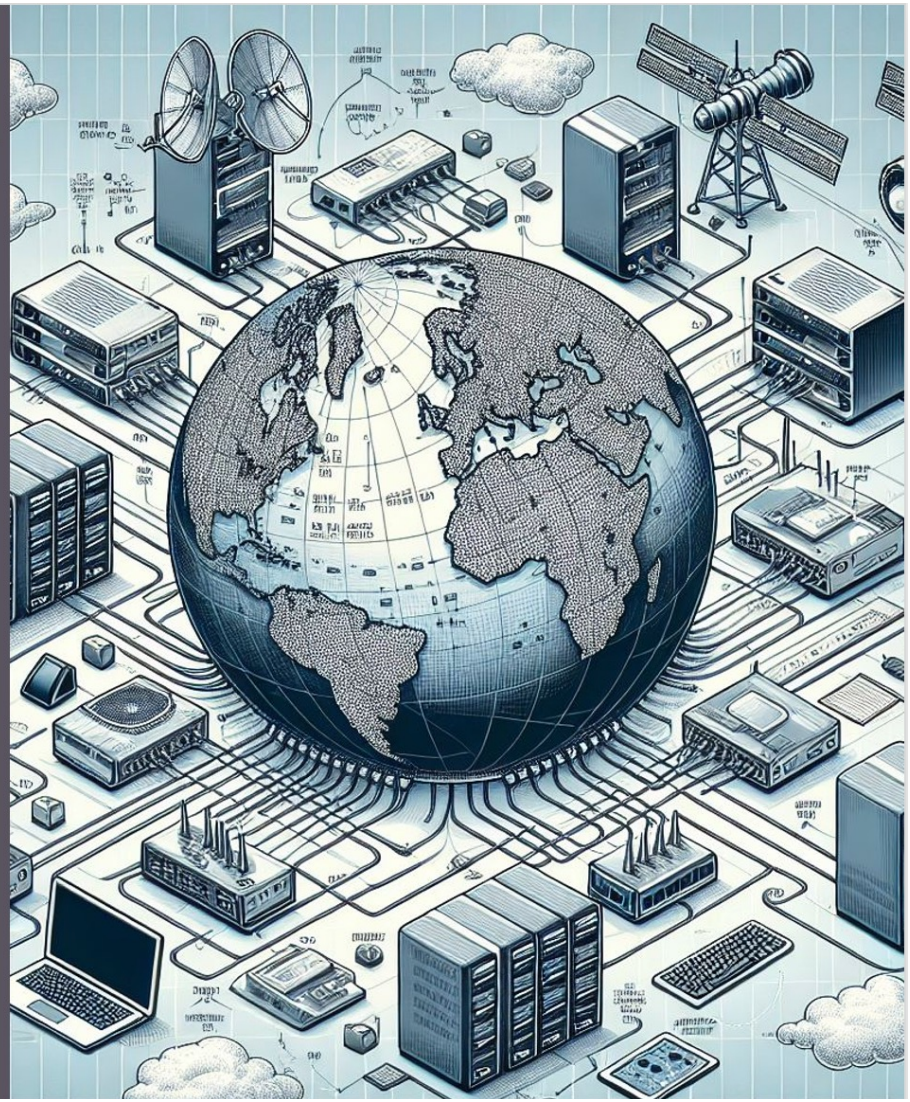
COLLEGE OF ARTS AND SCIENCES
The University of Alabama at Birmingham
Department of Computer Science

CS 334/534 NETWORKING

Dr. Ragib Hasan

Lecture 0.1:
Introduction and Course Logistics



Welcome to the class

- **Administrative details**
  - Where? : HHB 106
  - When?: MWF 10.10 am – 11 am
  - Web: https://uab.instructure.com/courses/1648235
  - Instructor: Dr. Ragib Hasan

  - **Teaching Assistant:**
    - Sharif Noor Zisad

This class has both a lecture and a lab section

Lecture	Lab

• HHB 106 – led by Dr. Hasan
• MWF 1010-11 am
	• UH 1007 – led by Zisad
	• Two sections
	  • 334 (UG): Tuesday 1230-120 pm
	  • 534 (GR): Tuesday 2-250 pm

Office Hours

Dr. Hasan

- **Thursday** 1230-130 pm
- UH 4141

TA Office Hours:

- Monday 2-3 pm
- Thursday 2-3 pm
- UH 1009

Preferred Method of Contact

- Via Canvas message **ONLY**. (Please **do not use email** to contact … Canvas inbox message is the official contact method for this course).

