

A. <u>Academic Division</u>: Business, Industry, and Technology

B. <u>Discipline</u>: Information Technology - Networking

C. <u>Course Number and Title</u>: ITEC1620 – Wireshark 101

D. <u>Course Coordinator</u>: Jesse Payne

Assistant Dean: Toni Johnson, PhD

Instructor Information:

Name: Click here to enter text.
Office Location: Click here to enter text.
Office Hours: Click here to enter text.
Phone Number: Click here to enter text.
E-Mail Address Click here to enter text.

E. <u>Credit Hours</u>: 2

Lecture: 1 hour Laboratory: 2 hours

- F. <u>Prerequisites</u>: ITEC 1640 (minimum grade C-)
- G. Syllabus Effective Date: Fall 2019
- H. <u>Textbook(s) Title</u>:

Wireshark 101: Essential Skills for Network Analysis

Author: Laura ChappellCopyright Year: 2017

• Edition: 2nd

• ISBN#: 9781893939752

- I. Workbook(s) and/or Lab Manual:
- J. <u>Course Description</u>: This course provides a starting point for analyzing network traffic, troubleshooting network performance, and detecting network security related incidents. Students will capture, filter, and analyze network traffic based on network protocols, applications, and data origin.
- K. College-Wide Learning Outcomes:

College-Wide Learning Outcome	Assessments How it is met & When it is met
Communication – Written	
Communication – Speech	
Intercultural Knowledge and Competence	
Critical Thinking	
Information Literacy	
Quantitative Literacy	

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L. <u>Course Outcomes and Assessment Methods</u>:

Upon successful completion of this course, the student shall:

	Outcomes	Assessments – How it is met & When it is met
1.	Create virtual machines and networks	Weeks 1-2, labs, tests, mid-term and final
		exam
2.	Compare and contrast packets and frames	Weeks 1-2, labs, tests, mid-term and final
		exam
3.	Describe Wireshark program elements and settings	Weeks 3-6, labs, tests, mid-term and final
		exam
4.	Identify Wireshark capture methods and associated	Weeks 7-9, labs, tests, mid-term and final
	filters	exam
5.	Demonstrate how to mark and export packet	Week 10, labs, tests, and final exam
	captures	
6.	Create tables and graphs from captured data	Week 11, labs, tests, and final exam
7.	Demonstrate how to reassemble network traffic	Week 12, labs, tests, and final exam
8.	Select the appropriate command line tool for a	Week 14, lab, tests, final exam
	given set of conditions	

M. <u>Topical Timeline (Subject to Change)</u>:

- Week 1: Virtual Machines and Networks
- Week 2: Network Protocols
- Week 3: Exploring Wireshark Elements and Traffic Flows
- Week 4: Labs
- Week 5: Wireshark Views and Settings
- Week 6: Labs
- Week 7: Capture Methods and Filters
- Week 8: Display Filters
- Week 9: Labs
- Week 10: Marking and Exporting Packets
- Week 11: Tables and Graphs
- Week 12: Traffic Reassembly
- Week 13: Commenting Trace Files and Packets
- Week 14: Command Line Tools
- Week 15: Labs
- Week 16: Final Exam/Makeup Labs

N. <u>Course Assignments</u>:

- 1. Labs
- 2. Tests
- 3. Midterm Exam
- 4. Final Exam

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O. Recommended Grading Scale:

NUMERIC	GRADE	POINTS	DEFINITION
93–100	A	4.00	Superior
90–92	A-	3.67	Superior
87–89	B+	3.33	Above Average
83–86	В	3.00	Above Average
80–82	B-	2.67	Above Average
77–79	C+	2.33	Average
73–76	C	2.00	Average
70-72	C-	1.67	Below Average
67–69	D+	1.33	Below Average
63-66	D	1.00	Below Average
60-62	D-	0.67	Poor
00-59	F	0.00	Failure

P. <u>Grading and Testing Guidelines</u>:

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Q. <u>Examination Policy</u>:

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R. Class Attendance and Homework Make-Up Policy:

Click here to enter text.

S. <u>Classroom Expectations</u>:

Click here to enter text.

T. <u>College Procedures/Policies</u>:

Important information regarding College Procedures and Policies can be found on the <u>syllabus</u> <u>supplement</u> located at

https://sharept.ncstatecollege.edu/committees/1/curriculum/SiteAssets/SitePages/Home/SYLLABUS % 20 SUPPLEMENT.pdf

The information can also be found Choose an item.

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