

SYLLABUS

(On Demand)

Course: CIT 372 Telecommunications II

Faculty: Dr. Mark Ciampa

Course Catalog Description

Introduction to software elements of the computer, including operating systems, tools, and system utilities. Emphasis will be on the most widely deployed desktop and server operating systems.

Topics and Objectives

Upon completion of this course, the student shall be able to:	How the student will develop outcomes	How the student will be assessed the learning on these learning outcomes
Define the terms involved and explain how TCP/IP protocols, sockets, and ports are identified	Readings, textbook activities, lab simulations, chapter exams	Textbook activities, lab simulations, chapter exams, final exam
Recognize and describe IPv4 addressing and address classes, describe the nature of IPv4 address limitations, and define the terms subnet, supernet, subnetting, and supernetting	Readings, textbook activities, lab simulations, chapter exams	Textbook activities, lab simulations, chapter exams, final exam
Identify the various fields and features that make up an IPv4 header	Readings, textbook activities, lab simulations, chapter exams	Textbook activities, lab simulations, chapter exams, final exam
Explain the fundamental concepts associated with Data Link layer protocols that operate over different network link types	Readings, textbook activities, lab simulations, chapter exams	Textbook activities, lab simulations, chapter exams, final exam

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Upon completion of this course, the student shall be able to:	How the student will develop outcomes	How the student will be assessed the learning on these learning outcomes
Explain the basics of the Internet Control Message Protocol (ICMP) and the roles it plays on networks	Readings, textbook activities, lab simulations, chapter exams	Textbook activities, lab simulations, chapter exams, final exam
Describe Neighbor Discovery in IPv6 and how it compares to ARP in IPv4 Explain the basic services	Readings, textbook activities, lab simulations, chapter exams Readings, textbook	Textbook activities, lab simulations, chapter exams, final exam Textbook activities, lab
that DHCP/DHCPv6 offers to its clients and explain its background	activities, lab simulations, chapter exams	simulations, chapter exams, final exam
Explain how name resolution works in IPv4 networks, including the DNS database structure, the DNS namespace, DNS database records, the delegation of DNS authority, and the different types of DNS servers, and explain how name servers work	Readings, textbook activities, lab simulations, chapter exams	Textbook activities, lab simulations, chapter exams, final exam
Explain, in detail, the header fields and functions of the UDP packet, as well as port numbers, processes, and how UDP behaves when used as a	Readings, textbook activities, lab simulations, chapter exams	Textbook activities, lab simulations, chapter exams, final exam
Explain hybrid IPv4/IPv6 network and node types, such as basic hybrid, nested hybrid, and true hybrid	Readings, textbook activities, lab simulations, chapter exams	Textbook activities, lab simulations, chapter exams, final exam
Describe the various methods that allow IPv4 and IPv6 networks to interact, including dual stack and tunneling through the IPv4 cloud	Readings, textbook activities, lab simulations, chapter exams	Textbook activities, lab simulations, chapter exams, final exam

Upon completion of this course, the student shall	How the student will develop outcomes	How the student will be assessed the learning on	
be able to:		these learning outcomes	
Explain how an IPv6	Readings, textbook	Textbook activities, lab simulations, chapter	
transition address works	activities, lab simulations,		
	chapter exams	exams, final exam	
Explain basic concepts and	Readings, textbook	Textbook activities, lab	
principles for maintaining	activities, lab simulations,	simulations, chapter	
computer and network	chapter exams	exams, final exam	
security			

Welcome

Welcome to CIT 372. I hope you will have a rewarding experience in this course.

Class Location/Times

This class is delivered in an online format. Because it contains a significant number of online assignments, it will be necessary for students to have access to reliable Internet connections. The class is available at the following website: https://blackboard.wku.edu.

Required Material(s)

- 1. Textbook: Guide to TCP/IP, 4th Edition, by Jeffrey L. Carrell, Laura Chappell, Ed Tittel, & James Pyles (ISBN-13: 9781133019862).
- 2. Software: The software used in this course is Wireshark, which is available as a free download from www.wireshark.org.

Instructor Information

Dr. Mark Ciampa #228 Grise Hall 270/745.8728

Mark.ciampa@wku.edu

Office hours: Mondays 8:30 AM - 2:00 PM

In order for the instructor to promptly respond to student email be sure that your email subject line is formatted as: CIT 372 - Your Name - Email Subject ("CIT 310 – John Smith – Question on Chapter 2 Practice Test"). Without this subject line your instructor will not be able to respond promptly. All emails received during the week will be answered within 24 hours; emails received on the weekend may be answered within 48 hours.

