if provided, must be used to complete your work. It is important that you read the provided template documents carefully, as they usually contain assignment specifications, hints, and examples on completing the assignment.

When answering questions, to make sure that you understand the concepts learned, you will need to show evidence that support your answers. Usually, this means you need to include readable "screenshots" of all pertinent information as evidence in supporting your answers for the lab assignments, so that I can check and grade your answers. Without screenshots that include all pertinent information, or including screenshots that the information is missing, incorrect, too small, or too blurry, I will not have enough evidence or won't be able to read the evidence to grade your lab. Showing up late for a group lab session, likewise, will result in your lab not being graded unless excused.

You are responsible for making sure that your work is complete and done to specification before handing it in. For your work to be graded, you must satisfy the submission requirements. **Any assignments or labs that are not complete or do not satisfy submission requirements will be returned to you without being graded and result in zero point for the assignment or lab**.

In general, the submission requirements are as followed:
- Follow the specifications as stated in the assignment. If there's a template file for the assignment, you must use the template file to complete your work.
- If online file submission is required, the file should be uploaded to Canvas by the due date and time.
- Printout your work with your name on it.
- The printout should be handed in at the beginning of the class (8am) on the due date.
    - The content of the printout (including screenshots' content) should be readable to a person with normal vision without requiring visual aids.
    - Any loose pages must be stapled together.
    If you do not have a printer at home, please make sure that you print out your file before the due date. Computer labs are not opened until 8am in the morning, so you won't be able to print out your file before class without being late.

For your convenience, submission requirements for each assignment/lab are included on the Assignment document, and also on Canvas (see screenshots below).

CIS150 Lab 01 - Wireshark Intro Lab Template
<Please put your full name here>

Submission Requirements

You must use the template for handing in your assignment. Follow the lab specifications stated on this file. After you completed filling in the information and screenshots required, please check that you've submit the following by the due date and time.

- The completed template file should be uploaded to Canvas before the due date and time.
- Printout of the template file with your name on it.
- The printout should be handed in at the beginning of the class (8am) on the due date.
    - The content of the printout (including screenshots' content) should be readable to a person with normal vision without requiring visual aids.
    - If there are more than one sheet of paper, the printout should be stapled.

If you do not have a printer at home, please make sure that you print out your file before the due date. Computer labs are not opened until 8am in the morning, so you won't be able to print out your file before class without being late.

Important: If you do not meet the above submission requirements, your assignment will be handed back to you without being graded and you will receive no credit (zero point) for the assignment.

How to use this file

Example of Submission Requirements on the Assignment file

Example of the same Submission Requirements on Canvas

Quizzes

A number of quizzes will be given throughout the semester. This is to ensure that you are keeping pace with the materials covered in class. The quiz will be announced at least one class period in advance and will normally be done via Canvas. Because you are given about a week to complete the quiz before the due date, **no make-up quiz will be given if you missed the due date, unless an arrangement has been made with me in advance.**

Optional Extra Credit

Finally, there will be opportunities throughout the semester for optional bonus exercises, such as Module Review Problems at the end of each module, that will be counted as bonus points towards your assignment, lab, or quiz. Because the extra credit is already built-in throughout the semester, there will be no additional bonus exercises given, other than the ones assigned throughout the course.

It is up to you to keep track of your current grade and take advantage of the extra credit opportunities. Some of these activities might be an impromptu ad-hoc activity done during class time, some might be extra exercise with specified due date announced during class, and others, such as the Module Review Problems, are planned extra credit activities with due date clearly stated on Canvas. Since some of the ad-hoc extra credit activity will be done as part of the in-class exercises, it is important that you attend class regularly. There will be no make up for ad-hoc extra credit activities.

For Module Review Problems, partial credit will be considered if you cannot complete all the problems in the assigned problem set. You still need to show the instructors the problems that you've completed on the due date.

Exams:

There will be two closed book exams for the course. However, you will be allowed to bring a one-sided letter size cheat sheet for the midterm exam, and a double-sided letter size cheat sheet for the final exam. The final exam is comprehensive and covers all materials. This includes materials from the textbook, class lectures, assignments and lab exercises. You are required to take the final examination to pass the class; otherwise, you will receive a failing grade for the course.

Final Exam: Monday December 16th, 2019 12:30pm – 2:30pm in SCI B348.

Please note: Excessive absence may result in you not being able to participate in the mid-term and/or final exam.

Evaluation and Grading:

Your final grade will be determined by your class attendance, completed and graded class activities, and exams. Your final grade will be calculated from the sum of your weighted grading scores as shown below:

Grading Items	Weight
Class Attendance and Participation	5%
Class Work – quizzes, labs, and assignments	50%
Midterm	20%
Final Exam	25%

Note that your weighted score for each category (including bonus points) cannot exceed the category's weight. Class Attendance and Professionalism is the only category that will allow you to exceed the category's weight with bonus points.

Please note: Excessive absence may result in you not being able to participate in the mid-term and/or final exam.

