Advanced Topics in Computer Networking
CS644 (01345)
Fall 2009/2010

Class Meetings:
Wednesdays and Fridays, 1:10pm - 3:00pm – Stocker 326 (mostly)

Instructor:
Dr. Shawn Ostermann
Office: Stocker 330 (through 335) – 59-31234
Office hours: Mondays at 10am, Thursdays at 3pm
Many times by appointment
(email baney@ohio.edu or phone 59-31567)
Any time through email
Email address: ostermann@eecs.ohiou.edu
WWW class information: http://ace.cs.ohiou.edu/~osterman/class/cs644.html

Class Objectives:
This class is designed to serve the following several purposes:

1. Teach you to think like a scholar
2. Teach you to experiment like a scientist
3. Teach you to program like an expert

Of course, these are rather lofty goals. What you get out of this class will be in direct proportion to what you put into it. This is a graduate research seminar, I am not the teacher, I’m simply the person choosing the topics and helping direct the discussions.

Class Organization:
The class will be organized as follows:

1. For each class period, there will be a reading assignment consisting of one or two papers/references to recent topics in networking.
2. For each paper, one student will be “the expert” and will lead the discussion of that topic the following class.
3. For each lecture, each student must bring to class a single-page mini-report containing:
   • your name
   • your picture
   • a short list of errors/problems in the reading (if any)
   • a short list of questions that you have about the reading topic
   • a short list of suggested followup references
4. We will also have one or two group programming projects.
Exams:
Assuming that all students come prepared for each class, participate in all discussions, and work hard on the projects, we won’t have any exams.

Class Topics:
This quarter, I’m planning to look into the following topics:

1. Email Infrastructure and needed improvements
2. Internet Privacy
3. Advanced TCP
4. Data Center Scaling
5. Delay Tolerant Networking (DTN)

If/when we exhaust that list of topics, we’ll choose new topics in accordance with the interests of the class.

Grading:
Class grades will be assigned based on your performance in the following areas:

1. Participation in discussions
2. Class presentations
3. Programming projects

Grading will be roughly as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Requirement</th>
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<tbody>
<tr>
<td>A</td>
<td>Excellent job being the expert, asks questions in every class, has interesting observations in some classes</td>
</tr>
<tr>
<td>B</td>
<td>Good job being the expert, sometimes asks questions, sometimes gives answers</td>
</tr>
<tr>
<td>C</td>
<td>OK job being the expert, seldom asks questions, seldom has input into the discussion</td>
</tr>
<tr>
<td>F</td>
<td>rarely speaks during the class</td>
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Email:
I will often send important announcements, project updates and corrections via electronic mail. To simplify mail list management, all email will go through your oak email accounts. If you don’t regularly use that machine, I recommend that you have your email forwarded from there to a department machine. Please get into the habit of checking your email regularly. An archive of all class email for the quarter can be found at URL

http://korgano.eecs.ohiou.edu/pipermail/644/