IT 3100: Systems Design and Administration I

Fall 2015 Syllabus

Course Description

Required of Computer and Information Technology majors and students with an emphasis in Information Technology. Covers system administration topics for managing Internet facing services, including DNS, SMTP, and HTTP. Students will install, configure, and test services in a server environment.

Prerequisites

CS 1400 and IT 2400 both with a C- or better

Course fees

Course fee: $25, used to assist in maintaining CIT infrastructure.

Disability Statement

If you suspect or are aware that you have a disability that may affect your success in the course you are strongly encouraged to contact the Disability Resource Center (DRC) located in the North Plaza Building. The disability will be evaluated and eligible students will receive assistance in obtaining reasonable accommodations. Phone # 435-652-7516.

Sections

One section:

1. MWF 11:00-11:50 am in Hazy 204
   Final exam December 16 at 11:00am - 1:00pm

Instructor

Instructor: Curtis Larsen
Email: larsen@dixie.edu
Phone: 435-652-7972
Office: Hazy 323
Office Hours: MW: 1:00-2:30 pm (@Burns 233), TR: 10:30-11:30 am (@Burns 233) or by appointment. (Spring 2016)

Objectives

The student will be able to discuss the principles of:

- server hardware and software selection,
- server configuration,
- user administration,
- filesystems,
- security,
- DNS, web, email and database services,
- other network services, and
- operating system installation and configuration.

The student will be able to demonstrate practical skills in:

- operating system installation,
- user and filesystem administration,
- configuration of DNS, web, email and database services,
configuration of DNS, web, email and database services,
securing network and local services, and
shell scripting.

Resources

Texts

There is an optional reference for this course:


The book is optional as a reference.

Computer Labs

You may use the computers in Udvar-Hazy 151. There will also be lab assistants in this lab. Not all assistants will be qualified to assist with this course. The CIT virtual machine farm is also available for use in this course.

Course Web Site

This course has an accompanying website. You are responsible for announcements, the schedule, and other resources posted on the website. Grades will be managed on the website, which requires a valid CIT username and password. If you do not already have a CIT login, visit http://cit.dixie.edu/facilities/passwd.php to create one, or ask a lab assistant to help you sign up for one.

Assignments and Exams

Reading

The student is responsible for finding and reading valuable information sources for this course. There are many helps available online.

Assignments

There will be approximately 20 projects, with multiple projects due almost every week. The assignments are designed to promote the course objectives listed above.

Assignments are due before 11:55 pm on the due date.

All assignment submissions will be weighted equally.

Quizzes

This course will have about 15 quizzes in the semester. Quizzes are designed to check understanding of the course materials. Quizzes may be short in-class activities, or out-of-class activities.

All quizzes will be weighted equally.

Exams

There will be approximately 5 practical exams scheduled near the end of the semester. The practical exams will require students to complete hands-on work on computer systems, relating to homework assignments. The students will be expected to demonstrate the practical skills listed in the course objectives. The practical exams will be conducted in a time limited setting.

There will be a final exam as scheduled during finals week. The final will be a comprehensive written exam. The students will be expected to demonstrate understanding of the principles listed in the course objectives.

Grading

Assignments will count for 25% of your point total. Quizzes will count for 5% of your point total. The final exam will count for 10% of your point total. The practical exams will count for 60% of your point total.

Letter grades are assigned based on the percentage of possible points attained, according to the following chart:
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**Course Policies**

**Attendance**

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 Commitment**

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 Policy**

Assignments are due on the dates listed in the course schedule. Handing in or passing off assignments after the due date, but before the practical exam related to the assignments will result in a 10% penalty. Handing in or passing of assignments after the practical exam related to the assignments will result in a 20% penalty. No assignments will be accepted after the last day of class.

**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**

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://new.dixie.edu/reg/syllabus/.