

**Professor:** Steve Brinton

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**Office Hours:** MWF 9-10am, 2-3pm

**Class Hours:** MWF 3:20- 4:20 pm (M212)

**Class Website:** <http://www.math-cs.gordon.edu/courses/cs372brinton/index.php>

**Purpose:**

Computer networks are every where - from your cell phone to a mesh network designed to fight a forest fire. Networks are fast becoming a part of everyday life for every person whether the person is a computer professional working for a Fortune 500 company or a person living in the jungles of Peru - networks play some sort of role in that person's life.

If it's true that networks are everywhere then understanding how they work is essential. This course will cover some of the basics of networking - especially the technical layers which make up the greatest network of them all - the internet.

The importance of wireless technology and network security is evident - therefore both topics will be covered in detail toward the end of the semester.

**Prerequisites:**

CS212 or permission of instructor.

**Texts:**

Computer Networking: A Top-Down Approach Featuring the Internet,  
Third Edition  
by James F. Kurose and Keith W. Ross  
2005, Pearson, Addison Wesley  
ISBN: 0-321-22735-2

**Course Expectations:**

A. Lecture and Reading

Reading from the course texts will be assigned on a regular basis. It would be wise to keep up with your reading as the material is presented in class so that you are able to ask questions and respond in class. Class sessions will be used to amplify, clarify and supplement material which is presented in the book. In some cases, material in the text will not be specifically covered during class time - the student is expected to fully read the assigned material in the textbook and ask questions when additional clarification is needed.

All students are expected to attend lecture regularly and will responsible for all material covered during class. In the event of an unavoidable absence, it is the student's responsibility to learn of any material or assignments from the missed class. (Also see section entitled: *attendance policy*)

B. Assignments

Since this course is of a technical nature and since the complexity of the material builds from topic to topic, it is essential that you stay up to date with the reading and assignments from within the course. In order to motivate you to continually interact with the material, occasional assignments will be given throughout the semester. In some cases, only a sampling of problems will be graded.

C. Programming Assignments

A couple of programming assignments will be given during the semester.

D. Exams

Two times during the course you will receive the opportunity to solve problems during an entire class session. The opportunities will be administered on the dates listed in the course schedule. The second opportunity will be cumulative; however, it will emphasize material from the latter portion of the course. Each opportunity will assume familiarity with material from the text, from lecture and from assignments. Exams will be closed book.

F. Student Presentation

Students will be given the opportunity to research and give a presentation on a special topic in networking. Choice of topics will be done on a first-come-first-serve basis.

## POSSIBLE TOPICS:

P2P File Sharing	IPv6
Network Monitoring (IDS)	Streaming Video
Mesh Networks	Virtual Private Networks (VPN)
Sensor Networks	CORBA
Multiplayer Gaming over networks	Kerberos
VoIP	

The topic must be approved by the professor (due February 2<sup>nd</sup>). Presentation date will be assigned by instructor.

**Summary:**

20% Programming Assignment  
 20% Assignments  
 15% Presentation  
 20% Midterm Exam  
 25% Final Exam  
 100%

**Grading Scale:**

A: <=100% >=95%	A-: <95% >=90%	B+: <90% >=86%
B: <86% >=84%	B-: <84% >=80%	C+: <80% >=76%
C: <76% >=74%	C-: <74% >=70%	D+: <70% >=66%
D: <66% >=64%	D-: <64% >=60%	F: <60% >=0%

**Being Responsible:**

At times, the amount of work required may seem insurmountable – however it is expected that each student be responsible to strive to do his or her best. On this note, cheating will not be tolerated. Cheating is any dishonest action which is intended to deceive and mislead others, and/or misrepresent yourself and your accomplishments. Any student discovered cheating will receive an automatic “F” for the course, as well as any further action deemed appropriate by the college.

**Policy Statement on Extensions and Incompletes:**

Extensions of the due dates for assignments or projects will be given in the event of extenuating circumstances (such as illness, personal emergency) If you submit a brief written request to the professor as soon as possible after the circumstances arise. This request will be initialed (if approved) and will be returned to you. You must attach it to the piece of work for which the extension was granted.

A grade of Incomplete will be given without penalty if you are unable to complete the course work by the last day of the term due to major illness or other similar emergency. Again, a written request should be submitted. Such a request will only be granted if you are substantially up-to-date with your course work and were making good progress in the course up to the time that the difficulty arose. Of course, you must complete all work for the course by the midpoint of the next semester in accordance with College policy.

**Attendance Policy:**

Regular attendance is expected of all students and will be recorded. Absences from class will be classified as “documented” or “undocumented”. A documented absence is one where written documentation (typically supported with authoritative signatures - like a doctor, nurse, school administrator, etc) is submitted and approved by the professor supporting an absence from class due to circumstances beyond the student’s control (such as illness, family emergencies, etc.) An undocumented absence is any other absence. Students who have more than 3 undocumented absences will have penalty added to their final grade at the discretion of the professor.

A student who is habitually late will have late arrival for class counted as a half undocumented absence for that class, and a student who sleeps through most or all of a given class session will be counted as undocumented absent for that class.

A student who anticipates the need to miss more than three classes due to athletic competitions or other student activities should review the college’s attendance policy on page 31 of the catalog, and should then discuss alternatives to class attendance with the professor at the start of the semester.

**Students with Disabilities:**

Gordon College is committed to assisting students with documented disabilities (see Academic Catalog Appendix C, for documentation guidelines). A student with a disability who may need academic accommodations should follow this procedure:

1. Meet with a staff person from the Academic Support Center (Jenks 412 X4746) to:
  - a. make sure documentation of your disability is on file in the ASC,
  - b. discuss the accommodations for which you are eligible,
  - c. discuss the procedures for obtaining the accommodations, and
  - d. obtain a **Faculty Notification Form**.
2. Deliver a Faculty Notification Form to each course professor *within the first full week of the semester*; at that time make an appointment to discuss your needs with each professor.

Failure to register in time with your professor and the ASC may compromise our ability to provide the accommodations. Questions or disputes about accommodations should be immediately referred to the Academic Support Center. See Grievance Procedures available from the ASC.