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Syllabi   Course Syllabi

Fall 9-1-2005

CRT 210T.01: Advanced Operating Systems

Thomas P. Gallagher
The University Of Montana, thomas.gallagher@umontana.edu

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CRT210T Advanced Operating Systems
Term: Fall, 2005
Credits: 3
Prerequisites: CRT112T Operating Systems and CRT151T Networking Basics

Meetings:
>   Classroom: TR 9:10-10:00, Room: HB04
>   Lab: W 2:10-4:00 or R 3:10-5:00, Room: HB04
>   Final Examination: Thursday, 12/15, 10:10-12:00

Faculty Contact:
>   Tom Gallagher
>   Phone: 243.7814
>   E-mail: thomas.gallagher@umontana.edu
>   Office Hours: MTWRF 10:00-11:00

Course Description:
Provides an in-depth study of a secure, multi-user, client-based network operating system. Topics include installation, administration of resources, performance, network services, and security.

Required Materials:
>   *Microsoft Windows XP Professional, Academic Learning Series*, Microsoft Press, 2002 with Lab Book Bundle
>
>   *Microsoft Windows XP Professional Software* (Evaluation version from Text Book Bundle or Full version available free of charge through the Campus MSDNAA)
>
>   Removable Hard Drive System:
>   IDE Hard Drive (recommend 5GB or larger)
>   *StarTech.Com* Drive Drawer Caddy available through bookstore
>
>   Floppy Diskette

Course Objectives:
Upon completion of this course:

1. Students will install a secure, multi-user, client-based network operating system.

2. Students will implement and conduct administration of operating system resources.

3. Students will implement, manage, and troubleshoot hardware devices and drivers.

4. Students will monitor and optimize system performance and reliability.

5. Students will configure and troubleshoot the operating system desktop environment.

6. Students will implement, manage, and troubleshoot network protocols and services.

7. Students will implement, monitor, and troubleshoot operating system security.

Course Structure:
The course will consist of two 1-hour classroom sessions and one 2-hour lab block. The lab block is intended to provide students with an application based experience in operating systems.

Exams and Assignments:
All exams are to be taken on the assigned date and time. Assignments are due at the start of class on the assigned date and time. "Makeup" exams and assignments will be accepted at the instructor's discretion and allowed only in extraordinary situations.

Lab Attendance:
Regular classroom attendance is expected. Lab attendance is mandatory. Students more than 10 minutes late for labs will not be given credit for attendance. All students must attend the lab section in which they have registered.

Online Component:
Various components of the course will be delivered using the UM Online Learning Environment. It is the responsibility of the student to access and familiarize herself/himself with the software component used by UM Online. Training is available through http://umonline.umt.edu

Accommodations for Disabilities:
Eligible students with disabilities will receive appropriate accommodations in this course when requested in a timely manner. Please speak with me after class or in my office. Please be prepared to provide a letter from your DSS Coordinator.

Evaluation Procedures:
Grades will be assessed as follows:

Assessment:		Grading Scale:	
Written Assignments and Lab Completion	10%	90-100%	A
Written Exams	30%	80-89%	B
Application/Simulation Exams	30%	75-79%	C
Comprehensive Final Exam	30%	70-74%	D

Course Outline:
1. Introduction to network operating systems.
2. Installation
3. Authentication
4. Networking protocols, DNS, and directory services
5. ACLS and Permissions
6. Sharing and managing printers
7. Sharing folders
8. Hardware management and the desktop environment
9. Auditing, security settings, and Internet options
10. Storage management
11. Monitoring system performance
12. Remote access and Internet connections
13. The boot process
14. Operating system deployment