

CRN 31166 CST K176 T1
Internet Technologies
Fall 2015

GENERAL COURSE INFORMATION

Instructor: Rebecca Rasmussen

Class Hours: **Lecture** 5:20p – 8:05p **Lab** 8:10p-9:50p

Location: KTRCC B227

Email: rrasmussen@trcc.commnet.edu

Required Textbook:

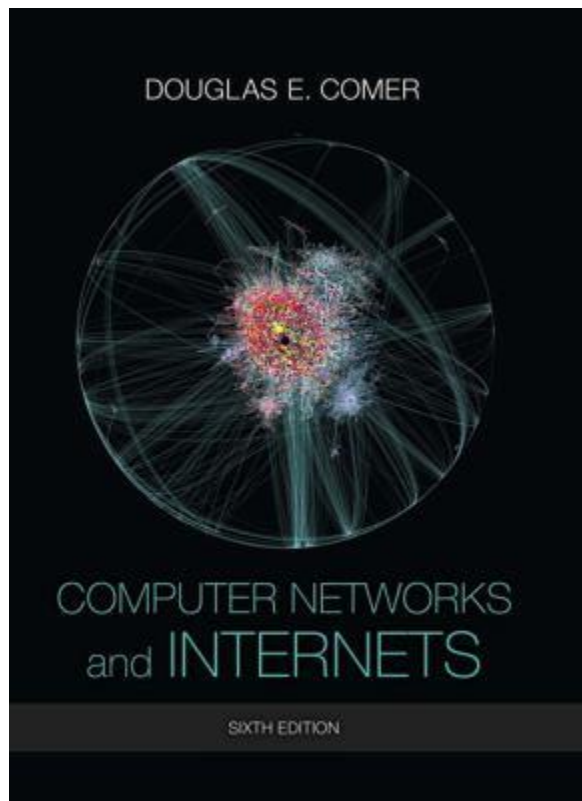
Computer Networks and Internets, 6th ed.

Comer, Douglas E.

Publisher: Pearson Education

ISBN-10: 0-13-358793-2

ISBN-13: 978-0-13-358793-7



Course Description:

This course surveys the various technologies that form and make the Internet work. It will prepare students to understand current technologies and make intelligent business decisions concerning the Internet. The student will acquire detailed knowledge of a wide range of internet basics, the knowledge and skills required to use and update client software, and to assist in the administration of internet/intranet sites. Additionally, the student will acquire knowledge of programming related terms and the differences between popular client and server programming language.

COURSE EVALUATION/GRADING SCHEME

40% Quizzes of Major Sections

40% Weekly Assignments

10% Final Exam

10% Class Participation and Attendance

COURSE POLICIES

Cell Phones: As a courtesy, please silence your cell phones. I understand that there may be outside responsibilities that demand your attention, and as such I will not require you turn your cell phones off. However please keep these as minimal and non-distracting as possible.

Attendance/Class Participation: Attendance is expected to each class and will be recorded. This accounts for 10% of your final grade. If you cannot make class, please send me an email in advance.

Food and Beverages: Per campus policy, no food or beverages are allowed in the computer labs.

Gum: No gum chewing allowed. Use a breath mint instead.

UNIVERSITY POLICIES

Student with Disabilities: If you are a student with a disability and believe you need support services and/or accommodations for this class, please contact the Disability Support Services at Three Rivers Community College. Students with a documented disability are provided

supportive service and accommodations to assist you with your academic objectives. Services are strictly confidential. Disability services may include individualized accommodations, advising, advocacy, counseling, technical assistant, and referral information.

Academic Integrity: Academic integrity is essential to a useful education. Failure to act with integrity severely limits a person's ability to succeed in the classroom and beyond. Furthermore, academic dishonesty erodes the legitimacy of every degree awarded by the College. In this class and the course of your academic career, present only your own work; clearly document the sources of the material you use from others; and act all times with honor.

Digication: All students are required to maintain a learning portfolio in Digication that uses the (Three Rivers) College Template.

COURSE SCHEDULE: Subject to Change

Week	Date	Chapter/Topics
<i>PART 1: Introduction and Internet Applications</i>		
1	September 3, 2015	1 Introduction and Overview 2 Internet Trends
2*	September 10, 2015	3 Internet Applications and Network Programming 4 Traditional Internet Applications
<i>PART 2: Data Communication Basics</i>		
3	September 17, 2015	5 Overview of Data Communications 6 Information Sources and Signals
4	September 24, 2015	7 Transmission Media 8 Reliability and Channel Coding
5	October 1, 2015	9 Transmission Modes 11 Multiplexing and Demultiplexing (Channelization) 12 Access and Interconnection Technologies
<i>PART 3: Packet Switching and Network Technologies</i>		
6	October 8, 2015	13 Local Area Networks: Packets, Frames and Topologies 14 The IEEE MAC Sublayer
7	October 15, 2015	15 Wired LAN Technology 16 Wireless Networking Technologies
<i>PART 4: Internetworking Using TCP/IP</i>		
8*	October 22, 2015	17 Repeaters, Bridges, And Switches 18 WAN Technologies and Dynamic Routing
9*	October 29, 2015	20 Internetworking: Concepts, Architecture, Protocols 21 IP: Internet Addressing

10*	November 5, 2015	22 Datagram Forwarding 23 Support Protocols and Technologies
11	November 12, 2015	26 Internet Routing and Routing Protocols
12	November 19, 2015	24 UDP: Datagram Transport Service 25 TCP: Reliable Transport Service
<i>PART 5: Other Aspects of Computer Networking</i>		
13	November 26, 2015	HAPPY THANKSGIVING! No Class
14	December 3, 2015	27 Network Performance (QoS and DiffServ) 28 Multimedia and IP Telephony (VoIP)
15	December 10, 2015	29 Network Security 30 Network Management (SNMP)
16	December 17, 2015	31 Software Defined Networking (SDN) 32 The Internet of Things 33 Trends in Networking Technologies and Uses

* = Important/Intense Week