



FLORIDA STATE UNIVERSITY

COLLEGE OF COMMUNICATION & INFORMATION

School of Information

LIS 5489 NETWORK ADMINISTRATION

SECTION(S)

TERM 20XX, COURSE MEETING DAY/TIME, COURSE MEETING LOCATION

MODE OF INSTRUCTION:

Instructor:

Email:

Office:

Phone:

Course Location/Website:

Office Hours (in office, online or via phone):

Teaching Assistant:

Email:

COURSE PREREQUISITES:

LIS 5484 Introduction to Data Networks for Information Professionals

COURSE DESCRIPTION:

This course focuses on the planning, design, configuration, operation, and management of computer networks containing data communication devices, servers, workstations, and networked applications and support systems. It introduces students to administrative techniques inherent to basic operating systems, and also to enterprise management systems required by larger organizations. Students examine and discuss issues of scalability, performance management, and integration of internal resources with external resources such as cloud-based systems.

COURSE OBJECTIVES:

After successful completion of this course, students will be able to:

1. Identify key differences between very small ad hoc networks, small-to-medium hand managed networks, enterprise networks, and "clouds"
2. Define networking services provided by a variety of operating systems, and perform basic operations on them
3. Demonstrate key skills in managing networking on Windows and UNIX/LINUX workstations and servers:
 - *Structure and manage Microsoft Active Directory (AD), DNS, and DHCP*
 - *Manage Users and Groups locally and in Active Directory*
 - *Establish servers and workstations in Active Directory Domains*
 - *Manage users in Microsoft Exchange*
 - *Design and manage File and Print sharing services in Microsoft Windows and in UNIX/LINUX*
4. Use Group Policies to manage users and workstations, and to manage software
5. Identify strengths and weaknesses in various network architectures, and identify gaps
6. Analyze the role of networked applications such as databases, messaging, and voice, and how they integrate into the enterprise network environment
7. Define cloud computing, virtualization and virtualization management systems
8. Read, create, modify, and maintain network diagrams and documentation
9. Explain how issues like scalability, time and resource management, ethics, and user information needs are critical to the effective practice of network and system administration.
10. Demonstrate basic network, server, and workstation troubleshooting functions

- 11. Plan and implement information security policies and measures based on various organizations' needs and requirements
- 12. Plan, prepare, and operate various enterprise-grade network management systems such as virus protection, intrusion detection, and workstation, server, and work
- 13. performance- and fault-monitoring systems

COURSE MATERIALS: Required

Textbooks:

Mastering Windows Server 2012 R2 (2012) by Mark Minasi, Kevin Greene, Christian

Booth, Robert Butler, John McCabe, Robert Panek, Michael Rice, Stefan Roth; ISBN-10: 1118289420

The Practice of System and Network Administration, Second Edition (2007) by

Thomas Limoncelli, Christina Hogan, Strata Chalup; ISBN-10: 0321492668

In addition to the textbook material, references to additional reading material such as articles, whitepapers, case studies, etc. will be posted on the course site.

COURSE ASSIGNMENTS AND EVALUATION:

- Assignment
- Assignment
- Assignment
- Assignment

[Note: A brief but clear description of each type of assignment is required]

GRADE CALCULATION:

The cumulative grade consists of the following graded items:

Concepts and Practice Quizzes	25%
Lab Exercises and Participation	25%
Team System Build-out and Presentation	25%
Team Design Project and Presentation	25%
TOTAL	100%

GRADING SCALE:

A	93 – 100	A-	89 – 92		
B+	85 – 88	B	81 – 84	B-	77 – 80
C+	73 – 76	C	69 – 72	C-	65 – 68
D+	61 – 64	D	57 – 60	D-	53 – 56
F	0 – 52				

COURSE SCHEDULE:

