

CIS 654 Data Communications – Winter 2014

Course Description

Data communications and computer networking concepts, Internet architecture and protocols. Selected examples of client/server applications to introduce the functional requirements of internetworking. Basic cryptography and its applications, introduction to network security (firewalls, IPsec, VPN and SSL).

Course Web Page

Students are responsible for all information posted on the course web page:
<http://www.cis.gvsu.edu/~kalafuta/cis654>

Instructor

Dr. Andrew Kalafut

Downtown Office Hours: T 5:00 - 5:50 PM

Downtown Office: 359 KEN

Allendale Office Hours: MTWF 1:00 - 1:50 PM

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Prerequisites

CIS 500 and CIS 501.

Required Text

Comer, Douglas E., Internetworking with TCP/IP (6th Edition) - Pearson 2014.

Grading

The course grade will consist of 1 final exam (25%), 1 mid-term exam (25%), one paper and presentation (25%), and one programming project (25%). The paper and the project will both represent significant amounts of work and will take multiple weeks to complete. Additional information about the paper and project will be posted on the course web site. The course will be graded according to the following scale:

A	A-	B+	B	B-	C+	C	C-	D+	D
93%	90%	87%	83%	80%	77%	73%	70%	67%	60%

Topics

The course will be structured approximately as follows. This schedule is subject to change depending on topic interest and speed of coverage. Students are expected to frequently check the more detailed schedule posted on the course web page.

Week	Topic
1	Introduction
2	Addressing
3	Forwarding
4	UDP/TCP
5	Interdomain Routing
6	Intradomain Routing
7	Midterm, Sockets Programming
8	MPLS
9	Spring Break
10	Security
11	Overlay Networks
12	Autoconfiguration
13	Traditional Applications
14	VoIP
15	Software Defined Networking
16	Final Exam

Policies and Expectations

Late work:

No points will be awarded for work turned in late, unless arrangements are made, for sufficient reason, in advance of the due date.

Grade disputes:

Grades will be posted on blackboard. Any questions regarding posted grades must be raised within 7 days of the grade posting date.

Academic honesty:

All work is to be completed individually. All outside resources used, including Internet sources, must be cited. It is never acceptable to post any part of any assignment or project online asking for help. No academic dishonesty will be tolerated. Consequences will include the most severe penalty allowed by GVSU policy. Please read the CIS honesty policy at <http://www.cis.gvsu.edu/Academics/Honesty>

Special needs:

If you need academic accommodations because of a learning, physical, or other disability, please contact Disability Support Resources (DSR) at 331-2490. Furthermore, if you have a physical disability and think you will need assistance evacuating this classroom and/or building in an emergency situation, please make me aware so I can develop a plan to assist you.