



## PRINCE GEORGE'S COMMUNITY COLLEGE

CIS 2320-LE01 – Wednesday 6:00 – 7:40 and Friday – 8:00 – 9:40pm  
Implementing, Managing and Maintaining Windows Network Infrastructure

**Student Name:** \_\_\_\_\_

**Instructor:** **Trang D. Nguyen** **Phone:** **(301) 322-0754**

**Office Location:** **Center for Advance Technology 229I**  
Office hours will be posted at the door and attached to the end of the syllabus. I have other students so please schedule an appointment in advance to avoid conflict. I will be glad to meet with outside of office hours to assist you in your study.

**Web Site:** <http://academic.pgcc.edu/~tnguyen/>

**Email:** Email is the best contact method. Use [PGCC\\_TDN@hotmail.com](mailto:PGCC_TDN@hotmail.com) or [Nguyentd@pgcc.edu](mailto:Nguyentd@pgcc.edu)

**Text Books:** MCTS: Windows Server 2008 Network Infrastructure Configuration Study Guide: Exam 70-642; William Panek, Tylor Wentworth, James Chellis; Sybex/Wiley; ISBN: 978-0-470-26169-9

MCTS: Windows Server 2008 Applications Infrastructure Configuration Study Guide: Exam 70-643; Joel Stidley; Sybex/Wiley; ISBN: 978-0-470-26170-5

**Other Materials:** Gray matters and dedication to learning

**Important:** Read the syllabus from the beginning to the end carefully.

**myPGCC:** All students must have a “myPGCC” account to access PGCC’s computing resources. User accounts from the previous semester are still active. If you do not have an existing myPGCC account, create your account at one of the following locations:

**Bladen Hall Room 104, UTC 226 and 246, <http://my.pgcc.edu>**

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**Learn From the Best You’ll Be Above the Rest  
Fasten Your Seat Belt for an Academic Adventure**



**Course Description:** 3 credits - 2 class/2 lab hrs. Students will learn to implement the components of Windows environment network infrastructure, implementing Windows Internet Name Service (WINS) and Domain Name System (DNS), deploying Dynamic Host Configuration Protocol (DHCP), providing Remote Access Services (RAS), and Network Address Translation (NAT). The course objectives prepare the students for Microsoft Certification exams 70-642 and 70-643. Students should take this course concurrently with CIS-2370 Windows Enterprise Network Infrastructure. **Prerequisite:** CIS 2310.

**Expected Course Learning Outcomes:**

Upon completion of this course, students should be able to:

1. Configure IPv4 and IPv6 Addressing and Services.
2. Configure Domain Name Resolution.
3. Configure Dynamic Host Configuration Protocol.
4. Configure Network Access and Network Security.
5. Configure File and Print Services.
6. Monitor and Manage Windows Network Infrastructure.
7. Explain Windows Hypervisor Virtualization.
8. Configure and Deploy Web Services.
9. Configure a VPN connection.
11. Configure and Manage Terminal Services.
12. Configure Windows High Availability Failover Cluster.
13. Configure Windows High Availability Network Load Balancing.
14. Explain Windows SharePoint Services.
15. Explain Windows Storage Services.
16. Configure Windows Routing Services.
17. Configure Windows Key Management Services.

**Expectations:** Students are expected to read the chapters outlined in the syllabus prior to the lecture, and to perform the lab exercises. Students should expect to spend up to 6-8 hours outside of class per week. Students are expected to have a good understanding of the Windows environment, creating directory, changing directory and directory structure.

**Grading:** There are 1000 points to be earned from class participation assignments, lab works, research projects, quizzes, chapter tests, and final exams. Your letter grade will be based on the following grading scale:

<b>Point/Grade Scale:</b>	<b>A</b>	<b>90</b>	<b>or</b>	<b>Above</b>
	<b>B</b>	<b>80</b>	<b>-</b>	<b>89</b>
	<b>C</b>	<b>70</b>	<b>-</b>	<b>79</b>
	<b>D</b>	<b>60</b>	<b>-</b>	<b>69</b>
	<b>F</b>	<b>Below 60</b>		

Attendance - will be used to help resolve tear-drop borderline course grades.



