



# Cybercrime

CCJS 418B

Spring 2014

<i>Instructor</i>	Professor David Maimon
<i>Lecture</i>	Tuesday and Thursday 2:00-3:15 Architecture Building 1105
<i>Office hours</i>	Tuesday and Thursday 11:00-12:00 and by appointment
<i>Phone</i>	(301) 405-4699
<i>Office</i>	LeFrak Hall Room 2220F, Department of criminology and Criminal Justice
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## Course Synopsis

Cybercrime research has grown in visibility and importance during the last two decades. Nevertheless, despite the growing public interest in cybercrime and its consequences for businesses and individuals, only scant attention has been given in the criminological discipline to investigation and understanding of this new type of crime. The purpose of this course is to introduce students with the technical, social and legal aspects of cybercrime as well as expose students to theories and tools that enable scientific exploration of this phenomenon. In the first weeks of the semester we will learn about the computer and the Internet, and discuss several definitions and typologies of cybercrime. Then we will discuss the hacker, the victim and the IT manager. We will conclude this section by reviewing important steps taken by scholars while conducting scientific research. In the second half of the semester we will review various theories of crime causation, and assess the relevance of these theories in the context of cyber space. We will then describe several technical tools that allow the collection of data from the Internet. We will conclude with a discussion on the legal issues affected and created by online crime.

The major objectives of the course are:

- To become familiar with various definitions and typologies of cybercrime
- To understand the contribution of hackers, victims and IT managers to cybercrime
- To apply criminological theories in the study of cybercrime
- To become familiar with technical tools allowing the collection of data in cyber space
- To explain the role of both the private sector and law enforcement agencies in investigating, prosecuting and preventing cyber crime
- To apply the research process

## Required Texts

McQuade III, Samuel C. 2006. *Understanding and Managing Cybercrime*. ISBN 0-205-43973-X

Wall, David. 2006. *The Transformation of Crime in the Information Age*. ISBN 0-745-62736-6

Additional required readings will be posted on Elms. You must be registered in this class to log on to the website. You may use the website to obtain class information, check announcements and your grades and obtain course readings. The address for the website is <http://elms.umd.edu>.

### Recommended Text

Schroeder, Steve. *The Lure: The True Story of How the Department of Justice Brought Down Two of The World's Most Dangerous Cyber Criminals*.

### Course Requirements and Evaluation

#### **Exams 45%**

- Midterm Exam 22.5%
  - Final Exam 22.5%
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#### **Article review 10%**

- Individual article review 10%
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#### **Quizzes 15%**

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#### **Final project 30%**

- Group presentation 10%
  - Final project 20%
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**1. Examination (45% of class grade)** - There will be mid-term and final examinations for this course. These exams consist of multiple choice, true/false, fill in the blanks and short answers. The midterm exam will be given on **March 11** during the regularly scheduled lecture time. The final exam will be held on **Monday May 19 between 10:30-12:30**.

**2. Article review (10% of class grade)** - You are to write an article review on a research paper you have chosen and that focuses in understanding cybercrime. This should be a two to three page paper including a summary of the article, an evaluation of the article's argument, and a statement of how it fits with the greater structure of the paper. You should also attach the abstract of the article to the back of your assignment. This is due to me in class on **April 3 (first draft) and April 17 (final draft)**.

**3. Quizzes (15% of class grade)** – 6 POP quizzes will be given throughout the semester. These quizzes will test your level of familiarity with the assigned readings for the relevant class. To pass the quizzes, all you have to do is keep up with the readings and attend the lecture.

Each quiz will count for 3 points from your final grade. Quizzes will be given at the beginning of lectures. Students who are late will not be allowed to take the quiz (and will lose 3 points!!). Only 5 of the 6 quizzes will be count in your final grade.

**4. Term paper project (30% of class grade)** - Students will develop a group project over the course of the semester. **Each group should have no more than 3 students in it**. The grade for this project is composed of two parts: the group presentation (10%) and the final paper (20%).