Your final letter grade will be awarded according to the table shown below:

Letter Grade	Final Score	Letter Grade	Final Score
A	>= 94	C+	>= 77
A-	>= 90	C	>= 74
B+	>= 87	C-	>= 70
B	>= 84	D+	>= 67
B-	>= 80	D	>= 60
		F	Below 60

TENTATIVE COURSE OUTLINE

Week#	Module / Topics	Required Reading	Class Work
1-2	Module 1 / Basic Concepts	Chapter 1, 7.1, 7.3.1, 7.4	Q0: Syllabus Quiz A1: Wireshark Intro Lab Quiz 1
3-5 ½	Module 2 / Application Layer	Chapter 2 Handouts	E1: HTTP Exercise A2: HTTP Lab E2: DNS Exercise A3: DNS Lab Quiz 2
5 ½ -8	Module 3 / Network Security	Chapter 8.1 – 8.5, 8.7 Handouts	A4: Supplement Lab E3: Cryptography Exercise Midterm Exam (from materials in module 1-3)
9-11	Module 4 / Transport Layer	Chapter 3	A5: UDP Lab A6: TCP Lab Quiz 3
12-13	Module 5 / Network Layer	Chapter 4.1-4.3, 5.1-5.3, 5.6, 8.6, 8.9 Handouts	A7: Supplemental Assignment
14-15	Module 5 / Data-Link Layer	Handouts	A8: Supplemental Assignment (if needed)
16	Final Exam (Comprehensive) **Thursday May 16th,2019 10:15am – 12:15pm in SCI B348.**		

Important Note: *The course outline on the syllabus is used as a guide and is subject to change. If there are any conflict(s) between the information on Canvas and the information on this outline, the information on Canvas will take precedence.*

TENTATIVE CLASSWORK AND EXAM OUTLINE

Module	Tentative Class Work and Exam Dates	Tentative Due Date (assignments due at 8am, unless stated otherwise on Canvas)	Reading Assignment
1	Q0: Syllabus Quiz	9/8	Chapter 1, 7.1, 7.3.1, 7.4
	A1: Wireshark Intro Lab	9/18	
	Quiz 1 (available 9/18)	9/25	
	Module 1 Review Problems (optional, for extra credit)	9/18	
2	E1: HTTP Exercise	In-Class	Chapter 2
	A2: HTTP Lab	9/25	Handouts
	E2: DNS Exercise	In-Class	
	A3: DNS Lab	10/2	
	Quiz 2 (available 10/9)	10/16	
	Module 2 Review Problems (optional, for extra credit)	10/9	
3	A4: Supplement Lab	10/9	Chapter 8.1 – 8.5, 8.7
	E3: Cryptography Exercise	In-Class	Handouts
	Module 3 Review Problems (optional, for extra credit)	10/23	
	Midterm Exam (from materials in Module 1 - 3) Wednesday October 23rd, 2019 8:00am – 9:50am in SCI B348		
4	A5: UDP Lab	10/30	Chapter 3
	A6: TCP Lab	11/13	
	Quiz 3 (available 11/13)	11/20	
	Module 4 Review Problems (optional, for extra credit)	11/13	
5	A7: Supplemental Assignment	11/27	Chapter 4.1-4.3, 5.1-5.3, 5.6, 8.6, 8.9
	A8: Supplemental Assignment (if needed)	TBD	Handouts
	Module 5 Review Problems (optional, for extra credit)	12/11	
	Final Exam (Comprehensive, from materials in Modules 1 - 5) Monday December 16th,2019 12:30pm – 2:30pm in SCI B348		

Important Note: The classwok and exams outline is used as a guide and is subject to change. If there are any conflict(s) between the information on Canvas and the information on this outline, the information on Canvas will take precedence.

Academic Misconduct:

The University of Wisconsin – Stevens Point is an academic community of individuals committed to the pursuit of learning, the acquisition of knowledge, and the education of all who seek it. This course expects that all work turned in for a grade is your own, or that of your group. A description of your rights and responsibilities as a member of the UWSP community can be found in the Community Rights document at: http://www.uwsp.edu/dos/Documents/CommunityRights.pdf.

Student Academic Standards and Disciplinary Procedures (UWS/UWSP Chapter 14) are available in the Community Rights document.   Academic misconduct will not be tolerated and will be acted upon according to the University of Wisconsin System Chapter 14 Student Academic Disciplinary Procedures. For this class, at a minimum, you will receive a zero grade for your submitted work that have been found to be the result of an academic misconduct.

Disability Services:

For information on accommodations available to students with disabilities, visit the Office of Disability Services in room 609 Albertson Hall (715-346-3365) or their website: http://www.uwsp.edu/disability/Pages/default.aspx.

You are responsible for notifying and making arrangements directly with the Disability Services Office before any exams.

UWSP Emergency Evacuation Procedure:

- In the event of a medical emergency, call 911 or use red emergency phone located near SCI B338, or SCI B238 in the hallway of the Science Building. Offer assistance if trained and willing to do so. Guide emergency responders to victim.
- In the event of a tornado warning, proceed to the lowest level interior room without window exposure on the first floor lavatory in the Science Building. If time or space do not allow, go to A224 or A225 Science Building or remain in the hallways around those classrooms. See http://www.uwsp.edu/rmgt/Pages/em/procedures/other/floor-plans.aspx for floor plans showing severe weather shelters on campus. Avoid wide-span rooms and buildings.
- In the event of a fire alarm, evacuate the building in a calm manner. Meet at parking lot X (the corner of Fourth Avenue and Reserve St.). Notify instructor or emergency command personnel of any missing individuals.
- Active Shooter – Run/Escape, Hide, Fight. If trapped hide, lock doors, turn off lights, spread out and remain quiet. Follow instructions of Emergency Responders. Watch the Active Shooter video at: https://campus.uwsp.edu/sites/rmgt/campus/SitePages/Shots%20Fired%20-%20Lightning%20Strikes.aspx.   Watch the Preventing Violence video at: https://campus.uwsp.edu/sites/rmgt/campus/SitePages/Flashpoint%20on%20Campus.aspx.
- See UW-Stevens Point Emergency Management Plan at http://www.uwsp.edu/rmgt for details on all emergency response at UW-Stevens Point."