MIDSTATE COLLEGE 411 W. NORTHMOOR RD. PEORIA, IL 61614

(309) 692-4092 (800) 251-4299 Fall 2008

Course Number & Name: MSE 215 – Windows Active Directory

Instructor Information: Brian Hughes bhughes@midstate.edu

Credit Hours: 4

Course Description: This course is designed to provide students with the knowledge

and skills necessary to install, configure, and administer Microsoft Windows Active Directory services. Topics include Active Directory installation, site link setup, organizational units, and Group Policy. Upon completion of this course, the

student will have covered the necessary topics for the

corresponding Microsoft certification exam.

Prerequisite: MSE 115 – Windows Server Administration or Proficiency

Exam

Text(s) & Manual(s): Planning, Implementing, and maintaining a Microsoft

Windows Server 2003 Active Directory Infrastructure (Textbook and Lab Manual) ISBN 0-07-294490-0

Author(s): Wendy Corbin

Publisher: Microsoft Press, 2004

Materials needed for

this course: Notebook for maintaining lab journal

Topics: Students work with Microsoft Windows Server 2003 Active

Directory directory services in planning, implementing, and maintaining forests, sites, domains, and organizational units (OUs) that meet the accessibility, performance, and security goals of a business plan. In addition, students use Group Policy

to deploy software and configure a computer or user

environment. Finally, students learn troubleshooting techniques

that are valuable for the maintenance of a network

environment.

Learning Objectives: Upon completion of this course the student will be able to:

- The basics of networking
- Describe the components of Active Directory, including forests, sites, domains, domain trees, and organizational units (OUs).
- Understand the role of the Domain Name System (DNS) in an Active Directory environment.
- Understand and assess the domain and forest functional levels according to the needs of an organization's network environment.
- Understand the trust models used by Active Directory and their role in resource accessibility.
- Determine a site strategy based on the physical network infrastructure.
- Use Active Directory Sites And Services (MMC snap-in) to configure replication.
- Optimize and monitor replication.
- Plan the placement of global catalog servers.
- Understand and enable universal group membership caching.
- Understand and plan FSMO role placement.
- Troubleshoot FSMO role issues.
- Understand, plan, and implement local, global, domain local, and universal groups.
- Understand, plan, and implement group nesting.
- Use appropriate scripting tools to modify, create, and delete multiple users and groups.
- Understand, plan, and implement smart cards.
- Use the Run As program to perform administrative tasks.
- Plan and implement an organizational unit strategy based on administrative and business goals.
- Understand and implement Group Policy planning guidelines.
- Describe local and non-local group policies.
- Describe the Default Domain Policy and the Default Domain Controllers Policy.
- Use various tools to view and modify group policy settings.
- Explain group policy processing during computer startup and user logon.
- Describe the techniques that can be used to alter the inheritance of group policies.
- Analyze a set of policies and determine effective policies.
- Understand and apply security settings to users and computers.
- Use Group Policy to create a request for a computer or user certificate.
- Understand and implement folder redirection and offline files.
- Understand and implement disk quotas using Group Policy.
- Understand the policy refresh process and use Gpupdate to force the refresh of a policy.
- Use Group Policy to install, manage, and maintain software applications.
- Define and configure Software Restriction Policies.
- Filter the scope of a GPO.
- Use the Group Policy Management Console (GPMC) to manage GPOs.
- Use RSoP, GPResult, and Group Policy Management Console to manage group policies.

- Delegate control of a GPO.
- Define and implement procedures used for Active Directory backup and restore.
- Understand and explain the primary, normal, and authoritative restore processes.
- Explain the defragmentation process and understand the differences between an offline and an online defragmentation.
- Implement guidelines and procedures for monitoring Active Directory.
- Use System Monitor and Event Viewer to monitor Active Directory and File Replication services.
- Differentiate and choose the appropriate tools for diagnosing Active Directory problems.
- Define the upgrade and migration paths available.
- Explain the difference between an interforest and intraforest migration.
- Understand the required steps to upgrade or migrate from Windows NT 4.0 to Windows Server 2003.
- Associate migration tools that are available with the tasks they can be used to perform.
- Explain the process and recommended order for upgrading Windows NT 4.0 domains.
- Explain the necessary security privileges for migrating between two forests.
- Explain the necessary requirements for migrating sIDHistory information to the target domain.

Midstate Grading Scale:

90-100 A 80-89 B 70-79 C 60-69 D 0-59 F

Midstate Plagiarism Policy:

Matters related to academic honesty or contrary action such as cheating, plagiarism, or giving unauthorized help on examinations or assignments may result in an instructor giving a student a failing grade for that academic effort and also recommending the student be given a failing grade for the course and/or be subject to dismissal.

Plagiarism is using another person's words without giving credit to the author. Original speeches, publications, and artistic creations are sources for research. If you use the author's words in your papers or assignments, you must acknowledge the source. Plagiarism is strictly against the academic policy of the college and is grounds for failing the course. If repeated, plagiarism may result in suspension from the college.

