COM-301 References to books

This document provides a mapping from the topics that are taught in COM-301 to existing books.
Note: not all books have everything included in the course, and not all the material in the books is included in the lectures. There are many other books that explain these topics. This is just a reference.

The books referred in the table are the following:

[1] *Computer security* by Dieter Gollmann (3rd Edition)
[2] *Security Engineering* by Ross Anderson (2nd Edition)
[3] *Computer Security: Principles and Practice* by Stallings and Brown (4th Edition)

	References (note that the chapter numbers correspond to a particular edition of the book. In other editions the chapter number may change although the chapter title is mostly the same)
Security Principles	[1] Chapter 3 - Foundations of Computer Security and some of Chapter 2 - Managing security [3] Chapter 1 - Overview
Access Control	[1] Chapter 5 - Access Control (less important Chapter 6 - Reference Monitors and Chapter 7/8 Unix/Windows Security) [2] Chapter 4 - Access Control [3] Chapter 4 - Access Control
Security Models	[1] Chapter 11 - Bell-LaPadula Model and Chapter 12 Security Models [2] Chapter 8 - Multilevel Security and Chapter 9 - Multilateral Security
Applied Cryptography	[1] Chapter 14 - Cryptography and some of Chapter 15 Key Establishment [2] Chapter 5 - Cryptography and some of Chapter 3 - protocols [3] Chapter 2 - Cryptographic tools (also some of Chapters 20 and 21)
Authentication	[1] Chapter 4 - Identification and Authentication [3] Chapter 3 - User authentication

Web attacks & Software Security	[1] Chapter 18 - Web Security; Some of Chapter 10 - Software Security [3] Chapter 10 - Buffer overflow, Chapter 11 - Software security
Trusted Computing	[2] some of Chapter 16 - Physical Tamper Resistance, some of Chapter 17 - Emission Security
Malware	[3] Chapter 6 - Malicious software; Chapter 8 Intrusion Detection
Network Security	[1] Chapter 16 - Communications Security, Chapter 17 - Networks Security [2] Chapter 21- Network Attack and Defence [3] Chapter 7 - Denial-of-Service Attacks, Chapter 9 - Firewalls and Intrusion Prevention Systems, some of Chapter 22 - Internet Security Protocols and Standards, some of Chapter 23 - Internet Authentication Applications
Privacy	Sadly there is no good book so far. Other resources that could be helpful: https://www.esat.kuleuven.be/cosic/publications/article-2270.pdf https://www.youtube.com/watch?v=y7fGVSO2lEg https://www.freehaven.net/anonbib/cache/DD08Survey.pdf https://www.youtube.com/watch?v=jtHkySkFqO8 (Please do not pay much attention to section 19.3 and 19.4 in book [3])