- Please expect a response within 24 hours on weekdays and a slower response on weekends (OR messages received after 5 pm on Friday will be returned Monday morning).
- Please Copy me and all TAs in your messages (unless it is something that you want to discuss ONLY with me)
- I am available to meet with you in person at UH 4141 or virtually via Zoom by appointment during my office hours.

- **Please note that all assignments are to be submitted through Canvas and not to my UAB email account**. If you submit an email, I will request you to resubmit the message through Canvas. This is due to FERPA compliance requirements.
- To comply with FERPA, We will not respond to course-related messages via email.

Instructional Method

In Person (both lecture and labs)

All content of the course will be posted via Canvas and homeworks are also to be submitted online.

The midterm and final exam will be conducted as as Canvas quizzes in class, via the respondus browser

Goals of the course

- Learning the fundamentals of computer networks
- Learning how the Internet works—what really happens when you “browse the web”
- Understanding Network Models
- Understanding of different networking protocols

Required Background

- The official prerequisites for the course is:
  - CS 250 Discrete Structures
  - CS 203 Object Oriented Programming
  - A minimum grade of C is required in the prerequisite courses
- We will also use Python for Socket programming

Modules

- There are 12 modules in this course
- Potential topics to be covered include:

Network Models

Physical Layer/Link Layer

Network Layer

Transport Layer

Application Layer

Network Protocols

Sockets/programming

Internet of Things

Cloud Networking

Network Topologies

Network Security

Wireless Networking

LAN

Plan

Each week, we will

- Pick a networking topic
- Discuss general issues on the topic
- Learn about the tools and techniques related to the topic
- Get hands-on training via labs

Evaluations

Assignments (30%):	6 assignments, one every two weeks Everything must be submitted via Canvas Due dates are fixed, **<u>no extensions</u>**
Lab tasks (20%)	4 lab tasks, aligned with 4 assignments Labs will have separate class and hands-on practice times
Midterm (20%) and Final Exam (30%):	These are online exams, managed via proctorU. Dates are posted on Canvas

Late submission policy

NO Late submissions will be accepted (except for documented medical emergencies)

Do not wait till the last moment. Often, submissions fail due to technical issues, so give you ample time before the 1159 pm deadline to submit your work.

After submitting your work, please double check if it uploaded correctly.

If you submit multiple times, only the last submission will be graded.

If you submit the wrong file, it will not be graded or replaced after the deadline. It is your responsibility to make sure you submitted the correct file.

Submission advice

- Be careful about using shared computers for submission. If you submit someone else's assignment file even by mistake, that will lead to an academic integrity violation.

- Make sure you submit the correct version of your assignment.

- Remember: NO late submissions will be accepted.

