

Cybercrime Final Exam
Professor Todd Cheesman
Massachusetts School of Law

Student Number
Time Started 6:00 pm
Time Completed

December 17, 2011
Essay Exam
Open Book, Open Notes

INSTRUCTIONS
Please read carefully

There are 2 sections. Each section is worth 50% of your grade. You should allocate your time accordingly. In each section, you have one fact pattern to answer.

This is an "open book" exam, so you may use any written material you want that was assigned this semester or to which you have previously referred in your homework assignments. However, during the exam, you may not communicate about the exam or your answer with anyone (orally, electronically or otherwise). Do not use any materials other than these in preparing your answers.

If you refer to any material that is not your unique work product, it must be adequately cited. By this, I mean that you sufficiently identify the work product so I will know what you are referring to (e.g., "Cybercrime Week 4 Lecture" or "The Kelly Gable article"). Failure to reference quoted, paraphrased or otherwise unoriginal material on your exam is an honor violation and will be dealt with accordingly.

Your exam should include your student number but not your name. Use this document as the template for your exam.

Your answer should be written in one of the following formats ONLY: pdf, doc, docx, rtf or txt. **I WILL ACCEPT NO OTHER FORMATS** and you will receive a zero grade for the course if you do not submit your exam in one of these formats. Also, the title of your document should be in this format: Your Student ID Number__Cybercrime Final Exam.doc (or pdf, docx, rtf or txt).

This is a take-home exam. This exam is scheduled to begin at 6pm, December XX. You have until 9pm (3 hours) to return the exam to me at my e-mail account: Cheesman@MSLaw.edu. **IF YOUR ANSWER IS LATE, YOU WILL FAIL THE COURSE. THERE IS NO GRACE PERIOD. NO EXCUSES!** Of course, students with medical exemptions who have been cleared with the registrar's office will be allotted additional time as permitted. When I have received your exam I will send you an email confirmation once I have confirmed the document is printable and that you have followed the instructions properly. **YOUR EXAM IS NOT CONSIDERED OFFICIALLY RECEIVED UNTIL I SEND THIS EMAIL CONFIRMATION.** You

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Other guidance:

- Specific answers are more correct than more general answers.
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- While generally your answer should be based on legal principles, you are also welcome to address other perspectives and concerns.
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GOOD LUCK AND HAPPY HOLIDAYS!

SECTION ONE

FACT PATTERN

In March 2009, a British high school student, "Henry" sent an e-mail to a Massachusetts school with the caption, "this is URGENT!!!" The text of the e-mail read:

"your all going to perish and flourish...you will all die
Tuesday, 12:00 p.m.

we're going to have a "blast"

hahahahahaha wonder where I'll be? youll all be destroyed. im sick of your [expletive deleted] school and piece of [expletive deleted] staff, your all gonna [expletive deleted] die you pieces of crap!!!! . . . "

As a result of this bomb threat, the school was closed for two days, while a bomb squad, canine team, the fire department and Emergency Medical Services were called in. In August 2009, Henry logged into the Internet computer system of a major Internet Service Provider ("ISP") using a program he had installed on a computer of one of the ISP's employees. This program allowed Henry to use the employee's computer remotely to access other computers on the internal network of the ISP and gain access to portions of the ISP's operational information.

In January 2010, Henry gained access to the internal computer system of a major telephone service provider that allowed him to look up account information of the telephone service provider's customers. He used this computer system to discover key information about an individual who had an account with the telephone service. He then accessed the information stored on this individual's mobile telephone, and posted the information on the Internet.

During this same time period, Henry used his access to the telephone company's computer system to set-up numerous telephone accounts for himself and his friends, without having to pay for the accounts.

Also in January, 2010, Henry set-up accounts for an associate at a company which stores identity information concerning millions of individuals allowing the him to look at the identity information for numerous individuals, some of which he used for the purpose of looking up the account information for the victim whose personal information he posted on the Internet.

In the spring of 2010, Henry, using a portable wireless Internet access device, arranged with one or more associates to place a bomb threat to a school in Massachusetts and local emergency services, requiring the response of several emergency response units to the school on two occasions and the school's evacuation on one.

