

## Tentative Syllabus

These topics are tentative and subject to change without warning. In particular, if I don't discuss something you're interested in, ask about it! I may very well add it or modify what I'm covering to include it.

All readings are from the text. The chapters will be uploaded to Canvas in the File area.

lec.	date	topic	reading	notes
1.	Mon Apr 2	Intro to computer security	§1	Homework #1 out
2.	Wed Apr 4	Access control matrix, HRU result	§2, 3.1–3.2	
3.	Fri Apr 6	Design principles, robust programming I	§14, [1]	Lab #1 out
<i>dis</i> –.		<i>No discussion section</i>		
4.	Mon Apr 9	Robust programming II	[1]	
5.	Wed Apr 11	Robust programming III, policy models	§4.1–4.3	Homework #1 due, #2 out
6.	Fri Apr 13	Policy models	§4.4–4.5, G	
<i>dis</i> 1.		Using Canvas; setting up lab		
7.	Mon Apr 16	Example policies, confidentiality models	§4.6, 5.1–5.2.1, A, G	
8.	Wed Apr 18	Confidentiality models, integrity models	§5.2.2, 5.3, 6.1	
9.	Fri Apr 20	Industrial control systems I <i>Guest lecturer: Steven Templeton</i>	Slides on Canvas	Lab #1 due, #2 out
<i>dis</i> 2.		Cross-site scripting, Google hacking		
10.	Mon Apr 23	Industrial control systems II <i>Guest lecturer: Steven Templeton</i>	Slides on Canvas	
11.	Wed Apr 25	Integrity models	§6.2, 6.4	Homework #2 due, #3 out
12.	Fri Apr 27	Other policy models, cryptography	§8.3–8.5, 10.1–10.2	
<i>dis</i> 3.		Buffer overflows		
13.	Mon Apr 30	Cryptography	§10.2, F	
14.	Wed May 2	Public key cryptography	§10.3–10.5	
15.	Fri May 4	<b>Midterm exam</b>		
<i>dis</i> 4.		Review for midterm exam		
16.	Mon May 7	Key exchange	§11	Lab #2 due, #3 out
17.	Wed May 9	Cipher techniques	§12.1, 12.3–12.4	Homework #3 due, #4 out
18.	Fri May 11	Authentication	§13	
<i>dis</i> 5.		Vigenère cipher		
19.	Mon May 14	Access control mechanisms	§16	
20.	Wed May 16	Access control mechanisms	§16	
21.	Fri May 18	Malware I	§23	
<i>dis</i> 6.		Elliptic curve ciphers		
22.	Mon May 21	Malware II	§23	Lab #3 due, #4 out
23.	Wed May 23	Penetration testing	§24	Homework #4 due, #5 out
24.	Fri May 25	Vulnerability analysis	§24	
<i>dis</i> 7.		Review midterm answers		
—.	Mon May 28	<b>Memorial Day</b> (no class)		
25.	Wed May 30	Intrusion detection systems	§26	
26.	Fri Jun 1	Attacks	§27	
<i>dis</i> 8.		<i>wireshark</i> , net traces		
27.	Mon Jun 4	<i>to be arranged</i>		Lab #4 due
28.	Wed Jun 6	<i>to be arranged</i>		Homework #5 due
<i>dis</i> 9.		Review for final exam		
—.	Tue Jun 12	<b>Final exam</b> (at 1:00pm)		

### References

[1] M. Bishop. “Robust Programming,” *unpublished* (Mar. 2011).