CIS4360 Computer and Information Security

Location: CSE222 11am-12:05pm MWF

Academic Term: Summer 2022

Instructor:

Cheryl Resch

Cheryl.resch@ufl.edu

Office Hours: Wednesday 12:30 pm

CSE 508

https://ufl.zoom.us/j/7182892352

Textbook:

Computer Security and the Internet: *Tools and Jewels from Malware to Bitcoin*, Second Edition

by Paul C. van Oorschot. Springer, 2021.

https://people.scs.carleton.ca/~paulv/toolsjewels.html

Slack:

https://join.slack.com/t/compandinfsec-xgd2609/shared_invite/zt-1842rpgqs-QjGV_JklpHzS5uKEWBj0EQ

Grader:

Jennifer Sheldon

Course Description

Covers systematic threat and risk assessment; programmed threats and controls in hardware, software, and human procedures; security policies, models, and mechanisms; theoretical limitations and practical implementations; certification and accreditation standards; and case study reviews.

Grading Scheme

Weekly Assignments: 11, 9% each, with one drop

Take home final 10%

You may turn in any assignment one day late for a 50% penalty

Grading Policy

The following is given as an example only.

Percent	Grade	de Grade Points	
93.4 - 100	Α	4.00	
90.0 - 93.39	A-	3.67	
86.7 - 89.99	B+	3.33	
83.4 - 86.69	В	3.00	
80.0 - 83.39	B-	2.67	
76.7 - 79.99	C+	2.33	
73.4 - 76.69	С	2.00	
70.0 - 73.39	C-	1.67	
66.7 - 69.99	D+	1.33	
63.4 - 66.69	D	1.00	
60.0 - 63.39	D-	0.67	
0 - 59.99	E	0.00	

More information on UF grading policy may be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

	Topic	Assignment	Due
1	Security Concepts and Principles	Homework Problems	May 15
2	Cryptographic Building Blocks	Homework Problems	May 22
3	User Authentication	Password Strength	May 29
		Analysis write up	
4	Authentication Protocols	Homework Problems	June 5
5	OS Security and Access Control	Homework Problems	June 12
6	Software Security	Buffer Overflow	June 19
		Activity	
7	Malicious Software	Homework Problems	July 3
8	PKI	Homework problems	July 10
9	Web and Browser Security	XSS SEEDLab	July 17
10	Firewalls and Tunnels	NICE Firewall lab	July 24
11	IDS and Network Based Attacks	NICE Snort Lab	July 31
12	Blockchain	Take home final	Aug 5

Students Requiring Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting https://disability.ufl.edu/students/get-started/. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

In-Class Recording

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Conduct Code (https://sccr.dso.ufl.edu/process/student-conduct-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Commitment to a Safe and Inclusive Learning Environment

The Herbert Wertheim College of Engineering values broad diversity within our community and is committed to individual and group empowerment, inclusion, and the elimination of discrimination. It is expected that every person in this class will treat one another with dignity and respect regardless of gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture.

If you feel like your performance in class is being impacted by discrimination or harassment of any kind, please contact your instructor or any of the following:

- Your academic advisor or Graduate Program Coordinator
- Jennifer Nappo, Director of Human Resources, 352-392-0904, jpennacc@ufl.edu
- Curtis Taylor, Associate Dean of Student Affairs, 352-392-2177, taylor@eng.ufl.edu
- Toshikazu Nishida, Associate Dean of Academic Affairs, 352-392-0943, nishida@eng.ufl.edu

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: https://registrar.ufl.edu/ferpa.html

Campus Resources:

Health and Wellness

U Matter, We Care:

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter,

We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Counseling and Wellness Center: https://counseling.ufl.edu, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Discrimination, Harassment, Assault, or Violence

If you or a friend has been subjected to sexual discrimination, sexual harassment, sexual assault, or violence contact the <u>Office of Title IX Compliance</u>, located at Yon Hall Room 427, 1908 Stadium Road, (352) 273-1094, <u>title-ix@ufl.edu</u>

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or http://www.police.ufl.edu/.

Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling; https://career.ufl.edu.

Library Support, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. https://teachingcenter.ufl.edu/.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. https://writing.ufl.edu/writing-studio/.

Student Complaints Campus: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/;https://care.dso.ufl.edu/policies/student-honor-code-student-conduct-code/;https://care.dso.ufl.edu/policies/student-honor-code-student-none-code-student-none-code/;

On-Line Students Complaints: http://www.distance.ufl.edu/student-complaint-process.