Prince George's Community College Hybrid Technology Training Course Syllabus

MCSA Training Part III: 70-412 Configuring Advanced Windows Server 2012 Services Meets: November 18th, 2014 to November 24th, 2014

Instructor Information:

Instructor:	TBD
Office:	TBD
Phone:	TBD
Email:	TBD

Course Information:

Prerequisite:	IT Foundations, A+, Network+, Security+, Windows Server 2012 (70-410) and
	Administering Windows Server 2012 (70-411)
Contact Hours:	40.00 Hours

Course Description:

This course is designed as a Hybrid Virtualization Training course. It blends in class instruction with a virtual lab environment. Students will learn to configure advanced Windows Server 2012 Services. Topics include: Network Load Balancing, Failover Clustering, Configuring Advanced File Services, Site-Level Fault Tolerance, Advanced DHCP Implementation, Advanced DNS, Configuring Sites and Trusts, AD Replication, AD Federation Services, AD Certificate Services and AD Rights Management.

Expected Learning Outcomes:

The below outcomes are the Microsoft exam objectives. Source: <u>https://www.microsoft.com/learning/en-us/exam-70-412.aspx</u>

Students, upon completion of this course, should be able to show proficiency and /or knowledge in the following areas:

- 1. Configure and Manage High Availability
 - a. Configure Network Load Balancing (NLB)
 - b. Configure Failover Clustering
 - c. Manage Failover Clustering Roles
 - d. Manage VM Movement
- 2. Configure File and Storage Solutions
 - a. Configure Advanced File Services
 - b. Implement Dynamic Access Control (DAC)
 - c. Configure and Optimize Storage
- 3. Implement Business Continuity and Disaster Recovery
 - a. Configure and Manage Backups

- b. Recover Servers
- c. Configure Site-Level Fault-Tolerance
- 4. Configure Network Services
 - a. Implement an advanced DHCP Solution
 - b. Implement an advanced DNS Solution
 - c. Deploy and Manage IP Address Management (IPAM)
- 5. Configure the Active Directory Infrastructure
 - a. Configure a Forest or a Domain
 - b. Configure Trusts
 - c. Configure Sites
 - d. Manage Active Directory and SYSVOL Replication
- 6. Configure Identity and Access Solutions
 - a. Implement Active Directory Federation Services
 - b. Install and Configure Active Directory Certificate Services
 - c. Manage Certificates
 - d. Install and Configure Active Directory Rights Management Services

Tentative Course Schedule:

MCSA Part III: 70-412	Tentative Course Schedule:	Last Updated:
Date:	Topic:	Reading Assignment:
Day 1	Configuring Network Load Balancing	Chapters 1-4
	Configuring Failover Clustering	
	Managing Failover Clustering	
	Managing Virtual Machine Movement	
Day 2	Configuring Advanced File Services	Chapters 5-8
	Implementing Dynamic Access Control	
	Configuring and Optimizing Storage	
	Configuring and Managing Backups	
Day 3	Recovering Servers	Chapters 9-12
	Configuring Site-Level Fault Tolerance	
	Implementing an Advanced DHCP Solution	
	Implementing an Advanced DNS Solution	
Day 4	Deploying and Managing IPAM	Chapters 13-16
	Configuring a Domain and Forest	
	Configuring Trusts	
	Configuring Sites	
Day 5	Managing AD and SYSVOL Replication	Chapters 17-21
	Implementing AD Federation Services	
	Installing and Configuring AD Certificate Services	
	Managing Certificates	
	Installing and Configuring AD Rights Management Services	

Labs:

Date:	Lab Name:	Chapter:
Day 1	MOAC70412-Lab1	Chapter 1
	MOAC70412-Lab2	Chapter 2
	MOAC70412-Lab3	Chapter 3
	MOAC70412-Lab4	Chapter 4
Day 2	MOAC70412-Lab5	Chapter 5
	MOAC70412-Lab6	Chapter 6
	MOAC70412-Lab7	Chapter 7
	MOAC70412-Lab8	Chapter 8
Day 3	MOAC70412-Lab9	Chapter 9
	MOAC70412-Lab10	Chapter 10
	MOAC70412-Lab11	Chapter 11
	MOAC70412-Lab11	Chapter 12
Day 4	MOAC70412-Lab13	Chapter 13
	MOAC70412-Lab14	Chapter 14
	MOAC70412-Lab15	Chapter 15
	MOAC70412-Lab16	Chapter 16
Day 5	MOAC70412-Lab17	Chapter 17
	MOAC70412-Lab18	Chapter 18
	MOAC70412-Lab19	Chapter 19
	MOAC70412-Lab20	Chapter 20
	MOAC70412-Lab21	Chapter 21

Course Materials:

Book:

70-412 Configuring Advanced Windows Server 2012 Services ISBN: 978-1-118-51159-6 Publisher: Wiley & Sons INC. Author: Pat Regan

Online Labs:

70-412 Microsoft Online Academic Curriculum (MOAC)

Note: The book and the MOAC Online Reg Card Set will be bundled together. ISBN: 978-11118-66838-2

Academic Honesty:

No Student shall engage in behavior that, in the judgment of the instructor of the class, may be construed as cheating. This may include, but not limited to, plagiarism or other forms of academic dishonesty such as the acquisition without permission of tests or other materials and/or distribution of

these materials. This includes students that aid such behavior as well as those who attempt such behavior.

Audio or Video Taping Class:

If a student wants to Audio or Video tape the class, you will need to contact the instructor in advance. This will be granted or denied at the discretion of the instructor. If granted, the student is prohibited from posting recordings on social media. The student is also prohibited from giving or selling recordings to a third party.