Description	Percent
Tests – Exams	75
Lab assignments, researches, projects	20
Homework, quizzes and class participation	5
Possible Total:	100

**Exams/Tests** are announced in advance and must be taken on the date specified. In general, there is no make up test. *In the unlikely event you miss a test due to extreme emergency make up is possible. Authoritative proof of the emergency is required. Having to work, car problems, childcare problems are not valid excuses. **There is NO guarantee that you will be given the opportunity to take the make-up exam. Make-up is possible only at the instructor's convenient even if it inconvenient you.*** Make-up test is available only one time per semester. All make-up tests must be taken within 10 calendar days after the test date; *there will be no exception to this policy.* All students **must** take the final exam on the day that it is given. The instructor must submit the final grade to the college on time for report card production, so there is no make-up for the final. A zero will be given if you miss the final. Should you know in advance that you would miss a test (except for the final exam), arrangements may be made to take it ahead of time (if the instructor deems it possible to do so). If you are late for class, no additional time will be given. ***Once you start the test, you must complete the test before leaving the class. Unless otherwise noted, there will be class after the test.***

**General Guidelines for Assignments:** Assignment means any project, homework or class assignment.

- **Due** at the *start of class* on the due date. It's your responsibility to hand-in your assignment. Do not wait for me to collect your homework. Any assignment not turned in when it is due is late, regardless of the reason that it is late, no tears, no excuses, and no exceptions.
- **Late** assignment may be turned in for reduced credit. To receive any credit. A late project must be turned in by the "late-turn-in" date, one week after it was due. **Ten-percentage point** (one letter grade) will be taken off for all late projects and homework assignments, regardless of reasons.
- **Hand-written** work will **not** be accepted, do not turn-in hand-written work; It shows that you didn't read the syllabus. Assignment must be typed, spell checked and grammar checked.
- **Multi-pages** assignment must be stapled. Invisible or imaginary staple, such as folding the pages at the corner, using chewing gum or spit, is **not** acceptable. Five-percentage point will be taken off for unstapled multi-pages assignment.
- **Folder** must be used when the assignment requires a folder or when a diskette is submitted with the assignment. All projects must be submitted in an approved folder (a 9"x11.5" folder with pockets). On the outside of the folder, print your name, the course name, meeting days/times, and the name of your instructor.
- **Diskettes** that you turn-in with the assignment must be secured in some fashion so that it does not fall out of the folder. It should contain only those files, which are part of the assignment. Make sure that the disk has an external label on it, which includes your name, the course name, and my name.



**Others** points include evaluation of student class participation, class and homework assignments, lab assignments, attendance, and quizzes.

**Quizzes** are **unannounced**. Quizzes will be given at the start or at the end of the class. If you are late for class, no additional time will be given. **There is no make-up**. Most of the quiz questions/answers come directly from the required reading assignments for the class session or from the class lectures following the previous quiz.

**Extra credit projects:** There is no extra credit project.

**Disability Support Services:** 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.

**Code of Conduct:** 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 this instance syllabus academic year Student Handbook for a complete explanation of the code of conduct, including the procedure for dealing with disruptive student behavior.

**Code of Academic Integrity:** The Prince George's Community 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 recently approved Code of Academic Integrity will be sent to all enrolled students early in the Spring 2006 semester and posted on the college's website.

**Caveat Concerning Cheating:** Copying versus helping: It is a very simple matter to copy someone else's work or to ask a friend to do the assignment for you. It is more difficult to ask that friend to help you understand the concepts and then assist in correcting your work. The former is cheating; the latter is legitimate student-to-student tutoring. The former teaches you nothing, though it may get you a perfect score on a given assignment; the latter improves your ability to tackle the next project, the next exam, and the next assignment after that. I discourage cheating, I do encourage you to work with each other to improve your understanding, that is, to tutor and assist each other. I expect that you will always be able to explain your work. If you cannot explain it, I will assume that you didn't do it, and I will grade it accordingly. If you are unsure of the difference between helping and cheating, it is better to err on the side of caution.



**CIS Information Sheet:** Students can pick the CIS Information Sheet at the College Life Office in Largo Student Center (near the bookstore). All official policies relating to students are in the information sheet. It will be available the first two weeks of class.

