

Syllabus – CIS 293 – Windows Server-Administering

Cuyamaca College: Spring 2017

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Section 0108

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2 units

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By Appointment

Course Description:

Comprehensive hands-on system administration course focusing on the administration tasks essential to administering a Windows server infrastructure, including: user and group management, network access, and data security.

Course Content

- 1) Windows server operating system configuration using both graphical user interface and command line tools
- 2) Configuration and implementation of group policy infrastructure, user and services accounts, and Active Directory (AD) domain services
- 3) Configuration and troubleshooting of Domain Naming Services (DNS) and the network policy server role
- 4) File system optimization and security
- 5) Implementing system update management services

Course Objectives

Students will be able to:

- 1) Define server services and system functions, roles and properties; command line and graphical user interface tools and utilities; network security considerations; and the AD infrastructure and functions.
- 2) Deploy and manage server images.
- 3) Configure network name resolution services, including: DNS, Dynamic DNS, DNS server records, forward and reverse lookup zones, secondary zones and stub zones.
- 4) Configure network access, including: remote access, secure socket tunneling, Internet protocol security (IPsec), and network policy server.
- 5) Configure network file and print services, including: distributed file systems, encryptions, file server resource management and audit policies.
- 6) Configure and manage AD functions, including: authentication, domain controllers, backup and recovery, account policies, and advanced Group Policy Object (GPO) management.

Method of Instruction

- 1) Online and demonstration
- 2) Hands-on practice
- 3) Topical discussion of current operating system trends and issues

Out-of-Class Assignments

May include the following:

- 1) Text reading assignments
- 2) Virtualized Labs
- 3) Exams
- 4) Discussion item research and responses

Student Learning Outcomes:

Upon successful completion of this course and given a computer troubleshooting or configuration scenario, students will be able to:

- 1) Deploy a Windows server image.
- 2) Configure and troubleshoot a DNS installation as part of domain controller promotion.
- 3) Configure and troubleshoot advanced AD and GPO implementations/configurations.

Materials needed:

Textbook and Lab Manual

MCSA Windows Server 2012 R2 Complete Study Guide: Exams 70-410, 70-411, 70-412.
Wiley; 2 edition (January 27, 2015). Panek, William.
ISBN-13: 978-1118859919

Microsoft Official Academic Course (MOAC) Lab Manual
Exam 70-411 Administering Windows Server 2012 R2
Wiley: (June 2014). Regan, Patrick.
ISBN: 978-1-118-88291-7

You can get your spring semester Textbook and Lab Manual from the Cuyamaca Bookstore link below:
www.Cuyamaca.bncollege.com

MOAC Labs Online (MLO) Access Reg Code

70-411 Admin Win Svr12 R2 MLO Online Access Reg Code.

You can get the Access Reg Code from DTS (Direct to Student purchase site) using the link below:
www.wiley.com/WileyCDA/Section/id-821526.html

Requirements:

Prerequisites

“C” grade or higher or “Pass” in CIS 190 or equivalent or current Microsoft Certified Technology Specialist (MCTS) 70-680 certification.

Entrance Skills

Without the following skills, competencies and/or knowledge, students entering this course will be highly unlikely to succeed:

- 1) Working knowledge of advanced Windows operating system terminology (i.e., permissions, shares, partitioning, RAID, etc.) and advanced computer network terminology (i.e., domain, sub-netting, DNS, DHCP, etc.).
- 2) Working knowledge of command line interpreter command syntax.
- 3) Complete complex computer client setup and configuration procedures without supervision.

Minimum Instructional Facilities

- 1) Current version of the Windows Server Operating System
- 2) Computer lab with configurable hard drives installed with appropriate software, or a virtualized lab environment using a virtualization PC/Server software that is accessible via the campus network or the Internet
- 3) Instructional domain server capable of student client computer connection (real or virtual)
- 4) Course management system

Grading and Assessment:

Discussions

Weekly discussions measure students' ability to describe computer operating system functions and characteristics analyze a scenario and choose the alternatives and troubleshooting options.

