

INFO 2601 Networking Technologies Fundamentals Semester 1 Course Information

Assistant Lecturer: Kris Manohar

Email kris.manohar@sta.uwi.edu

Lectures:

Day	Time
Monday	1:00 p.m. to 2:50 p.m.
Tuesday	3:00 p.m. to 3:50 p.m.

Tutor: Amit Ramkissoon

Email amit.ramkissoon@sta.uwi.edu

Tutorial:

Day	Time
Thursday	10:00 am to 11:50 am
Thursday	6:00 pm to 7:50 pm

EVALUATION

Coursework 50% One (1) 2-Hour Written Examination 50%

COURSEWORK

3 Assignments

Assignment 1 Approx. 4% Assignment 2 Approx. 7% Assignment 3 Approx. 9%

2 Coursework Tests

Exam 1 Approx. 10% Exam 2 Approx. 20%



ESSENTIAL TEXTS/ MATERIALS

Lecture slides

Computer Networking A Top-Down Approach (6th Edition) by James F. Kurose and Keith W. Ross. Publisher: Addison-Wesley, 2012.

Authoritative web sites for concepts discussed e.g. www.ietf.org

Additional Recommended Reading

Networking, A Beginner's Guide, Fifth Edition (Networking Professional's Library) by Bruce Hallberg. Publisher: McGraw-Hill Osborne, October 19, 2009

Computer Networks (5th Ed.) by A. Tanenbaum and D. Wetherall. Publisher: Prentice Hall, 2011.

Computer Networking First-Steps by Wendell Odom. Cisco Press, Paperback, Published April 2004, ISBN 1587201011. See www.bookpool.com

COURSE OVERVIEW

Computer networks are an indispensable component of any modern Information Technology infrastructure. This course introduces students to the world of computer networks. Principles and protocols for data communication are covered. Network architecture models are visited, and students get exposure to the practical aspects of networking such as setting up a basic network, router configuration, crimping of cables, etc...

Approach taken bridges two conceptual perspectives: theoretical and applicationoriented study of computer networks and technologies.



COURSE CONTENT

Topic	Name	Outline	Lab
1	Introduction to Networks	Globally Connected	
		LANs, WANs, and the	
		Internet	
		The Network as a Platform	
		The Changing Network	
		Environment	
2	Network Protocols and	Rules of Communication	Crimping
	Communication	Network Protocols and	
		Standards	
		Data Transfer in the Network	
3	Network Access	Physical Layer Protocols	Working with Wireshark
		Network Media	
		Data Link Layer Protocols	
		Media Access Control	
4	Ethernet Protocol	Ethernet Protocol	FTP Client
		LAN Switches	
		Address Resolution Protocol	
5	Network Layer	Network Layer Protocols	UDP using Wireshark
		Routing	
		Routers	
		Configuring a Cisco Router	
6	IP Addressing	IPv4 Network Addresses	Router configuration
		IPv6 Network Addresses	
		Connectivity Verification	
7	Subnetting IP Networks	Subnetting an IPv4 Network	MAC Address Filtering
		Addressing Schemes	
		Address Schemes	
8	Transport Layer Protocols	Transport Layer Protocols	Subnetting
		TCP and UDP	
9	Application Layer Protocols	Application Layer Protocols	Revision
		Well-Known Application	
		Protocols and Services	
10	Build a Small Network	Network Design	
		Network Security	
		Basic Network Performance	
		Network Troubleshooting	



TENTATIVE CW SCHEDULE

Wk	Date	Topics
1	14th Sept	
2	21st Sept	End of week 2: Assignment 1
		(Due in 2 wks-@wk4)
3	28th Sept	
4	5th Oct	
5	12th Oct	End of week 5: Assignment 2
		(Due in 2 wks-@wk7)
6	19th Oct	
7	26th Oct	
8	2nd Nov	Week 8: CWE1 End of week 8: Assignment 3 (Due in 2 wks-@wk10)
9	9th Nov	
10	16th Nov	
11	23rd Nov	Week 11: CWE2
12	30th Nov	Last week of classes. Revision and completion.

WHAT ARE THE RULES REGARDING PLAGIARISM AND CHEATING?

Plagiarism is the misrepresentation of someone else's work as your own. With the burgeoning amount of information available in print, on TV, and on the internet, the temptation to copy written, graphical or pictorial material into an assignment is very great. Yet this activity is morally and legally wrong. In lieu of formal disciplinary action, assignments containing plagiarized material will either be returned to the student with a mark of zero or returned for resubmission when rewritten in an original form satisfactory to the lecturer for marking, at the discretion of the lecturer. This does not preclude formal disciplinary action, which may include expulsion from the University. Students discovered cheating on an in-course test will normally receive a mark of zero for the test. Again, this does not preclude formal disciplinary action.

UWI Plagiarism Policy (a Google Search will bring up this Policy):

https://sta.uwi.edu/fst/lifesciences/sites/default/files/lifesciences/images/plagiarism.pdf
Individual Work Plagiarism Declaration Form (a Google Search will bring up this Form):
https://sta.uwi.edu/fst/lifesciences/sites/default/files/lifesciences/images/Plagiarism%20Declaration%20Form.pdf

Students **MUST** print and **FILL OUT** the Individual Work Plagiarism Declaration Form (link shown above) for **EACH** submitted assignment.