**Student Information Handbook:** The Prince George's Community College Student Handbook contains official policies and procedures regarding student conduct, academic integrity, and related matters. You are responsible for conducting yourself in accordance with those policies. The Student Handbook also contains a wealth of information designed to help students achieve success. Please pick up your free copy from the College Life Office in the Largo Student Center (near the bookstore).

### **Class Policies:**

1. Attendance is necessary in a course of this type. You are expected to be **on time** and are responsible for all material covered in the lecture and in the book. Attendance will be taken and recorded. You must sign the attendance sheet. In case of unavoidable absence, it is your responsibility to get that class's lecture material, discussion of tests, projects, etc., from another student.
2. Occasional tardiness sometimes cannot be avoided. Habitual tardiness is disruptive and will not be tolerated. In the event of unavoidable lateness, quietly slip into the room so as not to disturb the class.
3. Students may not have guests in the classroom. For those with children, this applies directly to you. For insurance reasons, *children must not be brought to the classroom!* If "child issues" prevent you from coming to class, please make arrangement to get lecture notes and assignments from another student.
4. No food and drink are allowed in the classroom doubling as the computer lab.
5. Put trash in the appropriate container. Put recyclable white paper in white paper recycle bin.
6. **Do not** roll your chair in the lab.
7. **Do not** use the class computer as your multimedia media to listen to music. Listening to music/radio is **not** allowed during class time.
8. Please turn cellular phones, pagers or other electronic equipment off, or to a silent setting while in class.
9. You may tape record lecture if the process does not disturb the professional atmosphere of the class.
10. Students must respect me as well as others in the class by maintaining an environment conducive to a high learning experience. This includes respecting one another's learning pace and style.
11. During lecture you are not to use the computer unless you are instructed to do so.
12. **Do not** surf the Internet during class lecture or lab.
13. Once the class is in session, your browsers must not contain any web contents external to the classroom. First violation will be a warning. Each additional violation will result in 5 points deduction from your cumulative score. *There will be no exception.*



14. If you are attending class, please remain until dismissed. If you need to leave early for whatever reason, please mention this to me at the start of class, and sit near an exit in order to slip out with minimum disruption. **Leaving early without permission affects your grade.**
15. After I have gone over the syllabus in details with you in class, you will receive five homework bonus points if you do not ask any question during the semester and the answer to the question can be found in the syllabus.
16. Students are expected to live up to the standard of PGCC Code of Conduct (see Student Handbook). The Student Handbook contains official policies and procedures regarding student conduct, academic integrity, and related matters. You are responsible for conducting yourself in accordance with those policies. The Student Handbook also contains a wealth of information designed to help students achieve success. The Student Handbook is available free of charge from the College Life Office in the Largo Student Center (near the book store). *Academic dishonesty will not be tolerated nor will disruptions to the academic process.*

### **Computer Lab Policies and Procedures for students using computers with internal hard drive in the lab:**

Most CIS classes have some time scheduled in a computer lab. Whether you are in a class where you have all or part of it regularly scheduled in a lab, or in CIS 101 where you will spend some of your class meetings in the lab, please notes the following policies regarding lab use:

- Lab classrooms on the second floor of Lanham will be opened by [faculty](#) shortly before the class starting time.
- Students may not remain in the lab when class is over unless the instructor is present. The instructor should ensure that students leave the room and the door is closed and locked when he/she leaves.
- Food, drink, *guests*, and cell phone usage are **not** allowed in labs.
- Know how to preview output on the screen for the software you are using. Ask your instructor, if necessary. Print only when necessary, after making changes and corrections based on screen output. Help us save paper and money!
- When you're finished working and preparing to leave the lab, save and close your file and exit the software you're working in. **Do not shut down or turn off the computer.**
- If you have any problems with hardware or software in the lab classrooms, tell your instructor. He/she will report them to the lab staff.

When you want to do computer work outside of class time, go to the open lab in Bladen Hall, Room 104.