Assignments & Point Values

Your grade for this course will be determined according to the following scheme:

Activities Percentag	ge
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Assessments (Practice tests, chapter exams)	40%
Activities (Review questions, Wireshark projects, case projects)	40%
Course project	5%
Final exam	15%

The grading scale that will be used is:

A: 100% - 90%

B: 89% - 80%

• C: 79% - 70%

• D: 69% - 60%

• F: 59% and below

Academic Dates

To determine important academic dates such as the last day to drop with a W, or the final exam schedule, please see http://www.wku.edu/registrar/academic calendars/

Activities

Below is a summary of the primary activities that you will perform in this course; the list of specific activities (such as which textbook chapters to read and which assignments to complete) are contained in the document entitled "Course Activities." A brief explanation of the activity and any deliverable associated with it are as follows:

- 1. READ the textbook chapter You will read textbook chapters as assigned. **Deliverable:** none.
- 2. VIEW the chapter notes You will review summaries of the chapter material. **Deliverable:** none.
- 3. ANSWER the online chapter review questions You will answer the multiple choice and true/false review questions found at the end of each chapter. **Deliverable:** You will submit your answers through the online Blackboard test format. When finished you will receive immediate feedback regarding any questions that you missed.
- 4. PERFORM the Hands-On projects You will use Wireshark to complete labs that capture packets and analyze them. **Deliverable:** See the document "Assignment Submission Information" for the details regarding how to submit the assignments.
- 5. PERFORM the Case projects You will complete a case project that utilizes a practical networking scenario. **Deliverable:** See the document "Assignment Submission Information" for the details regarding how to submit the assignments.
- 6. TAKE the chapter practice test You will take a practice test for each chapter. Your score must be over 70%. You may retake this test an unlimited number of

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- times but only the last score will be recorded. **Deliverable:** The score of your test will be recorded automatically.
- 7. TAKE the chapter exam You will take a chapter test for each chapter. This test can only be taken one time. **Deliverable:** The score of your test will be recorded automatically.
- 8. COMPLETE course project A course project that utilizes the knowledge gained in the course will be completed. **Deliverable:** See the "Course Project" document for detailed information.
- 9. TAKE final exam The Final Exam is comprehensive and you may not use your book or notes. **Deliverable:** The Final Exam must be taken in a proctored environment.

Assignments must be submitted in the order of the chapters. The material on Blackboard is designed to keep you on track as well as ensure that you meet the minimum requirements during the course. Practice tests in Blackboard will not appear until you have submitted your review questions (for example, the Practice Test on Chapter 1 will not appear until you have submitted the online review questions for Chapter 1). Chapter exams in Blackboard will not appear until you have scored over 70% on your average of chapter practice test attempts.

Final Exams

<u>All</u> CIT exams must be proctored. While you may be able to use the proctor of your choice at the location of your choice, you must register with the WKU testing center in order to have your proctor approved (see http://www.wku.edu/testing/ for more details). Note that you must pre-register with the testing center before taking the exam, which is usually no less than 10-days prior. I highly suggest that you register early

As the final exam is an assessment and not a learning activity, correct answers are not provided. However, if you wish to review your exam, it will made available to you. However, as with other on-campus final exams, you must know that student review can only be accomplished on-campus (Bowling Green), in a proctored environment, during a full term (fall and spring) following that of the exam's administration. This step is necessary to protect the integrity of the exam.

Attendance Policy

Because this is an online course there is no classroom attendance requirement. However, I strongly encourage you to remain actively involved in this course. Some suggestions for doing this are: 1) check your WKU email and Blackboard regularly for course announcements and information; 2) stay abreast of all due dates as they are added to the course schedule on Blackboard; 3) contribute regularly and effectively to the online discussions; 4) complete all work on time and to the very best of your ability.

Instructor Feedback

I will generally grade all submitted activities each Monday and post those grades once per week. The only exception to this is during the regular full semester final exam period at WKU: from the first day of final exams until grades are due ten days later I will NOT grade any submitted activities OR calculate any final grades.

Incompletes

All incomplete requests must follow school guidelines. See the University catalog.

Extra Credit

There is no extra credit or make-up work as the class assignments reflect what is required for successful completion of this course.

Academic Standards

I expect all students to support the same respect for individuals, commitment to issue and problem resolution, and open communication and feedback as in any learning environment.

Specifically, all students are expected to:

- Accept responsibility and accountability for all use actions and content posted to any online classroom, public meeting or personal inbox (email).
- Maintain the same ethical standards expected in a collaborative, academic environment.
- Demonstrate respect for all faculty, students, and staff regardless of age, race, gender, religion, national origin, veteran's status, disability, or sexual orientation.

In the online environment, the following will not be tolerated:

- Harmful, threatening, libelous, or abusive content
- Profanity of any kind
- Copyright infringement or violation of patent, trademark, proprietary information, or confidentiality agreements
- Misrepresentation of identity through alteration of inbox (email) names
- Posting unsolicited advertisements to public meetings or private inboxes (no spamming)
- Transferring computer viruses, intentionally or unintentionally, or other code that disrupts or interferes with other users' use of the online environment or personal computers, systems, or networks.

Honesty

I highly value academic honesty. A student must always submit work that represents his or her original words or ideas. If any words or ideas are used that do not represent the student's original words or ideas, then the student must cite all relevant sources. The student should also make it clear the extent to which such sources are used.