Grades:

Grading Allocation:

Lab Assignments	40%
E-Modules	10%
Class Participation	30%
Practice Exam (70-412)	20%

Grading Scale:

Grade:	Percentage:	Quality Points:
А	95 to 100	4.0
A-	90 to 94	3.7
B+	87 to 89	3.3
В	83 to 86	3.0
В-	80 to 82	2.7
C+	78 to 79	2.5
С	73 to 77	2.3
C-	70 to 72	2.0
F	Below 69	0

HOW TO LOG IN TO BLACKBOARD:

Blackboard is a web-based program that serves as the college's online classroom. You will use Blackboard to communicate with your instructor, to see your course materials, to submit assignments and to discuss course ideas with your classmates.

To log in to your Blackboard course, please follow these steps:

- Go to the Prince George's Community College Blackboard web site, which is located at http://pgcconline.blackboard.com. NOTE: There is no "www" in the Blackboard address.
- ALL STUDENTS must log in to Blackboard using their **Owl Link** account (this includes students who have used Blackboard in the past).
- If you do not have a *Owl Link* account,

- Go to <u>Owl Link Website</u> (http://www.pgcc.edu --> click "Quicklinks" --> select "Owl Link"
)
- 2. Look up your *Owl Link* username (Under User Accounts, select "What's My User ID")
- 3. Reset your *Owl Link* password (Under User Accounts, select "What's My Password")

Note: You MUST use your student PGCC student email address in ALL communication with faculty and staff at PGCC.

- Once you have your *Owl Link* account information, type it in the Blackboard login box at the <u>http://pgcconline.blackboard.com</u>.
- If your login is successful, you will see the Blackboard "Welcome" screen. In the box labeled "My Courses", you will see the course or a list of courses in which you are enrolled. Click on the course name to enter your Blackboard course.

OWL MAIL ACCOUNT:

You will need to activate your Owl Mail Account as your PGCC student email address is the only email account that PGCC faculty and staff are authorized to use to communicate with students. This policy was established by PGCC Administration to protect your privacy rights. <u>CLICK HERE</u> for instructions on how to activate your PGCC student email account

OWL ALERT: Text Messaging and Email Notification System:

Prince George 's Community College now has an emergency text messaging and email notification system called Owl Alert that is capable of sending text messages instantly and simultaneously to all students and employees who register their mobile phones, Blackberry's, wireless PDAs, pagers, Smart or Satellite phones, and/or preferred email addresses. These messages can also be added to your Google, Yahoo, AOL, or Windows Live home page as an RSS feed. These notifications will apply to weather cancellations, delays, and emergency conditions, including major disruptions in technology services. PLEASE REGISTER WITH OWL ALERT NOW – it only takes a minute. This will be the surest way for you to receive emergency notifications critical to your safety and well-being. <u>CLICK HERE TO REGISTER</u>

WEATHER RELATED CLOSINGS:

The following radio and television stations are notified and carry the announcements regarding college closings: TV channels 4,5,7, & 9; Radio stations WMAL, WPGC, WAMU, WASH, WRC, WTOP, WGAY, WAVA, WHUR, & WKYS. The college does <u>not</u> automatically close when the county school system closes except for classes scheduled at public school sites.

DELAYED COLLEGE OPENINGS

When the college announces a delayed opening, all classes with at least 45 minutes of class time remaining at the time of the opening will be held. For example, in the event of a 10 a.m. opening, a 9:30-10:45 a.m. class will be held. This procedure applies to all credit classes.

GENERAL COLLEGE POLICIES and INFORMATION SOURCES:

Students requesting academic accommodations are required to contact the Disability Support Services Office (M-1042) or call (301) 322-0838 (voice) or (301) 322-0122 (TTY) to establish eligibility for services and accommodations. Students with documented disabilities should discuss the matter privately with their instructors at the beginning of the semester and provide a copy of their Student/Faculty Accommodation Form. <u>Disability Support Services</u>.

Students are responsible for being familiar with all the official policies relating to students as spelled out in the <u>PGCC Student Handbook</u>. Please pay close attention to the CODE OF CONDUCT beginning on page 38 (page 40 in PDF file). The Prince George's Community College Code of Conduct defines the rights and responsibilities of students and establishes a system of procedures for dealing with students charged with violations of the code and other rules and regulations of the college. A student enrolling in the college assumes an obligation to conduct himself/herself in a manner compatible with the college's function as an educational institution. Refer to the 2011-2012 Student Handbook for a complete explanation of the code of conduct, including the procedure for dealing with disruptive student behavior.

The college is an institution of higher learning that holds academic integrity as its highest principle. In the pursuit of knowledge, the college community expects that all students, faculty, and staff will share responsibility for adhering to the values of honesty and unquestionable integrity. To support a community committed to academic achievement and scholarship, the Code of Academic Integrity advances the principle of honest representation in the work that is produced by students seeking to engage fully in the learning process. The complete text of the Code of Academic Integrity is in the 2010-2011 Student Handbook (Page 40) and posted on the college's website (page 42 in PDF file).

Students are also responsible for the knowing the information that is contained in the CIS Info Sheet

Click <u>HERE</u> for a link that discusses Academic Programs and Resources available to students.

CIVILITY STATEMENT:

To promote a community of scholarship and civility, everyone at Prince George's Community College is expected to be respectful, tolerant and courteous towards others at all times, adhere to college policies and procedures, and respect college property. Creating a culture of civility both inside and outside the classroom is everyone's responsibility.

Civility is a college-wide commitment and in order to identify PGCC students, students are required to enter classrooms with their college IDs visible. **ALL** students must have their IDs visible while **AT ANY COLLEGE SITE, WHETHER THEY ARE ON THE LARGO CAMPUS OR ANY EXTENSION SITE**.