Assessment will be based on both a group grade, and individual grade (determined in part by peer review and makes 10% of the overall grade on this assignment). Your research proposal should be designed to answer one or more questions about any type of cybercrime. The final paper should include an overview of the literature (how criminologists have thought about the problem you are discussing) and the implications of your proposed project for criminology. It should also state what type of data you would need to collect in order to conduct your proposed analysis. The paper should be around 15 pages long and will be due to me in class on **May 1 (First draft)** and **May 13 (Final draft)**. Each group will be required to present their final project to the class in a special mini-conference sessions we will have during lecture time (**May 6** and **May 8**).

### Academic Misconduct

I take Academic misconduct seriously. Please do not engage in any form of academic misconduct. Academic misconduct includes (but is not limited to): cheating (use of unauthorized materials, assistance on individual assignments or exams, etc.), fabrication (the falsification of information in an academic exercise), plagiarism (the presentation of ideas or statements of another person as one's own), and facilitating academic misconduct (helping another student to do any of the above). Any suspected case of academic dishonesty will be referred to the University Honor Council. For additional information on academic dishonesty and the accompanying procedures and penalties, see the University's Honor Code at: <http://www.shc.umd.edu/code.html>

### Grading Scale

**Grades will be assigned following the University of Maryland standard grading scheme:**

Percentage	Letter Grade	Qualitative Description
97-100	A+	Achievement that is <u>outstanding</u> relative to the level necessary to meet course requirements.
93-96	A	
90-92	A-	
87-89	B+	Achievement that is <u>significantly above</u> the level necessary to meet course requirements.
83-86	B	
80-82	B-	
77-79	C+	Achievement that is <u>in keeping</u> with the course requirements in every respect.
73-76	C	
70-72	C-	
67-69	D+	Achievement that is worthy of credit even though it fails to meet fully the course requirements.
60-66	D	
0-59	F	Work that was either completed but not worthy of credit, or incomplete

## Make-ups and Late Assignments

**EXAMS:** Exam dates are firm. This includes the final exam that is to be taken at the university appointed time during finals week. There are **no** make-up exams except under extreme circumstances. You should contact me **PRIOR** to the exam date if you are going to miss an exam. If a make-up exam is granted, you will be asked to provide official documentation.

**ASSIGNMENTS:** I ask that you *don't place assignments in my mailbox or submit them via e-mail*. Rather, I ask that you turn a hard copy of your assignments in to me **within the first 10 minutes of class**. Assignments that are not turned in to me during that time are subject to a 10% reduction (e.g. -7.5 points for a 75 point assignment) per each day, unless you have a credible excuse, official documentation, and you contacted me **BEFORE** (when possible) the assignment was due.

**NOTE :** Keep all of your class materials until you have received your final grade. This includes any papers that have been graded and handed back. In addition, please keep an electronic or additional hard copy of your papers until the end of the semester.

## The Classroom Environment

The important thing is to respect one another. It is crucial for our classroom to be comfortable and conducive to learning for all participants. We do not have to agree—hopefully we will have all kinds of intellectual disagreements—but we have to treat one another with respect. This means active listening and taking each other's ideas seriously. Keep in mind that we can learn a lot by listening to our colleagues.

I ask that everyone show up to class on time. In addition, please turn off your cell phones and other portable devices that can be distracting in the classroom. I will make exceptions to this rule if you explain to me why you need it turned on during class. Please inform me of this before class begins. **Surfing the web from your laptops or sending text messages during lecture time is prohibited.** Disruptive behaviors of any kind will not be tolerated. Students who are unable to show civility in class will be subject to referral to the Office of Student Conduct.