Words or ideas that require citation include, but are not limited to, all hardcopy or electronic publications, whether copyrighted or not, and all verbal or visual communication when the content of such communication clearly originates from an identifiable source.

All submissions to any public meeting or private mailbox fall within the scope of words and ideas that require citations if used by someone other than the original author.

Academic dishonesty in an Online learning environment could involve the following:

- Having a tutor or friend complete a portion of your assignments
- Having a reviewer make extensive revisions to an assignment
- Copying work submitted by another student to a public class meeting
- Using information from on-line information services without proper citation

Any of these practices could result in charges of academic dishonesty. Sanctions range from failing assignment or class grades to expulsion.

I consider academic honesty a very serious issue. I have, and will fail students that I discover are not adhering to the above guidelines.

Class Navigation

Go to http://blackboard.wku.edu and follow the login instructions (usually available by the first day of class). This site will be the primary means for quizzes, grades, announcements, exam and homework scores, reading materials, discussions, and other supplemental course information that you will need. Please be sure and check this site regularly.

Computer Access

This class requires each student to make use of several software packages, various other software tools and the Internet. All required resources are available either in the general Student Computer Labs across campus, on WKU Extended campuses, and typically, at public libraries. Lack of hardware, software and Internet connectivity at home to complete any assignment is not an acceptable reason for not completing work. You may work from any location you prefer (home, work, etc...), but you will need access to MS Office software.

Technology Issues

School servers are unavailable from time-to-time. Accordingly, I will accept e-mailed assignments to my personal mailbox for time-stamping purposes only. However, once Blackboard is available to you, in order to receive a grade, the assignment must be posted to the appropriate submission area.

Also, from time to time the Blackboard system will lock-up during a quiz or exam. If this happens, please contact me as soon as possible. I can only reset the exam, which means you will have to take it over (this includes final exams). If you wait until the last minute to take an exam, you may not be able to reset due to time limitations.

For comments/complaints about technology issues (for example, Blackboard exam problems), please contact the Office of the Chief Information Technology Officer (270-745-2243).

Cancellations

If you are dropped for any reason (lack of payment, etc.), your access to Blackboard may be terminated. In this event you will **NOT** be permitted to make up on-line course assignments/activities during the time you lost access to Blackboard.

Grievance Process

If you are unhappy with any aspect of the course, please contact me via email with a detailed explanation of the problem. I will do my best to help resolve the issue. If you are still unsatisfied, please contact the program coodinator, Dr. Mark Revels, at mark.revels@wku.edu.

Title IX Misconduct/Assault Statement

Western Kentucky University (WKU) is committed to supporting faculty, staff and students by upholdingWKU's Title IX Sexual Misconduct/Assault Policy (#0.2070) at https://wku.edu/eoo/documents/titleix/wkutitleixpolicyandgrievanceprocedure.pdf and Discrimination and Harassment Policy (#0.2040) at https://wku.edu/policies/hr policies/2040 discrimination harassment policy.pdf.

Under these policies, discrimination, harassment and/or sexual misconduct based on sex/gender are prohibited. If you experience an incident of sex/gender-based discrimination, harassment and/or sexual misconduct, you are encouraged to report it to the Title IX Coordinator, Andrea Anderson, 270-745-5398 or Title IX Investigators, Michael Crowe, 270-745-5429 or Joshua Hayes, 270-745-5121.

Please note that while you may report an incident of sex/gender based discrimination, harassment and/or sexual misconduct to a faculty member, WKU faculty are "Responsible Employees" of the University and MUST report what you share to WKU's Title IX Coordinator or Title IX Investigator. If you would like to speak with someone who

may be able to afford you confidentiality, you may contact WKU's Counseling and Testing Center at 270-745-3159.

ADA Accommodation Statement

In compliance with University policy, students with disabilities who require academic and/or auxiliary accommodations for this course must contact the Student Accessibility Resource Center located in Downing Student Union, 1074. SARC can be reached by phone number at 270-745-5004 [270-745-3030 TTY] or via email at sarc.connect@wku.edu . Please do not request accommodations directly from the professor or instructor without a faculty notification letter (FNL) from The Student Accessibility Resource Center.

On Demand Considerations

- The earliest that students can complete this course is seven weeks after it is started.
- Students on financial aid must complete this class in the semester in which it is started.
- Students not on financial aid must complete this course within nine months after it is started. An optional three-month extension may be granted. This extension is not granted by the instructor but must be negotiated with the office of WKU On Demand.
- Students will be allowed to submit four assessments per week. For this course student "assessments" will be interpreted as Hands-On projects and Case projects.
- The instructor will generally grade all submitted activities and post those grades once per week.
- Because students can enroll in this On Demand course at any time during the
 year all students will be starting and progressing at their own pace and not in
 step with all other students as in a regular class. Because students are at a
 different place in the material the instructor generally does not send out weekly
 emails to all students.
- Students should contact WKU On Demand with questions or for additional information (www.wku.edu/ondemand).