The Introduction is a special assignment that needs to be completed by the end of the first day of the course, which is the first Monday night by 11:59 pm. Keep in mind that this is your first discussion, so post information you are comfortable with sharing and make sure to come back in the coming days to "meet" everyone and say "hello."

MOAC Labs Online (MLO)

It is imperative that you read the material in your Lab Manual before trying the scenario-based lab activities that measure students' ability to configure specific operating system functions or subsystems, troubleshoot/analyze imposed system problems, investigate potential alternatives, and implement corrective action to achieve a determined result. For access to the MOAC Labs Online please refer to the MLO User Guide link below:

http://media.wiley.com/assets/7008/10/MOAC_Labs_Online_Guide.pdf

Exams

Expect three exams. *No makeups*, but I will drop your lowest exam. These will consist of practical application-based examinations that measure students' ability to evaluate scenario-based computer configuration requirements/problems, analyze/troubleshoot the operating system configuration, and apply the correct configuration changes to achieve the correct results.

You have a Blackboard account for CIS 293 with links to the syllabus and all handouts. In addition, I encourage you to have discussions within Blackboard collaborating with each other.

Please visit <http://www.cuyamaca.edu/helpdesk/> and use the gray menu pane on the left to check your browser's compatibility and that necessary plug-ins are installed on your computer at home. To access your course discussions and exams through Blackboard, use the link: <https://gcccd.blackboard.com/>

Evaluation

Introductions (1)	2%
Discussions (11)	22%
Labs Online (22)	44%
Exams (2)	20%
Final examination	12%

A Plus/Minus grading system will be used for final grades. A (Above 90%); B+ (87% - 89.9%); B (80% - 86.9%); C+ (77% - 79.9%); C (70% - 76.9%); D (60% - 69.9%); F (below 60%)

Any students seeking an "I" (incomplete) for a grade must file a petition with me citing "unforeseeable, emergency, and justifiable" reasons for this grade.

Important Dates

February 6 (Monday):	Spring Semester Starts
February 10 (Friday):	Last day to drop without a "W" (semester length classes)
February 10 (Friday):	Last day to Apply for Refund (semester length classes)
April 28 (Friday):	Last day to drop Semester Length classes
May 6 (Saturday):	Spring Semester Ends

You can see the Spring 2017 academic calendar in its entirety at <http://www.cuyamaca.edu/current-students/academic-calendars/default.aspx>

Online Class Policies:

Attendance Policy

Students who are inactive will be dropped from the course. If an entire week goes by with no activity on your part either through the discussion board participation, email communication, submission of lab work, or exam, you will be dropped. Therefore, it is imperative that you let me know if your contribution to the class will be interrupted.

Drop Policy

Though any student not participating in class may be dropped from the course by the instructor, it is always the student's responsibility to drop any unattended course. Failure to drop an unattended course will result in a grade of "F" on your transcript. Participation in an online class means submitting assignments and taking quizzes on time, contributing to discussion regularly, and checking Moodle & email at least twice a week.

Communication Policy

I will respond to messages by the next business day. Responses tend to be brief.

Q&A Forum. Please post course related questions in the Q&A discussion forum that can be accessed from the discussions area. Please keep in mind that posts & replies in this forum are visible to the entire class.

Messages and E-Mail. If you have a personal question, please contact your me via e-mail.

Other Policies

Students with disabilities. Notify me and Disabled Students Programs and Services (DSPS) early in the semester so that reasonable accommodations may be implemented.

If you are caught cheating or plagiarizing, you will earn a '0' on that assignment. If it happens a second time, you will earn a '0' on that assignment and I will report the incident to the Student Affairs Office.

You are responsible for any schedule changes or other announcements on days missed from the class. Any changes and announcements will be posted on Blackboard.

You are expected to be courteous to each other and to the instructor.

You are expected to work actively with your peers, sharing, taking, giving, explaining, questioning and answering. You are responsible for being prepared for participation in class discussions, and for assisting your peers to come to an understanding of Windows Server-Administering.

