



Lahore University of Management Sciences

CS 5716 - Topics in Computer Network Security Fall 2015-16

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TA Office Hours	TBD
Course URL (if any)	TBD

Course Basics				
Credit Hours	3			
Lecture(s)	Nbr of Lec(s) Per Week	2	Duration	75 minutes
Recitation/Lab (per week)	Nbr of Lec(s) Per Week	None	Duration	None
Tutorial (per week)	Nbr of Lec(s) Per Week	None	Duration	None

Course Distribution	
Core	No
Elective	Yes
Open for Student Category	
Close for Student Category	

COURSE DESCRIPTION
<p>This is a research topics course in Computer and network Security</p> <ul style="list-style-type: none">- Biased by interests of the faculty- Fairly wide coverage of topics- Course project



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The project will be graded on the following:

- (a) Complexity and the amount of the work carried out.
- (b) Your understanding of the subject of the report.
- (c) Organization and writing.
- (d) Comprehensiveness of the survey, originality of the ideas in experimental projects.

Grading emphasis may change based on the nature of the report:survey or experimentation or measurement or implementation.

COURSE PREREQUISITE(S)

- Network Security

COURSE OBJECTIVES

- Exposure to a select list of research topics and active research in the network and computer security field
- Hands-on research experience
- Exposure to state of the art-security research

Learning Outcomes

- After taking the course the student will be able to.
- Demonstrate in-depth knowledge in a particular area of specialization in network security as dictated by their project
- Demonstrate familiarity with the state of the art research on broad range of topics in network and computer security
- Critically analyze state of the art security research papers

Grading Breakup and Policy

Assignment(s):One topic/survey presentation of 30 minutes per team -25%
Class Participation: 10%
Project:40%
Final Examination: 25%

Examination Detail



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Midterm Exam	N/A
Final Exam	Open-book/Notes ,

COURSE OVERVIEW			
Weeks	Topics	Recommended Readings	Objectives/ Application
1.	Introduction	TBA	
2.	Provenance	TBA	
3.	Risk Management	TBA	
4.	Application security		
5.	Program Analysis		
6.	Program Analysis		
7.	Data Center Security		
8.	Data Center Security		
9.	Privacy preserving systems		
10.	Web security and privacy		
11.	Intrusion detection system		
12.	Cryptography		
13.	Forensics Investigation		
14.	Special topics (based on interest)		

Textbook(s)/Supplementary Readings
Textbook: Recommended (not required) Information security principles and practice, Mark stamp Applied cryptography, Bruce Schneier Reading material for each lecture will be sent in advance