# The Archaeology of Hacking

## **Syllabus**

## **Logistics**

**Lecture:** 2x per week (75-minute class periods)

Co-Instructor: Walter Scheirer Email: (walter.scheirer@nd.edu)

Co-Instructor: <u>Luis Felipe R. Murillo</u> **Email:** (lrosadom@nd.edu)

Slack: #the-archaeology-of-hacking-sp23

#### **Course Materials:**

<u>computerhackerscourse.nd.edu/course-calendar</u>

## ? Help Protocol

 $Think \rightarrow \mathbf{Slack} \rightarrow Think \rightarrow \mathbf{Email} \rightarrow Think \rightarrow \mathbf{Office}$ 

## **Lecture Schedule**

Lecture	Theme
Week 1	
1.1	Course Introduction
Week 2	
2.1	Course Introduction
2.2	Anthropological Theory + Methods
Week 3	
3.1	Computer Science Theory + Methods
3.2	Phone Phreaking
Week 4	
4.1	Information Networks
4.2	Bulletin Board Systems
Week 5	
5.1	Textfiles
5.2	Zines
Week 6	
6.1	Social Engineering
6.2	Video Game Hacking
Week 7	
7.1	Government and Law Enforcement
7.2	The Internet

Lecture	Theme		
Week 8			
8.1	Internet Relay Chat		
8.2	Hacker Conventions		
Spring Break			
Week 9			
9.1	Unix Security Vulnerabilities		
9.2	Windows Security Vulnerabilities		
Week 10			
10.1	Exploit Development Suites		
10.2	Cryptography		
Week 11			
11.1	Software Piracy		
11.2	Free Software		
Easter Break			
Week 12			
12.1	Open Source Software		
Week 13			
13.1	Hackerspaces		
13.2	Hardware Hacking		

Lecture	Theme
Week 14	
14.1	The Computer Security Industry
14.2	Hacktivism
Week 15	
15.1	Cyberwarfare
15.2	Future Hacking

## Coursework

Component	Points
Reading Quizzes	15 x 50
Writing Reflections	8 x 50
Technical Homeworks	7 x 50
Group Project	1000
Participation	500
Total	3000

## **Grading**

Grade	Points	Grade	Points	Grade	Points
		A	2790-3000	<b>A-</b>	2700-2789
B+	2601-2699	В	2499-2600	В-	2400-2498
C+	2301-2399	C	2199-2300	<b>C</b> -	2100-2198
D	1950-2099	F	0-1949		

### **Due Dates**

**Readings and Reading Quizzes:** Readings should be done in advance of each week's lectures. Reading quizzes are due **Sundays** at **5pm** (unless otherwise specified).

Writing Reflections: Writing reflections are due Tuesdays at 5pm.

**Group Projects:** Group projects are due the date and time specified in the assignment.

### **Policies**

## **Participation**

Students are expected to attend and contribute regularly in class. This means answering questions in class, participating in discussions, and helping other students.

Foreseeable absences should be discussed with the instructor ahead of time.

### **Reading Quizzes**

All **Reading Quizzes** must be completed individually and submitted via the appropriate Google Form.

## **Writing Reflections**

Each write reflection should be prepared as a Google Doc. At the time of the first assignment, share a Google drive for this class with our TA <u>Abby</u>. For each assignment, prepare a doc named using this convention: lastname\_firstname\_duedate. Abby will collect each assignment directly from your drive after it is due.

### **Group Projects**

Group project deliverables should be placed in a Google drive and shared with <u>Abby</u> by one member of your group. After you form your group, nominate one of the members as the scribe who will handle deliverables for the semester.

#### **Students with Disabilities**

Any student who has a documented disability and is registered with Sara Bea Accessibility Services should speak with the professor as soon as possible regarding accommodations. Students who are not registered should contact Sara Bea Accessibility Services.

### **Academic Honesty**

Any **academic misconduct** in this course is considered a **serious offense**, and the strongest possible academic penalties will be pursued for such behavior. Students may discuss high-level ideas with other students, but at the time of implementation (i.e., programming), each person must do his/her own work. Use of the Internet as a reference is allowed but directly copying code or other information is cheating. It is cheating to copy, to allow another person to copy, all or part of an exam or a

assignment, or to fake program output. It is also a violation of the <u>Undergraduate</u>

<u>Academic Code of Honor</u> to observe and then fail to report academic dishonesty. You are responsible for the security and integrity of your own work.

#### **Late Work**

In the case of a serious illness or other excused absence, as defined by university policies, coursework submissions will be accepted late by the same number of days as the excused absence.

Otherwise, a **late penalty**, as determined by the instructor, will be assessed to any late submission of an assignment. In general, the late penalty is 25% off for less than a week and 50% off for more than a week. The instructor reserves the right to refuse any unexcused late work.

## **Classroom Recording**

Notre Dame has implemented a classroom recording system. This system allows us to record and distribute lectures to you in a secure environment. You can watch these recordings on your computer, tablet, or smartphone. The recordings can be accessed via a request made to the instructor.

Because we will be recording in the classroom on select occasions, your questions and comments may be recorded. (Video recordings typically only capture the front of the classroom.) If you have any concerns about your voice or image being recorded, please speak to me to determine an alternative means of participating. No content will be shared with individuals outside of your course without your permission except for faculty and staff that need access for support or specific academic purposes.

These recordings are jointly copyrighted by the University of Notre Dame and your instructor. Posting them to other websites, including YouTube, Facebook, Vimeo, or elsewhere without express, written permission may result in disciplinary action and possible civil prosecution.

### **Guide to the Honor Code**

For the assignments in this class, you may discuss with other students and consult printed and online resources. You may quote from books and online sources as long as you **cite them properly**. However, you may **not** look at another student's solution, and you may **not** copy solutions.

The following table summarizes how you may work with other students and use print/online sources:

	Resources	Solutions
Consulting	Allowed	Not Allowed
Copying	Cite	Not Allowed

For further guidance please refer to the <u>CSE Honor Code</u>, which we will be following this semester, or ask the instructor.