### **Computer Lab Policies and Procedures for students using computer with removable hard drive in the classroom:**



- Students may not remain in the lab when class is over unless the instructor is present. The instructor should ensure that students leave the room and the door is closed and locked when he/she leaves.
- Food, drink, *guests*, and cell phone usage are **not** allowed in labs.
- Print only when necessary, after making changes and corrections based on screen output. Help us save paper and money!
- When you're finished working and preparing to leave the classroom lab, save and close your file and exit the software you're working in. **Shut down and turn off the computer and the monitor.**
- If you have any problems with hardware or software in the lab classrooms, tell your instructor. He/she will report them to the lab staff.

Open classroom lab hours are posted at the door. Please refer to the posted schedule for day and time. Reading the syllabus is a homework assignment, please put your name on the syllabus and bring it to the instructor for your homework points.

**Role of Lab Technicians:** The technicians in the PGCC computer labs are there to assist students with the use of the computers and software. That involves such help as how to turn on the computer, load a particular program and give its basic commands (such as saving and printing), and possible hardware problems.

Lab technicians are not to provide more than limited help in debugging, problem-solving and program development. Additional assistance in the understanding of concepts and assignments is available from the course instructor and, for many courses, from the Tutoring Center located in Bladen Hall, Room 107.

CIS students are advised to allow sufficient time to develop and complete their projects. They should read through their assignments and plan their projects or programs prior to getting on the computers. Students are expected to refer to class notes, project specifications, help screens, and the course textbook for additional assistance. Also, be sure to ask questions in class or during office hours if you do not understand something or want further explanation.

**The Tutoring Center and the Writing Center:** The Tutoring and Writing Centers, both located on the first floor of Bladen Hall, provide free assistance to PGCC students. It is expected that there will be tutors available for at least CIS 101 and 113. Call 301-322-0748 or go to Bladen Hall, Room 107 to check on specific tutoring schedules and make appointments.

**College Closings:** If an emergency develops requiring school closing, the following radio stations will be asked to announce the closings: WMAL, WPGC, WRC, WTOP, WAMU, WAVA, WASH, WHUR, WWMX, and WGAY. The following TV stations will also be asked to announce the closing: WRC (4), WTTG (5), WJLA (7), WUSA (9), and News Channel 8. You may also call the college's general number, 301-336-6000, where information about closings will be posted. **Please note that the college will have its own announcement which is separate from that of the Prince George's County Public Schools.**



**Open Computer Lab and Printer Services:** All computer-enabled and printer service areas are QUIET LEARNING-CENTERED ENVIRONMENTS. The Open Computer Lab is located on the first floor of Bladen Hall, Room 104, and is available for walk-in use. B102, B103D/E will be utilized as computer labs; however, may close earlier depending on volume of customers and available support staff. Users are required to establish and login with MYPGCC user accounts and read the “Acceptable Use Guidelines”. These guidelines are established to provide an environment conducive to learning. Violation of standards may result in denied access to college computing resources and may be subject to other penalties and disciplinary action. A printed copy of the guidelines can be obtained from the Bladen Hall 104 print area. Each print job is limited to 20 pages. No food, drink, guests, and cell phone usage are allowed in the open lab and printer areas. Users must begin closing all programs and log off user accounts 15 minutes prior to the close of business. Printers will be turned off promptly at 10:15 p.m. M-F and 4:45 p.m. Sat./Sun. The system may automatically restart or shutdown for close of business; therefore, users are urged to save their work and close all programs in a timely manner. If there are any questions, please call 301-322-0999.

**Lab hours are as follows:**

Monday-Friday	8:00 a.m.-10:15 p.m.
Saturday	8:00 a.m.- 4:45 p.m.
Sunday	12:00 noon - 4:45 p.m.

**College Bookstore:** The bookstore is located in Largo Student Center, telephone number 301-322-0912. Hours are Mon.-Tues. 9:00 a.m.-7 p.m., Wed.-Thurs. 9:00 a.m.-5:30 p.m., Fri. 9:00 a.m.-4:00 p.m.



### Academic Calendar Fall 2009 (Credit)

You should check the college official calendar for accuracy  
 These dates apply to classes scheduled for sixteen weeks during the Fall 2009 credit semester.

