



STARK STATE COLLEGE

GENERAL SYLLABUS

Course Information

Course Name: Cyber Forensics and Data Recovery
Course Number: CFS258

Required Materials

Textbook(s): Guide to Computer Forensics & Investigations, by Nelson, Phillips & Steuart, 6th Edition, (2019) Cengage Learning, ISBN 9781337569026
Digital version- includes MindTap.

Required Readings: None

Additional Materials:

1. Personal computer running **Windows 10 Professional** (Not Home Edition), a virtual machine running Windows 10 Professional or an external hard drive with a Windows to Go installation running Windows 10 Professional.
2. Additional material furnished by the instructor or available online.

Course Outline/Calendar

The date of coverage and order of coverage may be modified based on the faculty member and events beyond the control of faculty members that interfere with class times and teaching.

Week	Chapter/Topic/Lab
Week 1	<ul style="list-style-type: none"> • Introduction, Chap.1, Understanding Digital Forensics • Autopsy • Virtual Machine Lab Prerequisite • Chapter 1 Quiz • Lab Assignment
Week 2	<ul style="list-style-type: none"> • Chap. 2, The Investigators Office & Laboratory • Hands-on Projects 1-1 to 1-6 (Autopsy) • Chapter 2 Quiz
Week 3	<ul style="list-style-type: none"> • Chap.3, Data Acquisition • OS Forensics • Chapter 3 Quiz • Lab Assignment
Week 4	<ul style="list-style-type: none"> • Chap. 4, Processing Crime & Incident Scenes • Chapter 4 Quiz • Hands-on Projects 4-1 to 4-5 (OS Forensics)
Week 5	<ul style="list-style-type: none"> • Chap.5, Working with Windows and CLI Systems

Week	Chapter/Topic/Lab
	<ul style="list-style-type: none"> • ProDiscover • Chapter 5 Quiz • Lab Assignment
Week 6	<ul style="list-style-type: none"> • Chap.6, Current Digital Forensics Tools • Chapter 6 Quiz • Forensic Suites Lab Assignment
Week 7	<ul style="list-style-type: none"> • Chap.7, Linux & Macintosh File Systems • Ohio Cyber Range Institute • Parrot Linux • Chapter 7 Quiz • Hands-on Projects 7-1 to 7-3 (Kali, DEFT, ProDiscover) • OCRI Lab
Week 8	<ul style="list-style-type: none"> • Chap.8, Recovering Graphics Files • Chapter 8 Quiz • Lab Assignment
Week 9	<ul style="list-style-type: none"> • Chap.9, Digital Forensic Analysis & Validation • SANS SIFT • Chapter 9 Quiz • Hands-on Projects 9-1 to 9-4 (WinHex & OS Forensics)
Week 10	<ul style="list-style-type: none"> • Chap.10, Virtual Machine Forensics, Live Acquisition & Network Forensics • Chapter 10 Quiz • Lab Assignment
Week 11	<ul style="list-style-type: none"> • Chap.11, Email & Social Media Investigations • Paraben EC3 • Chapter 11 Quiz • Hands-on Projects 11-1 to 11-3 (OS Forensics & FB Forensic Toolkit)
Week 12	<ul style="list-style-type: none"> • Chap.12, Mobile Device Forensics & the Internet of Anything • Chapter 12 Quiz • Lab Assignment
Week 13	<ul style="list-style-type: none"> • Chap.13, Cloud Forensics • Password Cracking • Chapter 13 Quiz • Lab Assignment
Week 14	<ul style="list-style-type: none"> • Chap.14, Report Writing & Chapter 15 Expert Testimony • Chapter 14 & 15 Quizzes • Hands-on Projects 14-1 to 14-4 (OS Forensics & ProDiscover)
Week 15	<ul style="list-style-type: none"> • Chap.16, Ethics for the Expert Witness • Chapter 16 Quiz • Ethics Lab Assignment
Week 16	<ul style="list-style-type: none"> • Final • Final Practical Lab