CSCI 325 – Web Server Administration

Spring 2016 Section 001

Instructor: Jason Patalon

                    jpatalon@edinboro.edu

Class Info: Thursday 6:00 – 8:30 pm

                    Hamilton Hall LL

Office Hours: Thursday 5:00 – 6:00 pm

                    Hamilton Hall LL

Course Website

D2L: Lecture notes, readings, announcements, and grades. Log on at my.edinboro.edu

jpatalon.cs.edinboro.edu – Lecture notes, readings, announcements, and class files.

Course Description

This course introduces students to the theory and practice of installing, configuring and maintaining network services required to support a web site. Students will install, configure, optimize and perform restorable system backups for various software services on multiple operating systems. Prerequisites CSCI 230 and CSCI 280.

Course Objectives

1. Install, configure, deploy and maintain web (HTTP) servers.
2. Install, configure, deploy and maintain database servers.
3. Maintain effective system backups.
4. Understand the basic theory of operation of web site related services.
5. Establish and maintain secure systems.

Course Materials

Required textbook: Linux Administration: A Beginners Guide, Sixth Edition, 2012
Recommended: 8GB or larger USB flash drive.

Attendance

Regular and punctual attendance is expected. This course will follow attendance guidelines set forth in the Class Attendance Policy and Procedure section of the university catalog. Any in-class exercises must be done in class and are not available for make-up.

Technology Use

The use of cell phones or other communication devices during class is disruptive to the learning environment and prohibited from use during class. If there is an emergency which requires immediate attention, students must leave the classroom to take any calls.

Title IX Reporting Requirements

Edinboro University and its faculty are committed to assuring a safe and productive educational environment for all students. In order to meet this commitment and to comply with Title IX of the Education Amendments of 1972 and guidance from the Office for Civil Rights, the University requires faculty members to report incidents of sexual violence shared by students to the University's Title IX Coordinator. Information regarding the reporting of sexual violence and the resources that are available to victims of sexual violence is set forth at: http://www.edinboro.edu/directory/offices-services/social-equity/sex-discrimination-sexual-misconduct.

Grading Policy

Grades will be given according to the following breakdown:

Description	Percentage	Total Points
Midterm Exam	15%	300
Final Exam	15%	300
In Class Exercises	20%	400
Assignments	25%	500
System Checks	25%	500
Total Points		2000

Grading Scale

Percentage	Grade	Percentage	Grade
90.0-100.0	A	70.0-76.9	C
87.0-89.9	B+	67.0-69.9	D+
80.0-86.9	B	60.0-66.9	D
77.0-79.9	C+	0-59.9	F

Course Policies

- Attendance will be taken randomly during class, and may be taken multiple times during the same class.
- Disruptive behaviors, including but not limited to excessive talking, arriving late, sleeping, or using unauthorized electronic devices during class is not permitted. Repeat offenders may be administratively withdrawn according to university policy.
- Do your own work! There is no tolerance for cheating or plagiarism. Students engaged in dishonest academic activity may receive a lower or failing grade, or other academic sanctions including suspension or expulsion.
- Turn in all homework on time. Late homework assignment submissions are not accepted. Homework assignments are due immediately prior to the start of the class following when they are assigned.
- All exams must be taken during the scheduled class time, unless prior approval is given from the instructor. In the case of a different exam time, the exam given may be different from the exam given in class.
- Inform the instructor of any special needs or arrangements, including university sport or disability requirements, at the beginning of the semester! If you require accommodations for test-taking from the Office for Students with Disabilities (OSD), please provide the appropriate accommodation documentation during the first week of the semester. You must also provide a test accommodation form <u>for each test</u> in which the accommodation will be required. This documentation should be provided to me at least <u>one week</u> prior to the scheduled exam.

Tentative Course Schedule

*Exact schedule may change (updated Feb 13 2016)

Week 1 1/21/2016	Syllabus Servers Networks Storage Protocols Services Applications		Week 8 3/10/2016	Spring Break - No Class
Week 2 1/28/2016	Server Types & Components Fault Tolerance Network Connections & Components		Week 9 3/17/2016	Web server Installation Apache Config Web page configuration
Week 3 2/4/2016	IP Addressing & Subnetting Storage Types Disaster Planning Environments High Availability & Clustering Backup Systems		Week 10 3/24/2016	Web programming environment HTML Forms PHP MariaDB
			Week 11 3/31/2016	E-Mail Services SMTP POP Postfix Dovecot SquirrelMail
Week 4 2/11/2016	Server Installation Initial configuration		Week 12 4/7/2016	File Transfer Services FTP SCP
Week 5 2/18/2016	User management File permissions Account properties		Week 13 4/14/2016	Security HTTP authentication HTTPS/SSL
Week 6 2/25/2016	Domain Name Services Bind SSH		Week 14 4/21/2016	Firewall SELinux
Week 7 3/3/2016	Midterm Exam Apache Config User webpages & permissions Virtual directory Virtual hosts		Week 15 4/28/2016	Monitoring Performance Tuning
			Week 16 5/5/2016	Final Exam Hamilton Hall LL 6:00-8:00PM