**Voice over IP**
ITS 441 A01 (#04326), A02 (#04327), and A04 (#08011), Fall 2010/2011

**Class Meetings:**
10-11 MWTh (RTVC 027), Labs 1-3 Tue (A04), 3-5 Tue (A01), or 3-5 Thu (A02)

**Final Exam Time:**
Thursday, November 18, at 8:00 a.m. (2 hours)

**Textbook:**
<none>

**Class Web Sites:**
http://www.its.ohiou.edu/kruse/its441
Blackboard course site (www.ohio.edu/blackboard)

Dr. Hans Kruse, N292 Lindley Hall
Phone: 593-4891 or 740-205-6631, E-Mail: kruse@ohiou.edu
Office Hours: See http://www.its.ohiou.edu/kruse

---

**This syllabus outlines the structure and rules for this class. For specific information on the content of the class, assignments, and assignment dates, please consult the web site.**

---

**Exams**
This class contains two exams – a 1-hour midterm, and a 2-hour final.

**Readings**
We don’t have a textbook. Readings are posted on the web site, and are accessed electronically.

**E-Mail and Class Web Site**
I will frequently send important announcements, assignment updates and corrections via electronic mail. To simplify mail list management, all email will go through your OU email account. Please get into the habit of checking the “official” email regularly, even if you use a different e-mail account for non-class use.

All content information, assignments, class notes, etc., will be posted online; most of it on the open class web site, some on Blackboard. Check both web sites often for new resources.

**Learning Outcomes**
At the end of this class you will have a working knowledge of voice networks built on top of IP technology.

Specifically, you will review the general structure of voice switching and transport environment. We will identify the most common features required in various voice applications. We will compare in detail how these key functions can be translated from the circuit switched voice network to one based on IP transport.

You will examine the SIP, H.323, MGCP, RTP, RTCP protocols. In the lab you will inspect the operation of these protocols at the packet level.

You will evaluated the infrastructure that is evolving for VoIP services, and assess the changes in services and management practices that will accompany this evolution.
**Homework Assignments**

You will receive small assignments related to the readings from time to time; those will always be posted on the main web site, with due dates. Assignments turned in one day late will receive 50% credit, assignments that are two days late will receive 25% credit. Assignments that are more than two days late will not be accepted.

**Labs**

You will conduct up to 8 labs during the quarter (including one "virtual" lab you conduct at home). All but the first lab will be carried out in the ITS Applications lab. Labs are conducted in groups of 3-4 students. However, every student prepares a separate lab write-up for which they take sole responsibility. Lab reports are due on the Monday following the day the lab was conducted. Labs turned in one or two days late will receive 50% credit, labs that are three days late will receive 25% credit. Labs that are four or more days late will receive no credit.

**Attendance Requirements**

I expect students to attend each class and will hold them responsible for all material discussed. Although the notes from the classes will be on-line, we will often discuss issues and details that will not be found in the outside reading. It will be your responsibility to locate any information that you miss by being absent.

**Grading Basis (Total available points: up to 385)**

<table>
<thead>
<tr>
<th></th>
<th>Midterm</th>
<th>Labs</th>
<th>Final</th>
<th>Other Homework</th>
<th>Other Homework</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>75 points</td>
<td>up to 160 points</td>
<td>100 points</td>
<td>Up to 50 points</td>
<td></td>
</tr>
</tbody>
</table>

**Grade Determination**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Minimum points required</th>
</tr>
</thead>
<tbody>
<tr>
<td>(+)</td>
<td>93% 90%</td>
</tr>
<tr>
<td>(-)</td>
<td>87% 83% 80%</td>
</tr>
<tr>
<td>C</td>
<td>77% 73% 70%</td>
</tr>
<tr>
<td>D</td>
<td>67% 63% 60%</td>
</tr>
</tbody>
</table>

Any score below 60% will result in a failing grade (F). I reserve the right to “curve” these cutoffs down at the end of the course.

**Academic Misconduct**

The published policies of Ohio University prohibit any form of academic misconduct and dishonesty, including cheating on examinations, submitting work of others as your own, or plagiarism in any form. These policies fully apply to this course, and it is assumed that every student is familiar with them. Violations of the academic misconduct prohibitions will result in a reduction of the student’s grade and/or other penalties as indicated in the policies, including loss of credit for an assignment or the course, or expulsion from the University.

If you have any doubts about the definition of plagiarism, or the proper way to cite and/or quote material, review the library tutorial on this subject at http://www.library.ohiou.edu/bolt/mod6/index.html.

**Storage of Records and Materials**

All materials turned in to me as part of the assignments in this course will be returned to you once they are graded. Any records (grades, attendance, etc.) and materials which have not been picked up will be discarded after one year.