MARYMOUNT UNIVERSITY

School of Business Administration
2017-18 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 01/16/18 – 05/08/18, Tue, 6:30pm – 9:15pm, Room: Ballston 6088			
Office Hours, Location, Phone: Available by e-mail or appointment as needed			
E-mail: [redacted] **Class webpage:**			

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 seeking accommodations for a disability must complete the required steps for obtaining a Faculty Contact Sheet from the Office of Student Access Services (SAS). Students are then responsible for meeting with their instructors at the beginning of the semester to review and sign the Faculty Contact Sheet and develop a specific plan for providing the accommodations listed. **Accommodations cannot be granted to students who fail to follow this process.** Appointments with the SAS director can be 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 to reach the SAS director or an academic support coordinator.

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 student.affairs@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 confidentially.

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. This online-delivery version of the course will utilize the text/chapter readings, laboratory exercises, quizzes and exams. 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 (five 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*
Wireshark Labs	45%
Midterm	10%
Finals Part 1 (labs)	25%
Finals Part 2	15%
Class Participation	5%
Total:	100%

Percentage:	*Letter Grade*
94-100%	A
90-93%	A-
87-89%	B+
84-86%	B
80-83%	B-
77-79%	C+
70-76%	C
0-69%	F

Tuesday, Jan. 23, 2018 is the last day to late register
Friday, Feb. 16, 2018 is the last day to withdraw from a class without academic record
Friday, March 23, 2018 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 and Wireshark labs.

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
01/06	Introduction – Review of Syllabus	
01/23	Chapter 1: Computer Networks and the Internet Lab 1	
01/30	Chapter 2: Application Layer Lab 2	Lab 1
02/06	Chapter 3: Transport Layer Lab 3	Lab 2
02/13	Chapter 4: The Network Layer: Data Plane Lab 4	Lab 3
02/20	Chapter 5: The Network Layer: Control Plane	Lab 4
02/27	Midterm Lab 5	
03/06	No class: Conference	
03/13	Spring Break	
03/20	Chapter 6: The Link Layer and LANs Lab 6	Lab 5
03/27	No class: Easter Break	
04/03	Chapter 7: Wireless and Mobile Networks Lab 7	Lab 6
04/10	Chapter 8: Security in Computer Networks Lab 8	Lab 7
04/17	Chapter 9: Multimedia Networking Lab 9	Lab 8
04/24	Finals Review	Lab 9
05/01	Finals (Part 1: Wireshark Labs)	
05/08	**Finals Exams**	

6. REQUIRED TEXT (REQUIRED)

Computer Networking: A Top Down Approach - 7e
Kurose & Ross
ISBN-13: 9780133594140
ISBN-10: 0133594149