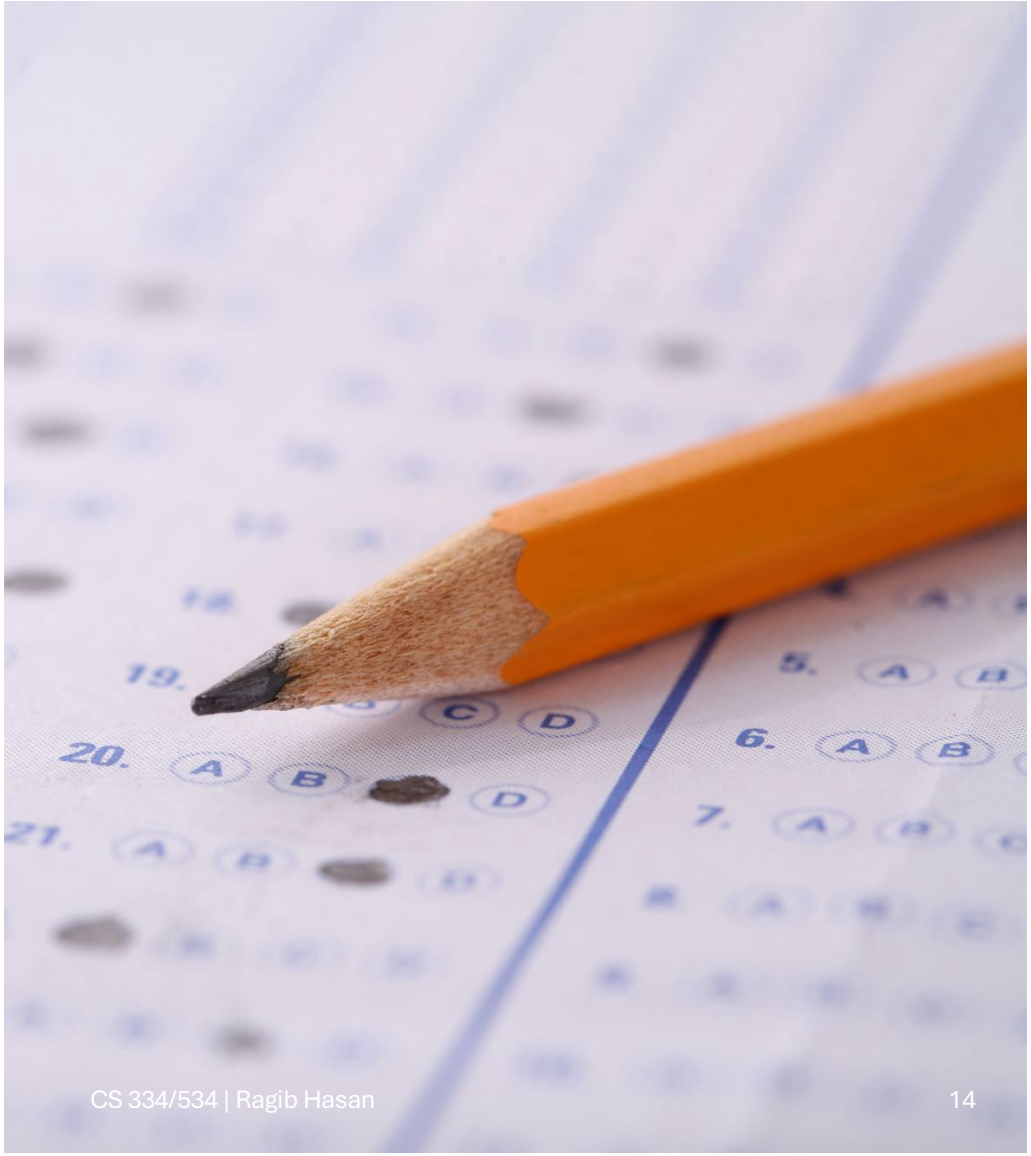
Exams

There will be two exams

- Midterm exam
- Final exam

Dates are posted on Canvas – see the bottom of the syllabus page

Both exams are closed-book, in-class, Canvas-quiz based exams. We will use the Respondus browser



Grading

For 443:	For 643 and 743:
• A (90-100%), • B (80-89.99%), • C (70-79.99%), • D (60-69.99%), • F (Below 60%).	• A (90-100%), • B (80-89.99%), • C (60-79.99%), • F (Below 70%).

Add Drop Policies

- **Drop/Add:** Deadlines for adding, dropping, or withdrawing from a course and for paying tuition are published in the Academic Calendar available online. Review the Institutional Refund Policy for information on refunds for dropped courses.

- **Withdrawal:** To avoid academic penalty, a student must withdraw from a course by the withdrawal deadline shown in the academic calendar and receive a grade of W (withdrawn). Failure to attend class does not constitute a formal drop or withdrawal.

Differentiated Course Requirements

The course has two sections: undergraduate (334) and graduate (534)

Graduate students will have to solve additional assignment problems with difficulty levels corresponding to their degree levels.

Attendance

Students will be required to attend all classes and labs. This is mandatory.

If you are unable to participate, please notify the instructor ASAP.

Attendance will be recorded via iClicker

Academic Misconduct Policy

- The University of Alabama at Birmingham expects all members of its academic community to function according to the highest ethical and professional standards. Students, faculty, and the administration of the institution must be involved to ensure this quality of academic conduct. Review the Academic Honor Code and Non-Academic Student Code of Conduct linked below.
- Academic Honor Code

- Academic misconduct may include, but is not necessarily limited to, acts such as plagiarism, cheating, misrepresentation, fabrication or giving or receiving unauthorized aid in tests, examinations, or other assigned work, and will be subject to disciplinary action. Any act of dishonesty in academic work constitutes academic misconduct.

- For homework answers, you ARE allowed to quote from class, but you must cite the slide number and module number and use quotation marks.

Academic Integrity

- The new Integrity code is online as of 8/23/2021
- https://www.uab.edu/compliance/images/FINAL_Academic_Integrity_Code__2021-June-22.pdf
- We will strictly follow the code.
  - All homework/code must be your own work
  - Any use of web based homework solution sites (e.g. chegg) is strictly prohibited. (will be considered a major violation)
  - Homeworks will be checked using Turnitin, and any copying or machine-paraphrasing will be detected and considered a major violation.
  - The penalties for major violations range for an F in the course and/or referral to the academic integrity coordinator for further action.