Assessment Portfolio Reminder:

Each student is required to prepare an assessment portfolio for graduation. Keep a copy of this syllabus in the portfolio. Use the "Evidence for Success" list for your program, which is already in the portfolio, and instructions from the instructor to determine the assignment(s) that should be in the assessment portfolio.

Participation requirements/policies and procedures/requirements to pass the course:

- 1) Assignments: Homework is due at the beginning of the class period. All homework is to be turned in with your name, date, and the name of the assignment at the top. 70% is the highest score that late or make up work can earn without prior arrangement with the instructor. No make up work is accepted during finals week.
- 2) <u>Exams</u>: Must be taken on the dates scheduled by the instructor. Failure to take an exam on the scheduled date will result in a grade of "F" (0 points). Make-up exams must be taken in the testing center. It is the student's obligation to make the appropriate arrangements to have a test administered.
- Attendance: Regular attendance is expected. It is the student's responsibility to notify the instructor when a class will be missed. If you know of a conflict ahead of time, you are welcome to submit projects early. If you find that an absence is unavoidable, contact the Midstate Office at 692-4092 and leave a message or email me at the address above. If I do not receive a call or email before the missed class period, you will be considered unexcused and no make-up will be allowed for that day. Lab work must be completed in class on furnished equipment. Make-up lab work can be scheduled with the instructor if an absence is unavoidable. Lab work may be scheduled during any class.
- 4) <u>Academic Dishonesty</u>: Plagiarism and cheating are serious offenses and may be punished by failure on exam, paper, or project; failure in course; and/or expulsion from the college. For more information refer to the "Academic Dishonesty" policy in the student handbook.
- 5) Grades: It is the students' responsibility to keep copies of all assignments turned in for a letter grade until the end of the quarter when a final grade has been earned. If a document is lost and no copy is available, the student will not receive credit.
- 6) <u>Behavior</u>: Cell phones / pagers are prohibited from use in this course. Also, do NOT use email/messenger programs during class. This is not only rude to your instructor, but also distracts you and others around you from the learning experience.
- 7) <u>Student Responsibility</u>: The following are the student's responsibilities:
 - Reading the class textbook and any other materials assigned by the instructor, including journals, magazines, white papers, and Internet materials. Chapter materials covered during class should be read BEFORE the start of class.
 - Participating in oral presentations and classroom discussions
 - Participating in lab exercises
 - Completing all assignments and quizzes/exams
 - Keep your lab journal up-to-date. This should be at least one (1) paragraph documenting your experience with the lab, such as, any problems you

experienced, specific things that you learned, and any other thoughts that come to you as the result of the lab assignment. Lab assignments and your lab journal make up 25% of your grade.

Methods of evaluating student performance:

Homework assignments are used to assess students' critical thinking skills. Lab work assignments will be used to measure the students' ability to apply concepts learned from lecture in a hands-on way.

Examination Information:

The quizzes and exams will be a combination of fill-in-the-blank, true/false, multiple-choice and matching questions. A hands-on practicum may be utilized where appropriate. Quizzes will focus mostly on recently covered material, however earlier material will still be included at some points to ensure foundation concepts are fully understood. The midterm will be comprehensive and cover all chapters covered in class to that date. The final will be comprehensive and will cover all chapters covered since the midterm.

Instructors Grading Scale:

These percentages are approximate values

•	Homework Assignments	(100 pts.)	29%
•	Lab assignments / Lab journal	(50 pts.)	14%
•	Exams	(2@100 pts.)	<u>57%</u>
•	Total	350 pts	100%

The following is a tentative schedule for the course. The instructor reserves the right to make schedule changes based on the needs of the students in the class.

Day	Date	Assignment
Week 1	8/19	Class introduction/Chapter 1
Week 2	8/26	Chapter 2 / Lab
Week 3	9/2	Chapter 3 & 4 / Lab
Week 4	9/9	Chapter 5 / Lab
Week 5	9/16	Chapter 6 /Lab
Week 6	9/23	Midterm Exam / Chapter 7 / Lab
Week 7	9/30	Chapter 8 / Lab
Week 8	10/7	Chapter 9 / Lab
Week 9	10/14	Chapter 10 / Lab
Week 10	10/21	Chapter 11 / Lab
Week 11	10/28	Chapter 12 / Lab
Week 12	11/4	Review / Final Exam

Tips to Succeed

- 1) Read the book! Please read the chapters BEFORE the class day you are scheduled to discuss them. This will make it easier for you to understand the lecture and also to be prepared to ask questions if you have any.
- 2) Good Attendance is important! School is like a job and to succeed you need to work at it.
- 3) Study, study, and study some more! The student handbook recommends studying 2 hours for every hour of class time scheduled. For example, a 4 credit hour class means you should be studying 8 hours a week outside of the classroom. Please refer to the student handbook, page 31, for more learning strategies.
- 4) Ask questions! If you do not understand a topic please ask questions! This is "YOUR COLLEGE", make the most of it.