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 TBA
2. TTh 1pm-2:15pm in Smith 108
   Final Exam TBA

Instructor: Jay Sneddon

- Email: jay.sneddon at dixie dot edu
- Phone: 435-652-7887 (note: email preferred)
- Office: Burns 234
- Office Hours: M-F 11am-11:50am or by appointment

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.
**Course Website**

This course has an accompanying website. You are responsible for announcements, the schedule, and other resources posted on the website. Assignments and grades will be managed using Moodle, which requires a valid CIT username and password. If you do not already have a CIT login, visit [http://cit.cs.dixie.edu/facilities/passwd.php](http://cit.cs.dixie.edu/facilities/passwd.php) to create one, or ask a lab assistant to help you sign up for one. The course website is accessible at [http://cit.cs.dixie.edu/courses/](http://cit.cs.dixie.edu/courses/). Grading and assignments are managed at [https://moodle.cs.dixie.edu](https://moodle.cs.dixie.edu).

**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**

**Exams**

This course will have approximately four exams and one comprehensive final exam, along with quizzes sprinkled throughout the semester. 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.

There will be a final project due the last week before finals, which represents a practical evaluation.

**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 = 35%
- Quizzes/Exams = 30%
- Final project = 10%
- Comprehensive Final Exam = 25%

Here is the grading scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>&gt;= 94</td>
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<tr>
<td>A-</td>
<td>&gt;= 90</td>
</tr>
<tr>
<td>B+</td>
<td>&gt;= 87</td>
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<tr>
<td>B</td>
<td>&gt;= 84</td>
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<tr>
<td>B-</td>
<td>&gt;= 80</td>
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<tr>
<td>C+</td>
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<tr>
<td>D</td>
<td>&gt;= 64</td>
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<tr>
<td>F</td>
<td>&lt; 64</td>
</tr>
</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 presented 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 45 hours of work per credit hour of class. This class will require about 135 hours of work on the part of the student to achieve a passing grade, which is approximately 9 hours per week. If you do not have the time to spend on this course, you should probably rethink your schedule.

**Late work**

Late work is not accepted. You are expected to turn things in by the date they are due. Exceptions must be discussed with the instructor. Computer failure does not qualify as an excuse for late work.

It is your responsibility to see that assignments/projects are turned in and on time. If you come to me and say, “I turned in that assignment”, yet I have no record of it, you will receive a 0. The burden of proof is on you to prove that you turned in something at a given time. We are using an electronic submission system which records when an item is submitted.

Finally, no points can be contested after a test which covers that assigned material has been given. So for example, if you come to me at the end of the semester and say “Oh, but I turned in that assignment the second week of the semester”. If I don’t have a record of it, and we have already tested on it, you will not get the points.

**Cheating and Collaboration**

Limited collaboration with other students in the course is permitted. 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. Students are free to discuss strategies for solving programming assignments with each other, but this must not extend to the level of programming code. Each student must code his/her own solution to each assignment. 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, discussing algorithms for homework solutions, 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 code or written work, either electronically or visually. The line between collaborating and cheating is generally one of language: talking about solutions in English or other natural languages is usually okay, while discussions that take place in programming languages are usually not okay. 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 [http://www.dixie.edu/reg/syllabus/](http://www.dixie.edu/reg/syllabus/).