

Reedley College
Spring 2010
01/11/10 – 05/21/10

Course: **IS 43 Advanced Networking and Concepts**

Class meets: TTH 12 pm – 2:35 pm
Instructor: David L. Atencio, BA computer science/MBA
Email: david.atencio@reedleycollege.edu
Phone: 638-3641 ext 3410
Office Hours: TBD
Final Drop Date: 01/29/10
Final Exam: 05/18/10

Text Books and Study Material:

Network+ Guide to Networking

1. **Course Description and Information:**

This course provides an introduction to computer networking, including network hardware and software. Additionally, this course provides an introduction into installation of networks, network design, and communications links

2. **Course Learning Objectives and Outcomes:**

Objectives:

- Design and install various network topologies.
- Make connections between Local Area Networks (LANs).
- Install and configure mail servers.
- Install and configure web server software.
- Install and configure web extensions and FTP.
- Manage user rights and permissions for web folders.
- Configuring ODBC for web databases.
- Install proxy servers.
- Install domain name servers.
- Manage servers, users, and resources with a server manager utility.
- Monitor network system performance.

- Explore migration strategies.

Outcomes:

- Create and test networking CAT5 cabling.
 - Design a LAN and a WAN, utilizing proper hardware and software.
 - Employ proper troubleshooting techniques to troubleshoot and fix a LAN or WAN problem.
 - Accurately document a LAN and a WAN setup.
 - Manage user accounts in a Windows Server Active Directory environment.
3. **Attendance:** Attendance is required and the instructor reserves the right to take roll at any time during the duration of the class period. To achieve successful completion of the course, it is critical for the students taking this course to attend all classes. I will drop you if you have more than three consecutive unexcused, absences.
 4. **Policies:** Campus code requires that shoes or sandals and appropriate attire be worn at all times on campus. Eating, drinking, and smoking is not allowed in the classroom or computer labs. Cell phone must be turned off or in the silence mode while class is in session. A student will be subject to discipline if she or he:
 - Prevents other students from pursuing their authorized curricular or co-curricular interests.
 - Interferes with or disputes faculty and administrators who are fulfilling their professional responsibilities.
 - Prevents classified employees from fulfilling their prescribed duties.
 - Deliberately endangers the safety of persons or the security of college property.
 - Violates Reedley College computers and networks usage policy.
 5. **Behavioral Standards:** Your classmates and I would greatly appreciate that students in the class take care of any personal needs (i.e., using the rest room, getting a drink, sharpening a pencil) before class begins. Please turn off you cell phones when entering the class. You may not use your phone as a calculator. I would appreciate that you not bring guests to class. I start class on time, please don't be late. If you are late, it is your responsibility to ensure you are counted for attendance after class. You may not surf the internet during lectures.
 6. **Academic Dishonesty:** Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly obtained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences.
 - **Plagiarism:** Plagiarism is the adoption or reproduction of the ideas or words or statements of another person without due acknowledgment. This can range from borrowing without attribution a particularly apt phrase, to paraphrasing someone else's original idea without citation, to wholesale contract cheating. When plagiarizing, students will often turn to the Internet, due the ease of copying and pasting from websites. Other more old fashioned forms of plagiarism such as paper mills and passing off obscure articles or chapters of books of others as original work also still occur. Plagiarized papers are often riddled with gross inconsistencies such as referencing non-existent sections of the essay, changes in spelling and grammar customs, or the argument changing in mid-paragraph.
 - **Cheating:** Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers in an attempt to gain an unearned academic advantage. Cheating can take the form of crib notes, looking over someone's shoulder during an exam, or any forbidden sharing of information between students regarding

an exam or exercise. Also, the storing of information in graphing calculators, pagers, cell phones, and other electronic devices has cropped up since the information revolution began. Incidents of cheating and plagiarism may result in a variety of sanctions and penalties, which may range from a failing grade on a particular examination, paper, project, or assignment in question to a failing grade in the course at the discretion of the instructor and depending upon the severity and frequency of the incidents.

7. **Accommodations for students with disabilities:** If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act please contact me as soon as possible.