In June 2010, Henry called a second major telephone service provider because a phone that a friend had fraudulently activated had been shut off. In a recorded telephone call, Henry threatened the telephone service provider that if the provider did not provide him access to its computer system, he would cause its web service to collapse through a denial of service (DOS) attack. The telephone service provider refused to provide the requested access. Approximately ten minutes after the threat was made, Henry and others initiated a denial of service attack that succeeded in shutting down a significant portion of the telephone service provider's web operations.

After all this, Henry was caught. What crimes did Henry commit? What do you think happened to Henry? What issues do you believe authorities may have had in the investigation, search & seizure, collection of evidence, prosecution and sentencing of the case?

SECTION TWO

The enormity of cyberspace is stretching the boundaries of the possibility of attacks worldwide. How is international law intersecting with national law in this realm? Are the relevant laws among member states to the Cybercrime Convention essentially the same or does each country get to tailor those rules? Finally, what is universal jurisdiction and what are its potential benefits and pitfalls?

End of Examination

Have a Great Winter Break!

Cybercrime Final Exam
Professor Todd Cheesman

Massachusetts School of Law

Student Number
Time Started 6:00 pm
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December 15, 2010
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SECTION ONE

FACT PATTERN ONE

Abel (“**A**”) is a college student at Massachusetts State University (“**MSU**”). **MSU** provides students with access to the school’s computer network and free access to the Internet on school-owned computers located in computer rooms around campus. Students who have their own computers may also access the Internet from their dorm rooms via the school’s network. Students access the school system by logging on with a username and password. **MSU**’s Terms of Use policy prohibits students from installing software or executing malicious programs on the system.

Late one evening, **A** decides to surf the Internet on a school-owned computer. **A** signs onto G-Com, a beta¹ Instant Messenger System², and begins instant messaging people online. After several minutes, **A** is messaged by “**BeautifulBezoar**” (“**B**”) whom **A** does not know. The following exchange takes place:

BeautifulBezoar: Hello. What’s up?
Abel: Just chatting. Are you really beautiful like your name says?
BeautifulBezoar: Yes.
Abel: You’re a woman?
BeautifulBezoar: I like to think so. I am 15. Do you like young ladies?
Abel: Not really, but we can talk. I go to **MSU**.
BeautifulBezoar: Hey, I live near you. Do you want to get together?
Abel: Thanks. No. I don’t have the time.
BeautifulBezoar: Oh, that’s too bad.
Abel: I have to go to sleep. It’s very late.
BeautifulBezoar: Ok. Would you like a picture of me?
Abel: Ok. My address is **Abel@MSU.edu**

B sends **A** an email to “**Abel@MSU.edu**” to which are attached four digital pictures of a nude girl who appears to be approximately fifteen years of age. In reality, **B** is a lonely 45-year-old single mother. The photos are of **B**’s daughter taken five years earlier. **A** and **B** communicate several times via email, but **A** has no intention of meeting **B**. In fact, after viewing the photos he believes to

¹ The beta version of a software release is considered to be a preview. It has all the standard features, but is not yet ready for wide release or sale. During this point, the company will collect feedback from users about the product’s usability — what they like and what should be changed — before the product’s wide release. A beta version of a program can be either a closed beta, which is limited to a specific group of users, or an open beta, which is available for the general public to use

² An instant messenger system is a system that enables users to chat with each other online. The G-Com instant messenger provides video conferencing, software exchange and document collaboration capabilities as well.

be of **B**, **A** moves them to the recycle bin. However, after much coaxing from **B**, **A** announces that he will meet her by sending an email that says: "OK, you convinced me to meet you."

Meanwhile, two other MSU students, Carl ("**C**") and Darryl ("**D**"), who are both computer science majors, plant spyware on several school-owned computers, which secretly records students' usernames and passwords when they log onto the system. Twenty students, including **A**, log onto the school-owned computers hosting the spyware. The program secretly records the students' usernames and passwords. **D** returns later that day and collects the twenty students' login information.

