



MARYMOUNT UNIVERSITY

School of Business Administration
2018-19 Spring Semester

COURSE SYLLABUS

Course Number IT-520-A	Course Title ENTERPRISE INFRASTRUCTURE AND NETWORKS		
Fall Semester	Spring Semester XXX	Summer Semester	Credit Hours 3
Name of Instructor: Dr. Ibrahim Waziri Jr.			
Meeting Day, Time, and Room Number 01/14/19 – 05/11/19, Mon, 6:30pm – 9:15pm, Room: Ballston 4022			
Office Hours, Location, Phone: Available by e-mail or appointment as needed			
E-mail: [REDACTED]			
Class webpage: canvas			
Course Description: Covers the technology and management of the various components of today's enterprise IT infrastructure, including hardware, software, and networks. The course examines network architectures, network protocols, network management, IT support models, performance metrics, and operating systems. It also considers data communication and messaging in a global context.			

UNIVERSITY STATEMENTS

ACADEMIC INTEGRITY

By accepting this syllabus, you pledge to uphold the principles of Academic Integrity expressed by the Marymount University Community. You agree to observe these principles yourself and to defend them against abuse by others. Items submitted for this course may be submitted to TurnItIn.com for analysis.

STUDENT COPYRIGHT INFORMATION

For the benefit of current and future students, work in this course may be used for educational critique, demonstrations, samples, presentations, and verification. Outside of these uses, work shall not be sold, copied, broadcast, or distributed for profit without student consent.

ACCOMMODATIONS AND ACCESSIBILITY CONCERNS

Please address any special challenges or needs with the instructor at the beginning of the semester.

Students with Disabilities

If you are seeking accommodations (class/course adjustments) for a long-term or short-term (less than 6 months) disability, you must do the following:

- 1) Register as a student with a disability with Student Access Services (SAS) in the Center for Teaching and Learning. This process takes time, so you should engage it as early as possible.
- 2) Once registered with SAS, you may be approved for accommodations by SAS. Approved accommodations will be listed on a "Faculty Contact Sheet" (FCS). This is important because not all accommodation requests are approved.
- 3) After receiving the FCS, meet with each of your instructors as soon as possible to review your accommodations, and have them sign the FCS. This document will help you and your instructors develop a plan for providing the approved accommodations.
- 4) Let SAS know if there are any concerns about the way your accommodations are being implemented by your instructors.

Please remember that:

- 1) Accommodations for disabling conditions cannot be granted if you do not follow the above steps.
- 2) Accommodations are not retroactive. That is, accommodations can only be applied to a course *after* they have been approved by SAS and put into motion by *you* through working with your instructors.
- 3) Appointments with the SAS staff are scheduled through the Starfish "Success Network" tab in Canvas. For more information, check the SAS website, e-mail access@marymount.edu, or call 703-284-1538.

Students with Temporary Challenges

Temporary challenges due to accident, illness, etc. that may result in missing class or navigating general campus access do not fall under the purview of SAS. If you experience something of this nature, please start by alerting your instructors. The Dean of Student Success may be involved in alerting instructors in extreme cases.

EMERGENCY NOTIFICATION POLICY

When students are absent due to a crisis situation or unexpected, serious illness and unable to contact their individual instructors directly, the Division of Student Affairs can send out an Emergency Notification. To initiate an Emergency Notification, students should contact the **Division of Student Affairs 703-284-1615** or studentaffairs@marymount.edu. Emergency Notifications are **NOT** appropriate for non-emergency situations (e.g. car problems, planned absences, minor illnesses, or a past absence); are **NOT** a request or mandate to excuse an absence, which is at the sole discretion of the instructor; and are **NOT** a requirement for student absences. If a student contacts instructors about an emergency situation directly, it is not necessary to involve the Division of Student Affairs as arrangements are made to resolve the absence.

For non-emergency absences, students should inform their instructors directly.

ACCESS TO STUDENT WORK

Copies of your work in this course including copies of any submitted papers and your portfolios may be kept on file for institutional research, assessment and accreditation purposes. All work used for these purposes will be submitted anonymously.