## Student Services

I am happy to discuss any issues or problems that you may have with this course during my office hours, or by appointment if needed. If you are experiencing special difficulties with this or other courses, especially in terms of writing or studying, I encourage you to take advantage of the services that The University of Maryland offers:

**Writing Center**  
1205 Tawes Hall  
College Park, MD 20742  
(301) 405-3785  
**Email: [writadmin@umd.edu](mailto:writadmin@umd.edu)**  
<http://www.english.umd.edu/writingcenter>

**Counseling Center Learning Assistance**  
3125 South Campus Dining Hall  
College Park, MD  
(301) 314-7651  
**Email: [LAS-cc@umd.edu](mailto:LAS-cc@umd.edu)**  
<http://www.umarc.miami.edu>

### **Students with Disabilities**

If you need accommodation based on the impact of a disability, you may contact me privately to discuss your specific needs. You may also contact the office of *Disability Support Service* at (301) 314-7682 in 4155 Susquehanna Hall to coordinate reasonable accommodation for your documented disability (see also <http://www.counseling.umd.edu/DSS/>). Students with disabilities are responsible for making their needs known to the instructor, and seeking available assistance, in a timely manner.

### Class Schedule

This schedule is subject to change. Announcements will be made in class as to changes in this schedule. Please complete the assigned readings before class. Additional readings may be assigned by the instructor in class.

<b><u>DATE</u></b>	<b><u>TOPIC</u></b>	<b><u>READING ASSIGNMENT</u></b>
Jan 28	Introduction to course and syllabus review	
Jan 30	The computer	Understanding computers*
Feb 4	The internet	Tanenbaum (Chapter 1 pp.1-26 )*
Feb 6	What is Cybercrime?	McQuade (Chapter 1)
Feb 11	Cybercrime: the invisible threat	Wall (Chapter 1)
Feb 13	Information and other assets in need of assurance	McQuade (Chapter 2)
Feb 18	Computer focused and computer assisted crimes	Wall (Chapters 4 and 5)
Feb 20	The hacker	McQuade (Chapter 4)
Feb 25	Hacking tactics	Raggo * Sreward*
Feb 27	The victim	McQuade (Chapter 6)
Mar 4	The research process	SSSD (Chapter 1)*
Mar 6	Review + final project guidelines	Grant proposal sample*
Mar 11	<b><i>Mid Term exam</i></b>	
Mar 13	<b>NO CLASS</b>	
Mar 16-22	<b>Spring Break</b>	
Mar 25	Theories	McQuade (Chapter 1)
Mar 27	Theories (cont.)	Wall (chapter 7)
Apr 1	Data: surveys, network flow and IPS/IDS	Sequeira (2002)* McHugh, Christie and Allen (2000)*

<b>DATE</b>	<b>TOPIC</b>	<b>READING ASSIGNMENT</b>
Apr 3	Data: honeypots and incidents <i>Article Review Due: First Draft</i>	Spitzner (definitions)* Spitzner (Chapter 4)*
Apr 8	The Maryland project	Maimon et al (2013)* Sobesto et al (2012)*
Apr 10	Cyber terrorism	Goodman, Kirk and Kirk (2007)* Wilson (2008)*
Apr 15	Cyber terrorism (cont.)	Stohl (2007)
Apr 17	Policing on line behavior <i>Article Review Due: Final Draft</i>	Wall (Chapter 8)
Apr 22	Guest lecture: The IT manager	Managing IT in a new age*
Apr 24	Cyber laws and regulations	McQuade (Chapter 8)
Apr 29	Cyber laws and regulations (cont.)	Phillips*
May 1	Investigating cyber crime <i>Final Project Due: First Draft</i>	McQuade (Chapter 9)
May 6	<i>Mini conference I</i>	
May 8	<i>Mini conference II</i>	McQuade (Chapter 10)
May 13	Preventing cyber crime and Future opportunities for managing cybercrime <i>Final Project Due : Final Draft</i>	McQuade (Chapter 11)

\* Available on ELMS



**Fear the Turtle**