C also decides to market the spyware program over the internet. **C** creates a website called "MSUSpyware.com," where he advertises the product. Wishing to expose his software to a wider audience, **C** asks his friend Ezekiel ("**E**"), who owns and operates a website called "CollegeHackers.com," to provide a link to <http://www.MSUSpyware.edu>, which **E** does.

Unknown to **C** or **D**, however, their program contains a serious flaw that "crashes" those computers onto which the program is loaded. **MSU** calls a computer repairman to fix the affected computers. The repairman fixes the school-owned computers, and charges **MSU** \$50 per hour for ten hours of work.

C decides to share the student login information with another MSU student named Frederica ("**F**"). First, **F** logs onto the MSU system using **A**'s username and password. **F** reads **A**'s email. Unknown to **A**, there was another email from **B** to which was attached three more photos of **B**'s daughter. **A** had not opened this email, but **F** did.

Next, **F** accesses the account of a student named Greg ("**G**"). **F** finds files in **G**'s account named "Stolen_Social_Security_Numbers.doc" and "Phony_State_Drivers_License_Template.jpg." **F** contacts the police and reports both **A** and **G**. The police, interested in initiating an investigation into the matters, tell **F** to "keep up the good work."

Following this, **F** accesses the account of Harry ("**H**"), another **MSU** student. While looking at **H**'s outgoing email, **F** discovers the following email sent by **H** to Ingrid ("**I**");

My Dearest Ingrid,

Nobody cheats me and gets away with it. If I don't get my money, I'm going to kill you and your entire family. I don't care if I have to drive across the country to get you.

Have a nice day,
Harry

Police investigators are sent to talk to **F**. **F** explains how she accessed the student accounts, and shows them what she had discovered while sifting through the accounts of **A**, **G** and **H**. While searching the account belonging to **G**, the police ask **F** to open another suspicious file entitled "Fake_ID_Customers.xls." In that file, **F** and the police find a list of the names of persons to whom

G had apparently sold false identification. Based on the information provided by **F**, the police apply for a warrant to search the dorm rooms belonging to **A**, **G** and **H**, including their personal computers, if any. Upon their arrival on campus, they are met by the **SMU** President, Mr. Jordan ("**J**") who accompanies them to the dorm rooms and assents to the searches.

While searching **G**'s room, the police find a laminating machine, several fake social security cards, and two fake drivers' licenses. They also find a set of lock-picking tools.

While searching **H**'s computer for evidence of "threatening communications," the police discover on **H**'s computer a stolen Kryptonite ("**K**") program that **H** had apparently downloaded from **E**'s hacker website.

Assume that all of the parties subsequently learned about the identities and actions of all the other parties.

FACT PATTERN ONE QUESTIONS

1. Criminal Offenses

- 1.1 Who may be charged with criminal offenses by the United States Attorney's Office, and with what criminal offenses may each defendant be charged?
- 1.2 What are each defendant's substantive defenses?
- 1.3 What is the government's counterargument to each defense?
- 1.4 What evidence should arguably be suppressed, and why?

2. Civil Liability

- 2.1 Who may be civilly liable to whom, and under what theories?
- 2.2 What are each defendant's defenses?
- 2.3 What are the plaintiff's counterarguments to each defense?

3. Other

- 3.1 What other relevant issues do you feel are worthy of discussion based on this fact pattern?

SECTION TWO

How would you describe the purpose of the Cybercrime Convention? What concerns, if any, do you have with regard to the privacy rights of individuals? How does the treaty address privacy concerns? What is the effect of member states with differing levels of privacy protections? Consider the circumstance where an individual writes and releases a virus like the "I LOVE YOU" bug or a DOS attack in a country (Widgetland) that is a member nation and that virus affects individuals in Australia, Canada, the UK or the USA. What would the investigation, search & seizure, collection of evidence, prosecution, penalty and inter-state cooperation look like? Note: you may not answer this question if you selected Fact Pattern Two in Section One about Henry the Hacker.

End of Examination

Have a Great Winter Break!