UNIVERSITY POLICY ON WEATHER AND EMERGENCY CLOSINGS

Weather and Emergency closings are announced on Marymount's web site: www.marymount.edu, through **MUAlerts**, area radio stations, and TV stations. You may also call the **Weather and Emergency Hotline at (703) 526-6888** for current status. Unless otherwise advised by local media or by official bulletins listed above, students are expected to report for class as near normal time as possible on days when weather conditions are adverse. Decisions as to inclement closing or delayed opening are not generally made before 6:00 AM and by 3:00 PM for evening classes of the working day. Emergency closing could occur at any time making **MUAlerts** the most timely announcement mechanism. **Students are expected to attend class if the University is not officially closed.** If the University is closed, course content and assignments will still be covered as directed by the course instructor. Please look for communication from course instructor (e.g., Canvas) for information on course work during periods in which the University is closed.

1. BROAD PURPOSE OF COURSE

This course covers the technology and management of the various components of today's enterprise IT infrastructure, including hardware, software, and networks. The course examines network architectures, network protocols, network management, IT support models, performance metrics, and operating systems. It also considers data communication and messaging in a global context. (3)
Prerequisite: IT 515

2. COURSE OBJECTIVES: Upon successful completion of this course students will be expected to:

1. Explain the concepts of telecommunications and telecommunications management;
2. Examine the understanding of the body of theory relevant to computer networks;
3. Conceptualize and logically design telecommunications systems and networking for an organization;
4. Develop a research orientation toward telecommunications and networking, and their application to organizations and business enterprises;
5. Develop an awareness of the evolution and current state of this industry through a study of the trade publications;
6. Determine the legislative and regulatory requirements for telecommunications companies;
7. Justify a specific network design through a detailed cost-benefit analysis

3. TEACHING METHOD

Traditional course delivery consists of lectures, multimedia, class discussions, presentations, projects, and/or group activities. We will follow the book's "Top-down" approach, which focuses first on the application layer and then works its way down towards the physical layer. We will also use the Internet's architecture (four layer) and protocols as primary vehicles for studying fundamental computer networking concepts as they apply at the enterprise level. Students are encouraged to participate in discussions on current developments in enterprise architecture, recent legislative and regulatory requirements for telecommunications companies and the current state of the industry.

Use of Electronics: During this class, the use of laptop computers or iPads is permitted. However, any student found to be using the device for activities other than class work will be barred from further in-class use of any device. **The use of cell phones is not encouraged and must be set to silent/vibrate during the class meeting time.**

4. GRADING POLICY

During the semester, there will be multiple lab assignments centered on Wireshark lab exercises, a mid-term exam (closed books & notes), a take home exam, a final exam (closed book & notes), and a case study (details forthcoming). Details of each task will also be posted on Canvas. The breakdown of the grading policy is as follows: All grades will be on Canvas.

Category:	Grade Percentage	Percentage:	Letter Grade
Wireshark Labs	40%	94-100%	A
Project Presentation 1	10%	90-93%	A-
Project Presentation 2	20%	87-89%	B+
Finals (Cumulative)	25%	84-86%	B
In-class/Online Participation	5%	80-83%	B-
Total:	100%	77-79%	C+
		70-76%	C
		0-69%	F

Jan. 22, 2019 is the last day to late register, add, or drop a class without academic record

March 22, 2019 is the last day to withdraw from a class with a grade of W

Late Assignment Policy: Late work will be accepted but only if written (email) approval of the instructor is received in advance.

Final Exams: The final exam will be based on the textbook.

Project: Project expectation would be discussed in class.

5. CLASS SCHEDULE

The weekly coverage might change as it depends on the progress of the class. However, you must keep up with the readings and assignments.

Date	Topics	Due
01/14	Online Class – Introduction – Review of Syllabus - Instructions on Canvas	
01/21	Labor Day Holiday (No Class)	
01/28	Chapter 1: Computer Networks and the Internet	
02/04	Chapter 2: Application Layer	Lab 1
02/11	Chapter 3: Transport Layer	Lab 2
02/18	Chapter 4: The Network Layer: Data Plane	Lab 3
02/25	Chapter 5: The Network Layer: Control Plane	Lab 4
03/04	Project Presentation - 1	
03/11	Spring Break	
03/18	Chapter 6: The Link Layer and LANs	Lab 5
03/25	Chapter 7: Wireless and Mobile Networks	Lab 6
04/01	Chapter 8: Security in Computer Networks	Lab 7
04/08	Chapter 9: Multimedia Networking	Lab 8
04/15	Project Presentation - 2	
04/22	Easter Holiday – (Make-up class on 04/23) - Fill in lecture gaps.	
04/29	Finals Review	
05/06	Finals Exams	

6. REQUIRED TEXT (REQUIRED)

Computer Networking: A Top Down Approach - 7e

Kurose & Ross

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ISBN-10: 0133594149