IT2400: Introduction to Networking

This is an introductory networking course for students in Computer Information Systems or in Computer and Information Technologies programs, or students having general interest in computer networking. At the end of the course, students will be prepared to take the CompTIA Network+ exam if they wish to pursue certification.

This course will typically have a weekly homework assignment, though a few of the labs will be done in class or as a group assignment. Each lab assignment will be due the week it is assigned on Sunday at 11:59pm, unless otherwise noted in Canvas. Canvas will be used for student lab submissions.

Prerequisites: IT1100 should be taken prior to enrolling in this course (and completed with a passing grade)

Course fee: The fee for this course is $25.00, used to assist in maintaining the CIT infrastructure.

Sections:

1. MWF 9am-9:50am in Smith 107
   Final Exam Tue May 1 @ 9am
2. TTh 10:30am-11:45pm in Smith 107
   Final Exam Mon Apr 30 @ 9am

Instructor:

- Jay Sneddon
  - email: jay dot sneddon at dixie dot edu
  - Office: Burns 234
  - Office hours: MWF 10am-10:50am, TR 12pm-12:50pm

Objectives

At the end of the course, students will:

- Be prepared to pass the CompTIA Network+ exam.
- Be able to describe how the Internet works.
- Be able to design, connect and implement a computer network.
- Be able to define and use several different Internet protocols.
- Be able to describe the TCP/IP and OSI protocol stacks and what happens at each layer.
- Be able to use basic networking tools to troubleshoot basic network problems.

Resources

Canvas

Canvas will have the authoritative schedule for labs, assignments, and exams. Check Canvas regularly for updates, announcements and assignments.

Texts

The readings will come from the course textbook, Managing and Troubleshooting Networks, 4th Edition by Mike Meyers, ISBN 978-0-07-184824-4. Some supplemental online resources may be used.

Computer Resources

You may use the computers in the Smith. There will also be lab assistants in these labs. You will also have access to virtual machines to complete most of the networking tasks.

Assignments and Exams
Reading

The student is responsible for reading the material in the textbook. A reading schedule is provided with the class schedule on the course website. The student is expected to read the material before the class in which it is discussed. The book also includes material beyond what we will discuss in lecture, which you are encouraged to study on your own. Feel free to bring questions from the reading to lectures or to office hours.

Assignments

Expect a weekly assignment. Working with other students (but not cheating) is encouraged; to dialogue the process with other students helps master the concepts. Practical exam tasks will be based on previous assignments, so understanding the homework is important.

Exams

This course will have approximately four exams and one comprehensive final exam, along with a weekly quiz throughout the semester. Expect a few practical exams, where task mastery is measured.

Students may opt out of the final exam if they pass the CompTIA Network+ exam before the final exam date. A valid certificate must be shown the instructor.

The final exam includes a practical project, to be performed during the final exam time.

Grading

Assignments/Labs, quizzes/tests, the final project and the comprehensive final each contribute to your point total.

The breakdown for the above items is as follows:

- Assignments/Labs = 25%
- Quizzes = 20%
- Exams = 25%
- Comprehensive Final Exam = 30%

Here is the grading scale:

<table>
<thead>
<tr>
<th>Score</th>
<th>Grade</th>
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<tbody>
<tr>
<td>&gt;= 94</td>
<td>A</td>
</tr>
<tr>
<td>&gt;= 90</td>
<td>A-</td>
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<tr>
<td>&gt;= 87</td>
<td>B+</td>
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<tr>
<td>&gt;= 84</td>
<td>B</td>
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<tr>
<td>&gt;= 80</td>
<td>B-</td>
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<tr>
<td>&lt;  64</td>
<td>F</td>
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</tbody>
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Test out

Students may test out of this course if they pass the CompTIA Network+ certification before the third week of the semester. A valid certificate must be shown the instructor.

Course Policies

Absences

Students are responsible for material covered and announcements made in class. School-related absences may be made up only if prior arrangements are made. The class schedule is approximate. The instructor reserves the right to modify the schedule according to class needs. Changes will be announced in class and posted to the website. Exams and quizzes cannot be made up unless arrangements are made prior to the scheduled time.
Time

Courses should require about 2 hours of outside work per lecture hour of class. This class will require about 6 hours of work per week on the part of the student to achieve a passing or higher grade. Be sure to evaluate your schedule before committing to this course.

Late work

Assignments are due on the date specified in the schedule. Late assignments will be docked 20%, unless previously arranged with the instructor. The instructor has the right to reject any late assignments. Some graded assignments are in class activities, which cannot be made up.

Cheating and Collaboration

Limited collaboration with other students in the course is permitted and encouraged. Students may seek help learning concepts and developing programming skills from whatever sources they have available, and are encouraged to do so. Collaboration on assignments, however, must be confined to course instructors, lab assistants, and other students in the course. See the section on cheating.

Cheating will not be tolerated, and will result in a failing grade for the students involved as well as possible disciplinary action from the college. Cheating includes, but is not limited to, turning in homework assignments that are not the student’s own work. It is okay to seek help from others and from reference materials, but only if you learn the material. As a general rule, if you cannot delete your assignment, start over, and re-create it successfully without further help, then your homework is not considered your own work.

You are encouraged to work in groups while studying for tests, discussing class lectures, and helping each other identify errors in your homework solutions. If you are unsure if collaboration is appropriate, contact the instructor. Also, note exactly what you did. If your actions are determined to be inappropriate, the response will be much more favorable if you are honest and complete in your disclosure.

Where collaboration is permitted, each student must still create and type in his/her own solution. Any kind of copying and pasting is not okay. If you need help understanding concepts, get it from the instructor or fellow classmates, but never copy another’s written work, either electronically or visually. It is a good idea to wait at least 30 minutes after any discussion to start your independent write-up. This will help you commit what you have learned to long-term memory as well as help to avoid crossing the line to cheating.

College Policies

Additional college policies, calendars, and statements are available online at https://academics.dixie.edu/syllabus/.