Use of AI based tools

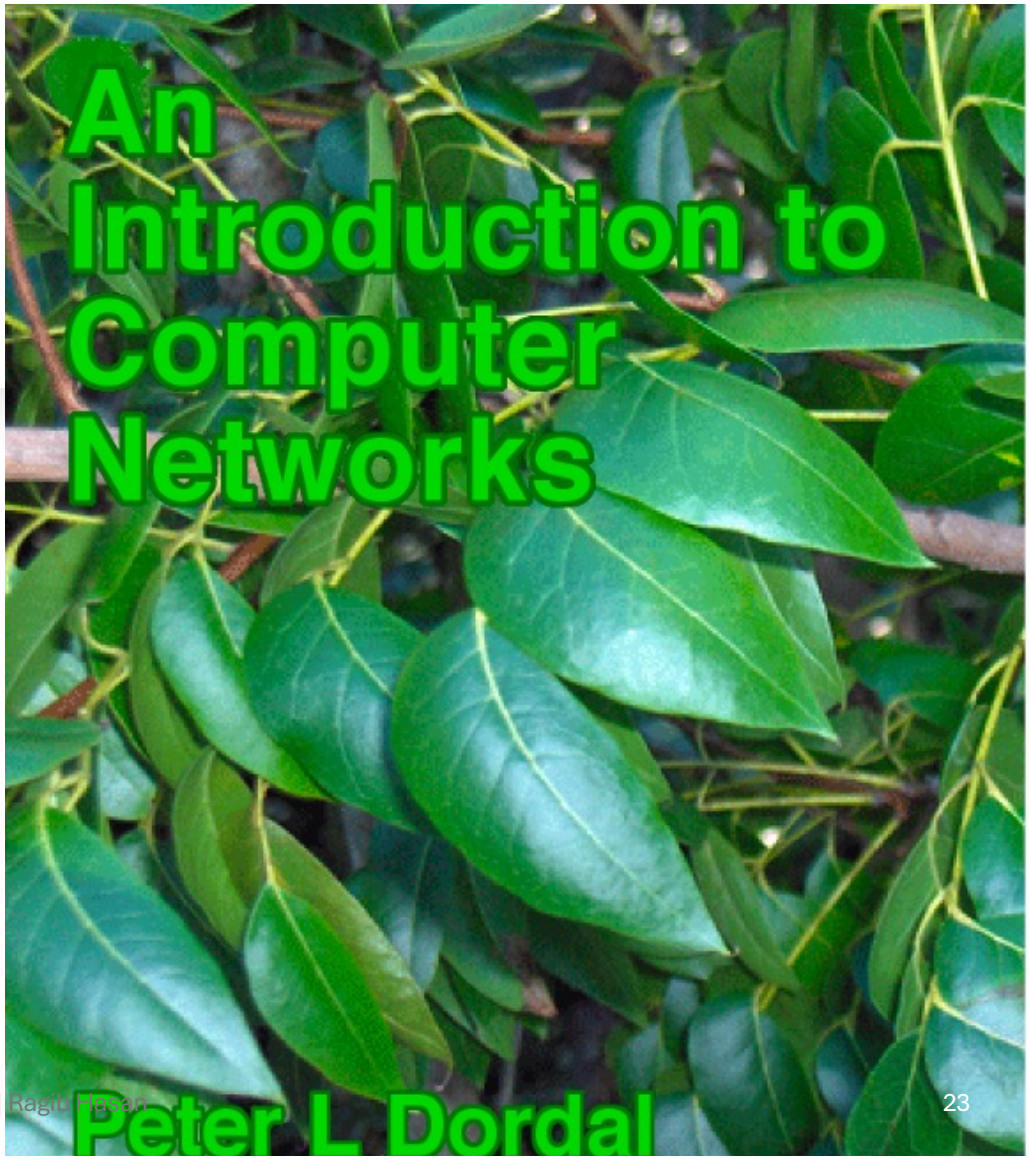
- Use of AI based tools such as ChatGPT or Bard to write homework answers is not allowed!
- Canvas has AI-detection tools built in and we will use them to identify such violations.
- Paraphrasing tools such as quilbot and others are also not allowed.

