

CSCI 325 – Web Server Administration

Spring 2018 - Section 001

Instructor: Jason Patalon
Ross Hall 145
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Class Info: Thursday's 6:00 – 8:30 pm
Ross Hall 136

Office Hours: Thursday 5:00-ish – 6:00 pm
Ross Hall 136

Course Websites

D2L: Lecture notes, readings, announcements, class files, assignments, 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 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, Seventh Edition, 2016
ISBN: 978-0071845366

Recommended Textbook: The Practice of System and Network Administration, Third Edition, 2016
ISBN: 978-0321919168

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.

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>.

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.

Grading Policy

Grades will be given according to the following breakdown:

<u>Description</u>	<u>Percentage</u>	<u>Total Points</u>
Attendance	6%	75
Midterm Exam	25%	300
Final Exam	25%	300
Assignments	44%	525
Total Points		1200

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 counterproductive to the learning environment and 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 at the end of the day (11:59:59PM Eastern Time) of the day specified.
- 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 for each test in which the accommodation will be required. This documentation should be provided to me at least one week prior to the scheduled exam.
- **DISCLAIMER!** Any information in this document is subject to change at any time without notice.

Tentative Course Schedule

Exact schedule may change.

Week 1 1/25/2018	Syllabus Servers Networks Storage Protocols Services Applications Assignment 1 Book: Introduction, Chapter 1
Week 2 2/1/2018	Server Types & Components Fault Tolerance Network Connections & Components TCP, IP Addressing, Subnetting Storage Types Assignment 2 Book: Chapters 11-12
Week 3 2/8/2018	Disaster Planning Environments High Availability & Clustering Backup Systems Assignment 3 Book: Chapters 9-10
Week 4 2/15/2018	Server Installation Initial configuration Assignment 4 Book: Chapters 2-4
Week 5 2/22/2018	User management File permissions & management Account properties SSH, VNC, RDP, Booting Assignment 5 Book: Chapters 5-6
Week 6 3/1/2018	Domain Name Services Bind Assignment 6 Book: Chapter 16
Week 7 3/8/2018	Midterm Exam Web servers User webpages & permissions Virtual directory Virtual hosts Assignment 7 Book: Chapter 18

Week 8 3/15/2018	Spring Break - No Class
Week 9 3/22/2018	Web server Installation Apache Config Web page configuration Web programming environment Assignment 7 Book: Chapter 19
Week 10 3/29/2018	HTML Forms PHP MariaDB Assignments 8 Book: Chapters 20
Week 11 4/5/2018	E-Mail Services SMTP POP Postfix Dovecot SquirrelMail, Roundcube Assignment 9 Book: Chapter 17
Week 12 4/12/2018	File Transfer Services FTP, SCP SMB/CIFS Assignment 10 Book: Chapters 7-8
Week 13 4/19/2018	Security HTTP authentication Assignment 11 Book: Chapter 13
Week 14 4/26/2018	Firewall HTTPS/SSL Assignment 12 Book: Chapter 14
Week 15 5/3/2018	Monitoring Performance Tuning Assignment 13 Lab Time Book: Chapter 15
Week 16 5/10/2018	Final Exam Hamilton Hall LL 6:00-8:00PM

Revised March 10, 2018