WEEK	TOPICS TO BE COVERED
1	<ul style="list-style-type: none">• Role of network and systems administration in organizations of various sizes;• Telecommunications review
2	<ul style="list-style-type: none">• Standalone Servers: Local Users and Groups;• Share Folders, NTFS Permissions, Workgroups (workstation);• Access Management Processes
3	<ul style="list-style-type: none">• Standalone Servers: Local Users and GroupsShare Folders, NTFS Permissions, Workgroups (servers)
4	<ul style="list-style-type: none">• Domain Controllers: Microsoft Domains, Active Directory• Installing Active Directory Forests and Domains• Configuration Management Processes
5	<ul style="list-style-type: none">• IP Address Management, DHCP, and DNS• Telecommunications Processes
6	<ul style="list-style-type: none">• Member Servers: Joining Workstations and Servers to Domains• Active Directory Users and Computers• Desktop Support Processes
7	<ul style="list-style-type: none">• Remote Server Administration• Performance Management Tools• Virtualization and Virtualization• Management Server Management Processes
8	<ul style="list-style-type: none">• Group Policies• Login Scripts• Software Distribution
9	<ul style="list-style-type: none">• Enterprise E-mail and Messaging• Enterprise SQL Systems• Integrated SQL Systems
10	<ul style="list-style-type: none">• Workstation Management Systems• Server Management• Systems Patch• Management Systems• Enterprise Anti-virus• Systems Information• Security Processes

11	<ul style="list-style-type: none">• Team Projects Kickoff Meeting• Team Implementation Sessions
12	<ul style="list-style-type: none">• Configuration Management Meeting• Team Implementation Sessions
13	<ul style="list-style-type: none">• Configuration Management Meeting• Team Implementation Sessions
14	<ul style="list-style-type: none">• Team Design Project Presentations
15	<ul style="list-style-type: none">• Team System Buildout Presentations

COPYRIGHT STATEMENT:

Some of the materials in this course are possibly copyrighted. They are intended for use only by students registered and enrolled in this course and only for instructional activities associated with, and for the duration of, the course. They may not be retained in another medium or disseminated further. They are provided in compliance with the provisions of the *Technology, Education, And Copyright Harmonization* (TEACH) Act (refer to the 3/7/2001 TEACH Act at www.copyright.gov/legislation/archive/).

SEXUAL HARRASSMENT POLICY:

It is the policy of the University that its employees and students neither commit nor condone sexual harassment in any form. http://registrar.fsu.edu/bulletin/grad/info/university_notices.htm

SCHOOL OF INFORMATION HARDWARE AND SOFTWARE REQUIREMENTS:

A list of all hardware and software requirements for students participating in the School of Information courses can be found at the following location: <http://ischool.cci.fsu.edu/academics/online/requirements/>

STUDENT ELIGIBILITY FOR AN INCOMPLETE GRADE:

Incomplete (“I”) grades will not be assigned, except in the case of exceptional unforeseen circumstances that occur within the last three weeks of the semester and your work has otherwise been satisfactory (C average).

University Attendance Policy:

Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

Academic Honor Policy:

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to ". . . be honest and truthful and . . . [to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at <http://fda.fsu.edu/Academics/Academic-Honor-Policy>.)

Americans With Disabilities Act:

Students with disabilities needing academic accommodation should:

- (1) register with and provide documentation to the Student Disability Resource Center; and
- (2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class.

This syllabus and other class materials are available in alternative format upon request.

For more information about services available to FSU students with disabilities, contact the:

Student Disability Resource Center
874 Traditions Way
108 Student Services Building
Florida State University
Tallahassee, FL 32306-4167
(850) 644-9566 (voice)
(850) 644-8504 (TDD)
sdrc@admin.fsu.edu
<http://www.disabilitycenter.fsu.edu/>

Free Tutoring from FSU

On-campus tutoring and writing assistance is available for many courses at Florida State University. For more information, visit the Academic Center for Excellence (ACE) Tutoring Services' comprehensive list of on-campus tutoring options - see <http://ace.fsu.edu/tutoring> or contact tutor@fsu.edu. High-quality tutoring is available by appointment and on a walk-in basis. These services are offered by tutors trained to encourage the highest level of individual academic success while upholding personal academic integrity.

Syllabus Change Policy

"Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice."