

CIS4360 Computer and Information Security **Location:** Online

Academic Term: Summer 2023

Instructor:

Cheryl Resch Cheryl.resch@ufl.edu
Office Hours: Wednesday 8 pm, Friday 10 am

Textbook:

Computer Security and the Internet: Tools and Jewels from Malware to Bitcoin, Second Edition by Paul C. van Oorschot. Springer, 2021.

The textbook can be accessed here:

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

Microsoft Teams:

<https://teams.microsoft.com/l/channel/19%3aCwWDVRZvqX4sc9x1FRqKmgxwcSCWFrYiMUJqYueU90s1%40thread.tacv2/General?groupId=e5c2547c-3cce-4e36-a369-5b61e689bba6&tenantId=0d4da0f8-4a31-4d76-ace6-0a62331e1b84>

Grader:

Anurag Yadav anuragswar.yadav@ufl.edu

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

Discussions: 15%

Respond to initial discussion post by Wednesday, reply to three other posts by Sunday
Grading based on timeliness and completeness.

Weekly Assignments: 65%

12 assignments, 5% each, with one drop

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

Final exam: 20%

Grading Policy

Percent	Grade	Grade Points
93 - 100	A	4.00
90.0 – 92.99	A-	3.67
87 - 89.99	B+	3.33
83 - 86.99	B	3.00
80.0 - 82.99	B-	2.67
77 - 79.99	C+	2.33
73 - 76.99	C	2.00
70.0 - 72.99	C-	1.67
67 - 69.99	D+	1.33
63 - 66.99	D	1.00
60.0 - 62.99	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>

Week	Topic	Assignment(s)	Due
1	Security Concept and Principals	Homework Problems Asset Security Requirements Discussion	May 21 May 17, 21
2	Cryptographic Building Blocks	Homework Problems	May 28
3	User Authentication	Password Strength Analysis Report Authentication Discussion	June 4 May 31, June 4
4	Authentication Protocols	Homework Problems	June 11
5	OS Security and Access Control	Access Control NICE Lab Access Control Discussion	June 18 June 14, 18
6	Software Security	Race Conditions SEED Lab	July 2

		Stack Buffer Overflow Discussion	June 21, 25
7	Malicious Software	Homework Problems Ransomware Discussion	July 9 July 5, 9
8	PKI	PKI SEED Lab	July 16
9	Web and Browser Security	XSS SEED Lab	July 23
10	Firewalls and Tunnels	NICE Firewall Lab	July 30
11	IDS and Network Based Attacks	NICE Snort Lab Intrusion Detection Tool Discussion	Aug 6 Aug 2, 6
12	Blockchain	Homework Problems Smart Contracts Discussion Final Exam (take home)	Aug 13 Aug 9, 13 Aug 13

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