Expectations

- Please attend all classes!
- Review lecture slides for each module
- Ask questions over email or discussion boards
- Attend office hours
- Try to start early on labs and homework assignments
  - Don’t wait until the very last minute!
- Follow the instructions and submit assignments on time

Course references

- P.L. Dordal. *An Introduction to Computer Networks*. Open textbook library. Peter L Dordal, 2nd Edition. Available at: http://intronetworks.cs.luc.edu
  - **<u>The textbook is FREE</u>**
- Lecture slides
- Other references to be provided as we proceed

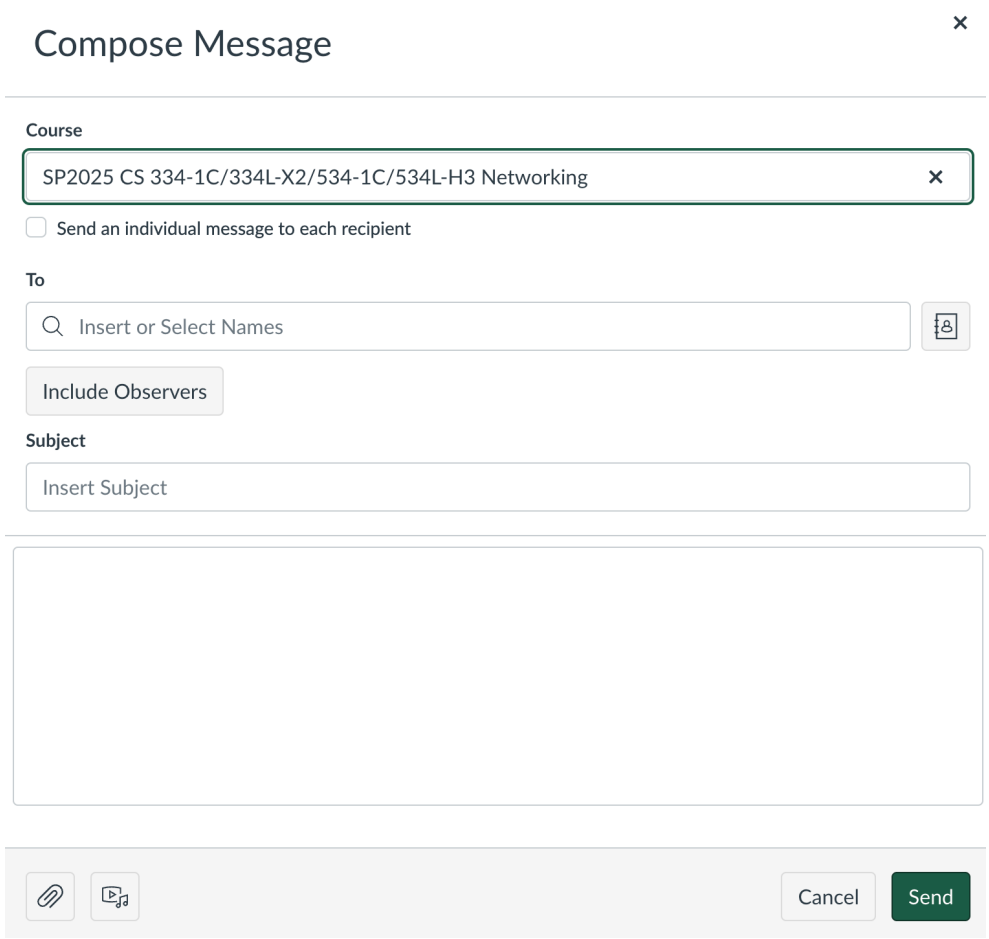


Accessibility

- UAB is committed to providing an accessible learning experience for all students. If you are a student with a disability that qualifies under the Americans with Disabilities Act (ADA) and/or Section 504 of the Rehabilitation Act, and you require accommodations, please contact **Disability Support Services** for information on accommodations, registration, and procedures.
- Requests for reasonable accommodations involve an interactive process and consist of a collaborative effort among the student, DSS, faculty and staff. If you are registered with Disability Support Services, please contact me to discuss accommodations that may be necessary in this course.
- If you have a disability but have not contacted Disability Support Services, please call (205) 934-4205 or visit the DSS website at http://www.uab.edu/students/disability/

Title IX Statement

In accordance with Title IX, the University of Alabama at Birmingham does not discriminate on the basis of gender in any of its programs or services. The University is committed to providing an environment free from discrimination based on gender and expects individuals who live, work, teach, and study within this community to contribute positively to the environment and to refrain from behaviors that threaten the freedom or respect that every member of our community deserves. For more information about Title IX, policy, reporting, protections, resources, and supports, please visit the UAB Title IX webpage.

Questions?

For any questions about course logistics, please contact Dr. Hasan or the TAs via a **Canvas message.**