

**University of North Texas at Dallas**  
**Fall 2015**  
**SYLLABUS**

<b>CSCE 3530.030: Introduction to Computer Networks</b>		<b>3Hrs</b>
<b>Department of</b>	Mathematics & Information Sciences	<b>School of</b>
		Liberal Arts & Sciences
<b>Instructor Name:</b>	<i>Dr. Gerard Rambally</i>	
<b>Office Location:</b>	<i>DAL2-229</i>	
<b>Office Phone:</b>	<i>972-780-3093</i>	
<b>Email Address:</b>	<a href="mailto:gerard.rambally@untdallas.edu">gerard.rambally@untdallas.edu</a>	
<b>Office Hours:</b>	3:30 PM – 5:30 PM on Mondays, Tuesdays, and Wednesdays or by appointment.	
<b>Virtual Office Hours:</b>	Communicate with me by e-mail.	
<b>Classroom Location:</b>	N/A	
<b>Class Meeting Days &amp; Times:</b>	This is an online course, except for the three times that you must be present on campus to take the three exams.	
<b>Course Catalog Description:</b>	Introduction to data communications; asynchronous, synchronous, networks and current technology.	
<b>Prerequisites:</b>	CSCE 2610D - Assembly Language and Computer Organization or CSCE 3600D - Principles of Systems Programming	
<b>Co-requisites:</b>		
<b>Required Text:</b>	Comer, Douglas. <i>Computer Networks and Internets</i> . Fifth Edition. Pearson. ISBN: 0-13-606127-3.	
<b>Recommended Text and References:</b>		
<b>Access to Learning Resources:</b>	UNT Dallas Library: phone: (972) 338-1616; web: <a href="http://www.untdallas.edu/our-campus/library">http://www.untdallas.edu/our-campus/library</a> UNT Dallas Bookstore: phone: (972) 780-3652; e-mail: <a href="mailto:1012mgr@fhcg.follett.com">1012mgr@fhcg.follett.com</a>	
<b>Course Goals or Overview:</b>	This course answers the basic question “how do computer networks and internets operate?” in the broadest sense. It provides a comprehensive tour through all of networking that describes low-level details such as data transmission and wiring, network technologies such as LANs and WANs, internetworking protocols, and applications. It shows how protocols use the underlying hardware and how applications use the protocol stack to provide functionality for users.	
<b>Student Learning Outcomes:</b>	Upon successful completion of this course, the student will	
1	Demonstrate knowledge of a conceptual view of the role of computers in communications.	
2	Demonstrate knowledge of communication protocols in the Internet.	
3	Demonstrate knowledge of fundamental network programming.	
4	Demonstrate knowledge of different network architectures.	
5	Demonstrate knowledge of application protocols, and different routing and forwarding protocols.	

## Course Outline

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated in BlackBoard.

TOPICS	TIMELINE
1. Introduction and Overview of Networks 2. Client-Server Interaction	Week of 8/24/15
3. Internet Applications 4. Transmission Media	Week of 8/31/15
5. Transmission Modes 6. Modulation and Modems	Week of 9/7/15
7. Multiplexing and Demultiplexing	Week of 9/14/15
Exam 1	7:00 pm on 9/23/15 in Bld 2, Room 339 on the Dallas Campus
8. Access and Interconnection Technologies 9. Local Area Networks: Packets, Frames, Error Detection, and Topologies	Week of 9/28/15
10. Wired LAN Technology 11. Wireless Networking Technologies	Week of 10/5/15
12. Extending LANs 13. WAN Technologies and Dynamic Routing	Week of 10/12/15
14. Internetworking: Concepts, Architecture and Protocols	Week of 10/19/15
Exam 2	7:00 pm on 10/28/15 in Bld 2, Room 339 on the Dallas Campus
15. Internet Protocol Addresses 16. Datagram Forwarding	Week of 11/2/15
17. Support Protocols 18. IPv6	Week of 11/9/15
19. UDP: Datagram Transport Service 20. TCP: Reliable Transport Service	Week of 11/16/15
21. Internet Routing	Week of 11/23/15
Exam 3	7:00 pm on 12/2/15 in Bld 2, Room 339 on the Dallas Campus

## Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

### Grading Matrix:

Instrument	Value (points or percentages)	Total
Assignments	Assignments on each topic with variable weights. There will be a total of 9 assignments. These assignments will involve short answer questions and solving problems to apply the concepts discussed in each topic.	25%
Exam 1 (on campus)	25%	25%
Exam 2 (on campus)	25%	25%
Exam 3 (on campus)	25%	25%
<b>Total:</b>		<b>100%</b>

### Grade Determination:

- A = 90% or better
- B = 80 – 89 %
- C = 70 – 79 %
- D = 60 – 69 %
- F = less than 60%

## **University Policies and Procedures**

### **Students with Disabilities (ADA Compliance):**

*The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Any student requesting academic accommodations based on a disability is required to register with Disability Services each semester. A letter of verification for approved accommodations can be obtained from this office. Please be sure the letter is delivered to me as early in the semester as possible. Grades assigned before an accommodation is requested will not be changed as accommodations are not retroactive. Disability Services is located in the Student Life Office in DAL2, Suite 200 and is open 8:30a.m. – 5:00 p.m., Monday through Friday. The phone number is (972) 338-1775.*

### **Student Evaluation of Teaching Effectiveness Policy:**

*The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SETE to be an important part of your participation in this class.*

### **Assignment Policy:**

*All assignments are due in class on the due dates stated on the assignments. No late assignments will be accepted, except for documented emergencies. All assignments are to be done individually unless stated otherwise on the assignment.*

### **Exam Policy:**

*Exams should be taken as scheduled. No makeup examinations will be allowed, except for documented emergencies (See Student Handbook).*

### **Academic Integrity:**

*Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Student Code of Academic Integrity at [http://www.unt.edu/unt-dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic Integrity.pdf](http://www.unt.edu/unt-dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic%20Integrity.pdf) for complete provisions of this code.*

### **Bad Weather Policy:**

*On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call UNT Dallas Campuses main voicemail number (972) 780-3600 or search postings on the campus website [www.unt.edu/dallas](http://www.unt.edu/dallas). Students are encouraged to update their Eagle Alert contact information, so they will receive this information automatically.*

### **Attendance and Participation Policy (for face-to-face classes):**

*The University attendance policy is in effect for this course. Class attendance and participation is mandatory because the class is designed as a shared learning experience and because essential information not in the textbook will be discussed in class. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent. Successfully completing this class is a function of many factors. Two such factors are class attendance and assignment completion.*

### **Diversity/Tolerance Policy:**

*Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Office of Student Life as the instructor deems appropriate.*

### **Cell Phones:**

*Cell Phone use (or ringing) in class is strictly prohibited.*