

Fall 9-2002

## IS 495.01: Advanced Network Administration

Ken Burrington

*University of Montana, Missoula*

Let us know how access to this document benefits you.

Follow this and additional works at: <https://scholarworks.umt.edu/syllabi>

---

### Recommended Citation

Burrington, Ken, "IS 495.01: Advanced Network Administration" (2002). *Syllabi*. 4614.  
<https://scholarworks.umt.edu/syllabi/4614>

This Syllabus is brought to you for free and open access by the Course Syllabi at ScholarWorks at University of Montana. It has been accepted for inclusion in Syllabi by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact [scholarworks@mso.umt.edu](mailto:scholarworks@mso.umt.edu).

# COURSE SYLLABUS

## IS 495

### Advanced Network Administration

**Instructor:**

Ken Burrington, GBB 336, 243-6620, [ken.burrington@business.umt.edu](mailto:ken.burrington@business.umt.edu)

**Meeting Time:** Tuesday & Thursday, 12:40 to 2:00 p.m.

**Meeting Place:** GBB 206 Computer Lab

**Course Description:**

This course focuses on teaching advanced networking principles that include design, setup, operations, and maintenance networks for an organization. There will be a special emphasis on network security, directory services, and network infrastructure. This course will utilize the networking lab in GBB 206 as well as will bring in outside experts to speak on networking topics. Every class will include a lecture or discussion on network topics along with a hands-on lab demonstrating the concepts.

**Credits:**

The Advanced Network Administration course can be used to meet the IS option degree requirements.

**Textbook:**

*Mastering Windows 2000 Server* by Mark Minasi, Sybex, ISBN: 0-7821-2774-6

**Course Objectives:**

- To expose students to advanced networking concepts in the information technology industry.
- To expose students to the language and terms of information technology and the impact of information systems on the strategic operations of businesses or organizations.
- To give students hands-on experience working with state-of-the-art networking hardware and software.
- To allow students to implement information systems theories and practices in a lab environment that simulates real business scenarios.
- To enable students to develop network plans and implement those plans in a laboratory setting.
- To expose students to the ethical issues facing information technology workers in the areas of networks, security, and data integrity.

**Prerequisites:**

This course requires students to have a basic knowledge of computers and networks that can come from courses offered in the MCSE program, Computer Science Department, Information Systems Department, or through work experience. Consent of instructor is required to take this course.

**Grading:**

Student performance will be based on a combination of projects, presentations, tests, and class participation.

**Course Topics:**

- OSI Model and Networking Protocols
- Network Infrastructure and Topologies (Ethernet, Hubs, Switches, and Network Interface Cards)
- Designing Wide and Local Area Networks
- Designing Domains and Directory Services
- Implementing Network Security
- Managing Domain Controllers, Servers, and Workstations
- Managing Users, Printers, Files, Permissions, and Other Network Resources
- Disaster Planning and Recovery with Backups, RAID, and Virus Protection
- Using Network Management Tools to Install Software as well as Diagnose and Troubleshoot Hardware and Software Issues
- Ethics of Network Administration