Fall 2012

CEG 2400-01: Intro to PC Networking

Chris P. Fickert  
*Wright State University - Main Campus, chris.fickert@wright.edu*

Follow this and additional works at: [https://corescholar.libraries.wright.edu/cecs_syllabi](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/880

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 library-corescholar@wright.edu.
General Course Information

Instructor: Chris Fickert
Office: 346 Russ Engineering Center
Office Hours: After class and by appointment
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 4:40 – 6:00 PM

Prerequisites: CS 1180 or CS 1160 or CEG 2170 or CS 1150
Credit Hours: 3

Textbook: Tamara Dean, Network+ Guide to Networks Sixth Edition Course Technology Incorporated

Additional Materials:
Slides, Reference material found on
http://www.wright.edu/~chris.fickert/CEG2400

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, demonstrations, 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.

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 help prepare you to select the best network design, hardware, and software for your environment. You will also learn the basic 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
Grading and Evaluation Criteria
Exam 1 25 %
Exam 2 25 %
Exam 3 25 %
Labs/Cases/Activities 25 %

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

**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.
<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Chapter Readings</th>
<th>Lab Assignments &amp; Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aug 27&lt;br&gt;Aug 29&lt;br&gt;Course Introduction, An Introduction to Networking Standards and the OSI Model</td>
<td>Chapter 1&lt;br&gt;Chapter 2</td>
<td>Lab</td>
</tr>
<tr>
<td>2</td>
<td>Sept 3&lt;br&gt;(Holiday)&lt;br&gt;Sept 5&lt;br&gt;Networking Standards and the OSI Model</td>
<td>Chapter 2</td>
<td>Lab</td>
</tr>
<tr>
<td>3</td>
<td>Sept 10&lt;br&gt;Sept 12&lt;br&gt;Transmission Basics and Networking Media&lt;br&gt;Introduction to TCP/IP Protocols</td>
<td>Chapter 3&lt;br&gt;Chapter 4</td>
<td>Lab – make cable</td>
</tr>
<tr>
<td>4</td>
<td>Sept 17&lt;br&gt;Sept, 19&lt;br&gt;Introduction to TCP/IP Protocols&lt;br&gt;In-Depth TCP/IP Networking</td>
<td>Chapter 4&lt;br&gt;Chapter 9</td>
<td>Lab&lt;br&gt;Lab - subnetting</td>
</tr>
<tr>
<td>5</td>
<td>Sept 24&lt;br&gt;Sept 26&lt;br&gt;Troubleshooting Network Problems&lt;br&gt;EXAM 1</td>
<td>Chapter 13</td>
<td>Lab</td>
</tr>
<tr>
<td>6</td>
<td>Oct 1&lt;br&gt;Oct 3&lt;br&gt;Topologies and Ethernet Standards&lt;br&gt;Network Hardware, Switching, and Routing</td>
<td>Chapter 5&lt;br&gt;Chapter 6</td>
<td>Lab</td>
</tr>
<tr>
<td>7</td>
<td>Oct 8&lt;br&gt;Oct 10&lt;br&gt;Network Operating System (NOS)&lt;br&gt;NOS</td>
<td>Handout, Slides</td>
<td>Lab – Installing Win2008</td>
</tr>
<tr>
<td>8</td>
<td>Oct 15&lt;br&gt;Oct 17&lt;br&gt;Directory Services&lt;br&gt;Directory Services</td>
<td>Handout, Slides</td>
<td>Lab</td>
</tr>
<tr>
<td>9</td>
<td>Oct 22&lt;br&gt;Oct 24&lt;br&gt;Wide Area Networks&lt;br&gt;Wireless Networks</td>
<td>Chapter 7&lt;br&gt;Chapter 8</td>
<td>Lab</td>
</tr>
<tr>
<td>10</td>
<td>Oct 29&lt;br&gt;Oct 31&lt;br&gt;Virtual Networks and Remote Access&lt;br&gt;EXAM 2</td>
<td>Chapter 10</td>
<td>Lab – Virtual XP</td>
</tr>
<tr>
<td>11</td>
<td>Nov 5&lt;br&gt;Nov 7&lt;br&gt;Virtual Networks and Remote Access&lt;br&gt;Network Security</td>
<td>Chapter 10&lt;br&gt;Chapter 11</td>
<td>Lab – Virtual XP</td>
</tr>
<tr>
<td>12</td>
<td>Nov 12&lt;br&gt;(Holiday)&lt;br&gt;Nov 14&lt;br&gt;Voice and Video over IP</td>
<td>Chapter 12</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Nov 19, Nov 21&lt;br&gt;(Holiday)&lt;br&gt;Ensuring Integrity and Availability</td>
<td>Chapter 14</td>
<td>Lab</td>
</tr>
<tr>
<td>14</td>
<td>Nov 26&lt;br&gt;Nov 28&lt;br&gt;Network Management&lt;br&gt;Event Logs in win2008</td>
<td>Chapter 15</td>
<td>Lab&lt;br&gt;Event logs lab</td>
</tr>
<tr>
<td>15</td>
<td>Dec 3&lt;br&gt;Dec 5&lt;br&gt;In-Class simulations&lt;br&gt;EXAM 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>