Winter 2011

CEG 210: PC Networking I

Jerry Hensley
Wright State University - Main Campus, jerry.hensley@wright.edu

Follow this and additional works at: https://corescholar.libraries.wright.edu/cecs_syllabi

Part of the Computer Engineering Commons, and the Computer Sciences Commons

Repository Citation
https://corescholar.libraries.wright.edu/cecs_syllabi/1301

This Syllabus is brought to you for free and open access by the College of Engineering & Computer Science at CORE Scholar. It has been accepted for inclusion in Computer Science & Engineering Syllabi by an authorized administrator of CORE Scholar. For more information, please contact corescholar@www.libraries.wright.edu, library-corescholar@wright.edu.
Syllabus
CEG 210 PC Networking I
Winter 2011

General Course Information

Instructor: Jerry Hensley
Office: LX 040H Library Annex
Office Hours: After class and by appointment
Phone: 937-775-2349
E-mail: jerry.hensley@wright.edu
Web site: http://www.wright.edu/~jerry.hensley
Classroom: 346 Russ Engineering Center
Class Times: MW 4:10 – 5:50 PM
Credit Hours: 4

Prerequisites: CS 205


Additional Materials
Slides, Reference material found on
http://pilot.wright.edu/

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 (FINAL EXAM) 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 from 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 from Wright State's Office of Judicial Affairs. Complete information may be found at: http://www.wright.edu/cwis/policies/itpolicy.html

**Students With 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 775-5680.
## IMPORTANT DATES for WINTER QUARTER 2010

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 31</td>
<td>New Year's Day Holiday; University Closed</td>
</tr>
<tr>
<td>Jan 03</td>
<td>First day of Winter Quarter Classes</td>
</tr>
<tr>
<td>Jan 07</td>
<td>Last day to register, add classes or drop/withdraw and receive 100% refund of fees in person. Last day to change audit status (must be done in person). Last day for international students to register without approval from UCIE (must be done in person). Students with holds must come to the registration windows before 5 pm to drop or withdraw.</td>
</tr>
<tr>
<td>Jan 09</td>
<td>Last day to register, add classes or drop/withdraw and receive 100% refund of fees using WINGS Express.</td>
</tr>
<tr>
<td>Jan 10</td>
<td>70% refund period begins</td>
</tr>
<tr>
<td>Jan 14</td>
<td>Last day to register or add classes without $250 late registration fee (must be done in person).</td>
</tr>
<tr>
<td>Jan 17</td>
<td>Martin Luther King, Jr. Holiday; University Closed (official census date)</td>
</tr>
<tr>
<td>Jan 18</td>
<td>Last day to drop classes or withdraw and receive 70% refund of fees. Last day to cancel student health insurance. Late registration/add fee of $250 begins. Students with holds must come to the registration windows before 5 pm to drop or withdraw.</td>
</tr>
<tr>
<td>Jan 21</td>
<td>Last day for ALL students to drop a class without a grade</td>
</tr>
<tr>
<td>Feb 18</td>
<td>Last day for ALL students to drop a class with a grade of W (not calculated in grade point average). Students with holds must come to the registration windows before 5 pm to drop or withdraw.</td>
</tr>
<tr>
<td>Mar 01</td>
<td>Last day to apply for June graduation</td>
</tr>
<tr>
<td>Mar 12</td>
<td>Last day of Winter Quarter Classes</td>
</tr>
<tr>
<td>Mar 14-19</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>Mar 23</td>
<td>Grades due by Noon</td>
</tr>
</tbody>
</table>

4
<table>
<thead>
<tr>
<th>DATE</th>
<th>LECTURE TOPIC</th>
<th>READING</th>
<th>LAB</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/3/2011</td>
<td>Course Introduction</td>
<td>Chapter 1</td>
<td>HOP 1-1</td>
</tr>
<tr>
<td>1/5/2011</td>
<td>An Introduction to Networking</td>
<td></td>
<td>HOP 1-2</td>
</tr>
<tr>
<td>1/10/2011</td>
<td>Networking Standards and the OSI Model</td>
<td>Chapter 2</td>
<td>HOP 2-3(#1-4), whose NIC is it, Case 2-2</td>
</tr>
<tr>
<td>1/12/2011</td>
<td>Transmission Basics and Networking Media</td>
<td>Chapter 3</td>
<td>LAB 3</td>
</tr>
<tr>
<td>1/17/2011</td>
<td>Martin Luther King, Jr. Holiday; University Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/19/2011</td>
<td>Introduction to TCP/IP Protocols</td>
<td>Chapter 4</td>
<td>LAB 4</td>
</tr>
<tr>
<td>1/24/2011</td>
<td>In-Depth TCP/IP Networking</td>
<td>Chapter 10</td>
<td>LAB 5</td>
</tr>
<tr>
<td>1/26/2011</td>
<td>Troubleshooting Network Problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wrap Up, Review Exam 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/31/2011</td>
<td>EXAM 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2/2/2011</td>
<td>Topologies and Ethernet Standards</td>
<td>Chapter 5</td>
<td>LAB 6</td>
</tr>
<tr>
<td>2/7/2011</td>
<td>Network Hardware (NICs, switches, routers)</td>
<td>Chapter 6</td>
<td>LAB 7</td>
</tr>
<tr>
<td>2/9/2011</td>
<td>Network Operating Systems</td>
<td>Chapter 9</td>
<td>LAB 8</td>
</tr>
<tr>
<td>2/14/2011</td>
<td>Open Lab, In-Class Simulations</td>
<td></td>
<td>No Lab</td>
</tr>
<tr>
<td>2/16/2011</td>
<td>Network Security</td>
<td>Chapter 12</td>
<td>LAB 9</td>
</tr>
<tr>
<td>2/21/2011</td>
<td>Security Continued</td>
<td></td>
<td>TBA</td>
</tr>
<tr>
<td>2/23/2011</td>
<td>WIRELESS</td>
<td>Chapter 8</td>
<td>LAB 10</td>
</tr>
<tr>
<td>2/28/2011</td>
<td>Ensuring Integrity and Availability, Network</td>
<td>Chapter 14</td>
<td>TBA</td>
</tr>
<tr>
<td>3/2/2011</td>
<td>Network Management</td>
<td>Chapter 15</td>
<td>TBA</td>
</tr>
<tr>
<td>3/7/2011</td>
<td>FINAL PROJECTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/9/2011</td>
<td>FINAL PROJECTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/14/2011</td>
<td>FINAL EXAM – 5:45 to 7:45 in 346 RUSS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>