CIS 293; Class Schedule Spring 2017 J. Garibay

Course Outline

Dates	Activity (Textbook)	Labs (Lab Manual)
Week 1: Feb. 6 th – Feb. 10 th	<ul style="list-style-type: none"> • Chapter 10. Manage and Maintain Servers - Introductions - Discussion: Exercises 10.1 – 10.3 	<ul style="list-style-type: none"> • Lab 1: Deploying and Managing Server Images
Week 2: Feb. 13 th – Feb. 17 th	<ul style="list-style-type: none"> • Chapter 10. Manage and Maintain Servers - Discussion: Exercises 10.4 – 10.5 - Answers to Review Questions 	<ul style="list-style-type: none"> • Lab 2: Implementing Patch Management • Lab 3: Monitoring Servers
Week 3: Feb. 20 th – Feb. 24 th	<ul style="list-style-type: none"> • Chapter 11. Manage File Services - Discussion: Exercises 11.1 – 11.4 	<ul style="list-style-type: none"> • Lab 4: Configuring DFS • Lab 5: Configuring FSRM
Week 4: Feb. 27 th – Mar. 3 rd	<ul style="list-style-type: none"> • Chapter 11. Manage File Services - Discussion: Exercises 11.5 – 11.7 - Answers to Review Questions - Exam 1 	<ul style="list-style-type: none"> • Lab 6: Configuring FS and DE • Lab 7: Configuring Advanced Audit Policies
Week 5: Mar. 6 th – Mar. 10 th	<ul style="list-style-type: none"> • Chapter 12. Configure DNS - Discussion: Exercises 12.1 – 12.3 	<ul style="list-style-type: none"> • Lab 8: Configuring DNS Zones • Lab 9: Configuring DNS Records
Week 6: Mar. 13 th – Mar. 17 th	<ul style="list-style-type: none"> • Chapter 12. Configure DNS - Discussion: Exercises 12.4 – 12.7 - Answers to Review Questions 	<ul style="list-style-type: none"> • Lab 10: Configuring VPN and Routing • Lab 11: Configuring Direct Access
Week 7: Mar. 20 th – Mar. 24 th	<ul style="list-style-type: none"> • Chapter 13. Configure Routing and RA - Discussion: Exercises 13.1 – 13.2 - Answers to Review Questions 	<ul style="list-style-type: none"> • Lab 12: Configuring a Network Policy Server • Lab 13: Configuring NPS Policies
Week 8: Mar. 27 th – Mar. 31 st	<ul style="list-style-type: none"> • Spring Recess 	
Week 9: Apr. 3 rd – Apr. 7 th	<ul style="list-style-type: none"> • Chapter 14. Manage and Maintain Servers - Discussion: Exercises 14.1 – 14.2 - Exam 2 	<ul style="list-style-type: none"> • Lab 14: Configuring NAP • Lab 15: Configuring Server Authentication
Week 10: Apr. 10 th – Apr. 14 th	<ul style="list-style-type: none"> • Chapter 14. Manage and Maintain Servers - Discussion: Exercises 14.3 – 14.4 - Answers to Review Questions 	<ul style="list-style-type: none"> • Lab 16: Configuring Domain Controllers • Lab 17: Maintaining Active Directory
Week 11: Apr. 17 th – Apr. 21 th	<ul style="list-style-type: none"> • Chapter 15. Manage and Maintain Servers - Discussion: Exercises 15.1 – 15.4 	<ul style="list-style-type: none"> • Lab 18: Configuring Account Policies • Lab 19: Configuring GP Processing
Week 12: Apr. 24 th – Apr. 28 th	<ul style="list-style-type: none"> • Chapter 15. Manage and Maintain Servers - Discussion: Exercises 15.5 – 15.7 - Answers to Review Questions 	<ul style="list-style-type: none"> • Lab 20: Configuring Group Policy Settings • Lab 21: Managing Group Policy Objects
Week 13: May 1 st – May 5 th	<ul style="list-style-type: none"> • Final Exam - Tuesday, May 2, 2017 	<ul style="list-style-type: none"> • Lab 22: Configuring Group Policy Preferences

Any information above may change at the discretion of the instructor at any time.
This course adheres to the policies outlined in the Cuyamaca College catalogue.
For further information, see Academic Policies stated in the catalogue.