Day	Month/Dates	Events
<b>Monday</b>	<b>August 31</b>	<b>Classes begin for Fall 2009</b>
<b>Sat.-Mon.</b>	<b>September 5-7</b>	<b>COLLEGE CLOSED – Labor Day</b>
Wednesday	September 9	Last day to drop with a refund from 15-week classes
Tuesday	September 15	Last day to apply for fall graduation
Friday	September 25	Last day to change credit to audit or audit to credit
Wednesday	October 7	Last day to withdraw from first half-semester classes
Wednesday	October 21	Midterm exams; end of first half-semester classes
<i>Thursday</i>	<i>October 22</i>	<i>Beginning of second half-semester classes</i>
<b>Tuesday</b>	<b>October 27</b>	<b>Professional Development Day - No classes</b>
Friday	November 20	Last day to withdraw from 15-week classes
<b>Wed.-Sun.</b>	<b>Nov. 25-29</b>	<b>COLLEGE CLOSED -Thanksgiving Vacation</b>
Monday	November 30	College Re-opens and classes resume
<i>Monday</i>	<i>November 30</i>	<i>Last day to withdraw from second half-semester classes.</i>
Thursday	December 10	Last day of regular classes for fall semester
<b>Friday-Thurs</b>	<b>Dec. 11-17</b>	<b>Final examination period/last week of classes</b>
	Dec. 19-Jan. 3	COLLEGE CLOSED - Winter break
<b>Get ahead of the curve, sign-up for spring 2010 classes</b>		



## TIPS FOR ACADEMIC SUCCESS

- Take responsibility for your own learning!
- Attend all classes, including lab sessions.
- Read the textbook prior to each class meeting.
- Ask questions and participate in class discussions.
- See your instructor outside of class if you have other questions or concerns.
- Read assignments carefully; start projects right away.
- Look over class notes between classes.
- Get the name and phone number (or email address) of a classmate to call if you miss class or have questions.

Name: \_\_\_\_\_

Email address: \_\_\_\_\_

Phone number: \_\_\_\_\_

<\*>

Name: \_\_\_\_\_

Email address: \_\_\_\_\_

Phone number: \_\_\_\_\_



**CIS 2320-LE01 – Wednesday 6:00 – 7:40 and Friday – 8:00 – 9:40pm  
Implementing, Managing and Maintaining Windows Network Infrastructure**

This is a tentative schedule, subject to change due to class pace, unexpected class cancellations and other factors.

Text Books		MCTS Win2k8 Network Infrastructure Configuration Study Guide – 70-642 MCTS Win2k8 Application Infrastructure Study Guide – 70-643
Session/Date		(Chapter) Title - Objective
1	Sept 2 Sept 4	1. Understanding Windows Server 2008 Networking 8. Using Virtualization in Windows 2008
2	Sept. 9 Sept. 11	2. TCP/IP (IPv4 and IPv6)
3	Sept. 16 Sept. 18	3. DNS (Domain Name System)
4	Sept. 23 Sept. 25	4. DHCP (Dynamic Host Configuration Protocol)
5	Sept. 30 Oct. 2	<b>Exam 1</b> 5. Routing and Remote Access
6	Oct. 7 Oct. 9	6. Remote Access Services (VPN)
7	Oct. 14 Oct. 16	7. Security for Remote Access Services 9. Deploying Servers
8	Oct. 21 Oct. 23	8. Managing File and Print Services 1. Windows 2008 Storage Services
9	Oct. 28 Oct. 30	2. Exploring Terminal Services in Windows Server 2008 3. Terminal Services Licensing, Advance Configuration and Monitoring TS
10	Nov. 4 Nov. 6	<b>Exam 2</b> 4. Configuring Web Services Infrastructure
11	Nov. 11 Nov. 13	5. Advance Web Services Infrastructure Configuration 6. Configuring Additional Communication Services (Fax) – Read
12	Nov. 18 Nov. 20	7. Configuring Windows SharePoint Services (WSS)
<b>November 25-29 COLLEGE CLOSED - Thanksgiving Vacation</b>		
13	Dec. 2 Dec. 4	10. Configuring High Availability (Failover Clustering and Network Load Balancing)
14	Dec. 9 Dec. 11	11. Monitoring Windows Server 2008 for High Availability
15	Dec. 16	<b>Final Exam – 6:00pm</b>