8. **Learning Methods:**

- a. Lectures – used to provide bring all students to a level playing field of learning
- b. Required reading
- c. Class projects and Blackboard assignments (lab work)
- d. Textbook assignments (lab work)

9. **Reading and Lab Assignments:** Assigned chapters MUST be read prior to attending class. Students are required to complete class/lab assignments in class. You may collaborate with fellow students on lab assignments. Late lab assignments will not be accepted.

10. **Outcomes assessment:**

<i>Network+ Guide to Networks: Quizzes (2 @ 20 points each)</i>	40 points
Labs (15 @ 10 points each)	150 points
Midterm	50 Points
Participation	100 points
Final Exam/demonstration	100 points

Total	440 points

Grading scale:

90-100% = A 80-89% = B 70-79% = C 60-69% = D <60% = F

11. **Final Drop Date:** The final drop date for this class is: 01/29/10 (to avoid a “W”) and 03/12/10 (to avoid a letter grade)

12. **Examinations and assignments:** All examinations must be completed individually. Students may make use of the help feature of any application provided in the classroom computers. Students may use their books and notes for all examinations. I will keep open the previous week, current week and one future week at all times for assignments and exams. Once a week is closed out it will be too late to make up.

13. Schedule:

Week	Notes	Reading Assignments	Homework/Lab Assignments
Week 1 <i>Week of 01/11/10</i>		Chapter 1 An Introduction to Networking	Tue: Class orientation, Intro to Blackboard, syllabus review, district policies, companion website. Thursday: Introduction to networking.
Week 2 <i>Week of 01/18/10</i>		Chapter 2 The OSI model	Tue: Chapter 2 – a review Thu: OSI continue Lab 1 – Case Project 2-3
Week 3 <i>Week of 01/25/10</i>		Chapter 4 Sockets & Ports	Tue: Chapter 4 Sockets and ports Thu: Lab 2. Case project 4-1 & 4-3
Week 4 <i>Week of 02/01/10</i>		Chapter 5 Topologies	Tue: Topologies Thu: Lab 3 – Case project 5-1
Week 5 <i>Week of 02/05/10</i>		Chapter 7 WAN's and Remote Connectivity	Tue: Chapter 7 Thu: Quiz 1
Week 6 <i>Week of 02/15/10</i>		Chapter 9 Network Operating Systems	Tue: Ch9 Thu: Lab 4 Project 9-4
Week 7 <i>Week of 02/22/10</i>		Chapter 9 Network Operating Systems	Tue: NOS cont... Thu: Lab 5 case project 9-3 and Quiz 2
Week 8 <i>Week of 03/01/10</i>		Design and install various network topologies.	Tue: Lecture Thu: Lab 6

Week	Notes	Reading Assignments	Homework/Lab Assignments
Week 9 <i>Week of 03/08/10</i>		Make connections between Local Area Networks (LANs).	Tue: Lecture Thu: Midterm
Week 10 <i>Week of 03/15/10</i>		Install and configure mail servers.	Tue: Lecture Thu: Lab 7
Week 11 <i>Week of 03/22/10</i>		Install and configure web server software.	Tue: Lecture Thu: Lab 8
Week 12 <i>Week of 04/05/10</i>		Install and configure web extensions and FTP.	Tue: Lecture Thu: Lab 9
Week 13 <i>Week of 04/12/10</i>		Manage user rights and permissions for web folders.	Tue: Lecture Thu: Lab 10
Week 14 <i>Week of 04/19/10</i>		Install proxy and domain name servers.	Tue: Lecture Thu: Lab 11 and 12
Week 15 <i>Week of 04/26/10</i>		Chapter 13 Troubleshooting Network problems Install proxy servers	Tue: Lecture Thu: Lab 13
Week 16 <i>Week of 05/03/10</i>		Chapter 14 Ensuring Integrity and Availability	Tue: Lecture Thu: Lab 14
Week 17 <i>Week of 05/10/10</i>		Chapter 15 Network management	Tue: Lecture Thu: Lab 15

Week	Notes	Reading Assignments	Homework/Lab Assignments
<i>Week 18</i> <i>Week of</i> <i>05/17/10</i>	FINALS WEEK		Final Tuesday May 18, 2010, 12-1:50