## Wright State University

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Computer Science & Engineering Syllabi

College of Engineering & Computer Science

Fall 2011

# CEG 210-01: PC Networking I

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## **Syllabus CEG 210 PC Networking I** Fall 2011

#### General Course Information

Instructor:

**Chris Fickert** 

Office:

346 Russ Engineering Center After class and by appointment

Office Hours: Phone:

Leave message at CS&E Office

E-mail:

chris.fickert@wright.edu

Web site:

http://www.wright.edu/~chris.fickert

Classroom:

346 Russ Engineering Center

**Class Times:** 

MW 4:10 - 5:50 PM

Prerequisites: CS 205 or CS 240 Credit Hours: 4

Textbook: Tamara Dean, Network and Guide to Networks 5e text and Lab Connection Online

Printed Access Card., Fifth Edition, Course Technology Incorporated,

2010 ISBN: 1111226431

#### Additional Materials:

USB Headphones for PC for Lab Connection Online

Slides, Reference material found on

http://www.wright.edu/~chris.fickert/CEG210/

#### **Course Description**

Introduction to networking technologies including infrastructure and architectures, standards, protocols and directory services, administration, security and management. Integrated lecture and lab.

#### Course Format:

A combination of lecture, demonstration and lab activities will be used during class. Typically, the first part of the class will be dedicated to lecture and the remainder of the class will be used to complete lab-based assignments and cases.

#### Topic Coverage:

This course first introduces the fundamental building blocks that form a modern network, such as protocols, topologies, hardware, and network operating systems. It then provides coverage of important concepts in contemporary networking, such as TCP/IP, Ethernet, wireless transmission, and security. The course will prepare you to select the best network design, hardware, and software for your environment. You will also learn the skills to build a network from scratch and maintain, upgrade, and troubleshoot an existing network. Specific topic coverage includes:

- An Introduction to Networking
- Networking Standards and the OSI Model
- Transmission Basics and Networking Media
- Introduction to TCP/IP Protocols

- Topologies and Ethernet Standards
- Network Hardware
- Wireless Networking
- Network Operating Systems
- In-Depth TCP/IP Networking
- Network Security
- Troubleshooting Network Problems
- Ensuring Integrity and Availability
- Network Management

#### Grading and Evaluation Criteria

Exam 1	30 %
Exam 2	30 %
Labs/Cases/Activities	20 %
Final Project	20 %

The following tentative scale will be used to calculate your grade:

90 – 100 % A 80 – 89 % B 70 – 79 % C 60 – 69 % D 59 and below F

Assignment and Exam Policy: 10 % will be deducted for each day an assignment is late. No credit will be given for assignments over 2 days late. Lab assignments/cases/activities done in class cannot be made up for credit.

If you know that you will miss an exam, you may take it early, otherwise exams *may* be made up at discretion of the Instructor - if advance notice is given and proper documentation is supplied. Generally, make-up exams are given on the last day of class.

You will have card access to this lab and may use the lab when there is not another class in session.

## Link to 346 Class/Lab Schedule: http://www.cs.wright.edu/cse/students/lab-schedules.shtml

#### **Academic Integrity**

It is the policy of Wright State University to uphold and support standards of personal honesty and integrity for all students consistent with the goals of a community of scholars and students seeking knowledge and truth. Furthermore, it is the policy of the university to enforce these standards through fair and objective procedures governing instances of alleged dishonesty, cheating, and other academic misconduct. The following recommendations are made for students:

- 1.Be honest at all times.
- 2. Act fairly toward others. For example, do not disrupt or seek an unfair advantage over others by cheating, by talking, or by looking at other individuals' work during exams.
- 3. Take group as well as individual responsibility for honorable behavior. Collectively, as well as individually, make every effort to prevent and avoid academic misconduct, and report acts of misconduct that you witness.
- 4.Do not turn in the same work in more than one class unless permission is received in advance from the

professor.

- 5. Unless permitted by the instructor, do not collaborate with others on graded course work, including in class and take home tests, papers, or homework assignments.
- 6. Know what plagiarism is and take steps to avoid it. When using the words or ideas of another, even if paraphrased in your own words, cite the source(s).
- 7. Know the policy-ignorance is no defense. If you have any questions regarding academic misconduct, contact your instructor. Those who violate campus rules are subject to disciplinary action.

This information was obtained form Wright State's Office of Judicial Affairs. Complete information may be referenced at: http://www.wright.edu/students/judicial/integrity.html

# Responsible Use of Information Technology

Wright State University provides computing, information, and communications resources for its students to support their learning and research. Access to these information technology resources is a privilege and requires adherence to this Information Technology policy as well as to other University policies, including but not limited to: World Wide Web (Wright Way 2001), Copyrighted Materials (Wright Way 2303), WSU Student Handbook, WSU Student Organization Handbook, and Student Housing Data Network Acceptable Use Policy.

Users of the University's information technology resources are also bound not only by those laws, policies, and regulations that are specific to computing, telecommunications, and networks, but also by all other international, federal, state, and local regulations and statutes that apply.

This policy applies to all use of the University's computing, information, and communications resources, whether administered by Computing and Telecommunications (CATS), by individual University colleges and departments, or by off-campus units that connect remotely to the University's network and operate under the aegis of Wright State University. Privately-owned machines, while attached to the University network, are subject to the same policies as University-owned computer systems.

Responsibility for the use of the University's computing, information, and communications resources by minors (persons under 18 years of age) rests with their parents or legal guardians.

This information was obtained form Wright State's Office of Judicial Affairs. Complete information may be found at: http://www.wright.edu/cwis/policies/itpolicy.html

#### Student Disabilities

Students with documented disabilities that require physical or academic accommodations must contact their Instructor during the first week of classes. To receive more information or to apply for services, contact the Office of Disability Services.

Important Dates for Fall Quarter 2011

September 6 Tuesday First Day of Fall Quarter Classes (Labor Day is

Monday, September 5, University Closed)

September 26 Monday

Last Day for All Students to Drop a Class Without a

Grade

October 24 Monday

Last Day for All Students to Drop a Class With a

Grade of W

November 11 Friday Veteran's Day Holiday Observed (University Closed)

November 12 Saturday Last Day of Fall Quarter Classes

# Course Outline (Tentative) Adjustments to the schedule will be announced in class

Week	Topics	Chapter Readings	Lab Assignments & Activities
1	Course Introduction An Introduction to Networking	Chapter 1	In Class, Lab 1 on my web page and LabConnections registration(80956) Chapter 1, Labs 1&2
2	Networking Standards and the OSI Model	Chapter 2 Chapter 3	LabConnections Chapter 2, Labs 1&2 TBA
	Transmission Basics and Networking Media		1211
3	Introduction to TCP/IP Protocols In-Depth TCP/IP Networking	Chapter 4 Chapter 10	TBA TBA
4	Troubleshooting Network Problems	Chapter 13	TBA
	Wrap Up, Review Exam 1, Begin Next Section Topologies and Ethernet Standards	Chapter 5	ТВА
5	EXAM 1 Topologies and Ethernet Standards	Chapter 5	ТВА
6	Network Hardware (NICs, switches, routers) Network Operating Systems NOS, Directory Services	Chapter 6 Chapter 9	TBA
7	Open Lab, In-Class simulations Network Security	Chapter 12	TBA TBA
8	Security, cont. Wireless	Chapter 8	ТВА
9	Ensuring Integrity and Availability Network Management	Chapter 14 Chapter 15	TBA TBA
10	Final Projects Final Projects		

EXAM 2 is during Finals Week standard time