

Cybercrime and Digital Law Enforcement

ICT 552, Section 401, Fall 2018

Instructor: Dr. Bryce C. Newell
Class time and location: Th. from 6:00 pm – 9:00 am, L.C. Little Fine Arts Library, Room 312
Office address: 341 Lucille Little Fine Arts Library
Email: brycnewell@uky.edu
Office phone: (859) 218-3415
Office hours: Tuesday and Thursday from 11:00am-1:00pm
Virtual office hours: During office hours (or by appointment) via Zoom:
<https://uky.zoom.us/j/7332000666>

Preferred method of contact: Email.

Communication and appointments policy: Contact me via e-mail to schedule an appointment to meet or to talk about the class; I will try to respond as soon as possible, usually within 24-48 hours during weekdays, or on Monday for emails sent over weekends. I will generally not check or respond to my email on weekends or holidays, so please be patient if you email me during these time periods.

COURSE DESCRIPTION

The global reach of the Internet, the low marginal cost of online activity, and the relative anonymity of users have contributed to a wide escalation in cybercrimes. Consequently, information and communications technologies (ICT) are being increasingly employed to instigate threats to global civil society. This course provides an overview of cybercrime and the digital law enforcement practices put in place to respond to them. The course will focus on the types and extent of current cyber crimes, how the justice system responds to these crimes, the various constitutional protections afforded to computer users, the law and policies that govern cybercrime detection and prosecution, and related technologies.

PREREQUISITES

None.

STUDENT LEARNING OUTCOMES

Students completing the course will be able to:

- Define and describe the nature and scope of cybercrime;
- Develop knowledge of major incidents of cybercrime and their resulting impact;
- Analyze and discuss national and global digital law enforcement efforts;
- Critically consider specific laws and policies governing cybercrime detection and prosecution;
- Identify and evaluate the specific technology that facilitates cybercrime and digital law enforcement;
- Critically evaluate the impact of cybercrime on information professions.

REQUIRED MATERIALS

Thomas J. Holt, Adam M. Bossler, and Kathryn C. Seigfried-Spellar. 2017. *Cybercrime and Digital Forensics: An Introduction*. New York: Routledge (2nd Edition). ISBN: 978-1138238732.

Additional readings

All other required readings (those not contained in the required book) will be posted to Canvas (or linked to online, if they are open-access materials). Assigned readings are noted in the [Course Schedule \(on Canvas\)](#).

Canvas

The Canvas course management system will be used to facilitate the class. The course's Canvas page is at <https://uk.instructure.com/courses/1920634>. Please visit <https://www.uky.edu/canvas/> to learn about this system and the login requirements.

Computer and Internet Access

You will need access to an appropriate computer with a broadband Internet connection and a word processing program (e.g., Microsoft Word).

Additional Resources (optional)

For highly entertaining reads, I recommend:

- Cliff Stoll's *The Cuckoo's Egg: Tracking a Spy Through the Maze of Computer Espionage* (various editions, the newest is the Pocket Books printing, 2005);
- Nate Anderson. 2014. *The Internet Police: How Crime Went Online, and the Cops Followed*. New York: W.W. Norton & Company, Inc. ISBN: 978-0393349450.

COURSE ACTIVITIES AND ASSIGNMENTS

Summary of assignments (for undergraduate students)

<u>Assignment</u>	<u>Deadline</u>	<u>Points</u>
Participation	varies; in class	10
Group presentation	varies; in class	15
Case briefing (x2)	varies; in class	15
Position paper	Oct. 11	25
Documentary analysis	Nov. 15	5
<u>Final exam</u>	<u>Dec. 11 @ 6-8pm</u>	<u>30</u>
TOTALS		100

Summary of assignments (for graduate students)

<u>Assignment</u>	<u>Deadline</u>	<u>Points</u>
Participation	varies; in class	10
Group presentation	varies; in class	15
Case briefing (x2)	varies; in class	15
Position paper (first draft)	Oct. 11	15
Documentary analysis	Nov. 15	5
Position paper (final draft)	Nov. 29	20
<u>Final exam</u>	<u>Dec. 11 @ 6-8pm</u>	<u>20</u>
TOTALS		100

SUMMARY DESCRIPTION OF COURSE ASSIGNMENTS

Success in this course will require student attendance and participation—in class and outside of class. The following paragraphs summarize the graded assignments for the course. Note that graduate students will need to complete additional assignments beyond that required of undergraduate students. Please note that there are a variety of on-campus resources for students to seek assistance on oral or written assignments, including Presentation U! (<http://www.uky.edu/presentationU/>). Please make use of the resources that are available to you, as needed.

Undergraduate and Graduate Students:

1. **Participation.** Participation in classes is expected, and such participation generally requires that you have done the assigned readings prior to class. We will also have multiple guest lectures during the semester. The dates and topics of these guest lectures will be added to the syllabus (under the Course Schedule) as they are confirmed (if changes are made to this schedule, you will be informed via Canvas). To receive full credit for participation, students should be prepared to regularly ask questions, respond to questions, or comment during regular and guest lectures.
2. **Group presentation.** Students will be randomly assigned to a small group of (approximately 3) students and will be required to give a 10-minute presentation—followed by another 10 minutes of responding to questions from the class—at the beginning of one class session over the course of the term. The date of the presentation will be also be randomly assigned to each group. The purpose of the presentation is to have students research a recent cybercrime incident or legal case (any occurring in 2017 or 2018 are acceptable) and to summarize for their classmates 1) the background and facts of the case, 2) the legal and technical issues involved in the case and, 3) as far as the case has been resolved, the outcome of the case. Students should also briefly summarize what impact they think the case has had on technology, criminal activity, policy, and/or the law (pick one or two, not all).
3. **Case briefing.** As we will be reading and discussing a number of legal decisions over the course of the semester, students will be responsible for briefing (reading and being prepared to discuss in class) the cases assigned during two different class sessions. Students will be assigned to these two dates during the first class session (there will be a group of approximately 3-4 students assigned each day). On each of these days, the assigned students should be prepared to present (and answer questions from the instructor about) the following details of all of the assigned cases for that day: 1) the relevant facts of the case (e.g., who allegedly did what), 2) the primary legal issue or question confronting the court, 3) the rule (or holding) announced by the court, and 4) the reasoning used by the judges to come to their conclusion. PASSING: students are free to “pass” when called on during their assigned days; however, if a student passes, they will then be re-assigned to another date later in the semester (generally the next class meeting unless arranged with the instructor in advance). If a student passes during the final week of class, there will not be any chance to make up the assignment. To receive full points, students must adequately brief cases in two class sessions. OPTION: Students may elect to be on-call for a third day, in which case their lowest score across the three days will be dropped (only the two higher grades will be used).
4. **Documentary analysis.** For this assignment, students should select and watch a cybercrime-related documentary (non-fiction) film and write a concise two- to three-page summary and analysis of the film and/or the issues raised in the film. The analysis should include the following: 1) the name of the film, release date (year), and name of the film’s director, 2) a short summary of the content and focus of the film, and 3) a paragraph or two in which the student reflects on their reaction to the film and how the issues in the film relate to the topics covered in the course and/or the student’s interests or intended career path.
5. **Position paper.** This three- to four-page essay (which also works as the first draft of the final term paper for graduate students), is an exercise in exposition, argumentation, and critique. You will need to clearly present a normative argument about a particular form of cybercrime, the criminalization of some form of cybercrime, or the regulation police investigations in cybercrime cases (that is, you need to argue, for example, that X ought to be, or that Y should

(or should not) be criminalized, or that the police should (or should not) be allowed to do Z when investigating cases involving crime Y). The ought or should aspect of the argument is key here, as you need to go beyond explaining what the law (or nature of the crime) is, and make a normative argument, using the best evidence (premises) that you can to make the argument as strong as possible.). The argument you make to demonstrate your position should be your own (i.e., not taken directly from another source), but may be informed by the assigned readings, other academic sources, law (legal cases, statutes, other legal instruments), or current events. You will explain the thesis of your argument, provide background and contextual information, and craft a formal argument (**note: you must formalize your argument in the format shown below**) with premises that lead, logically, to your stated conclusion. You might begin with an introduction that contains a thesis statement and an explanation of the technology and the context in which you are situating it for purposes of your argument, followed by the formal development of your argument. For example, a valid argument structure might look something like:

- Premise 1. Such and so is the case.
- Premise 2. This or that is true.
- Premise 3. If such and so is true and this or that is true, then X is true.
- Conclusion. So it follows that X is true

You should also present a discussion and analysis of your premises and conclusion, including any cases or evidence that support your argument, and define any terms you use that might be subject to multiple meanings or interpretations. You may incorporate legal or other research and analysis when appropriate for your chosen topic, but you are not required to research or incorporate sources outside those required for the course (those noted as required readings in the Course Schedule).

6. **Final exam.** The final exam will be a two-hour, partly-open-book, written examination held during our regularly-scheduled final exam period on December 11 (from 6–8pm). The exam will consist of 1) a set of multiple-choice questions, and 2) a written portion in which students will be given a set of facts and corresponding questions that they must answer in written form. Students will be provided copies of any needed legal statutes (e.g., relevant provisions of the Stored Communication Act) when they enter the exam room, but they will be responsible for preparing and bringing notes related to legal cases and other content covered during the semester. Students may bring one letter sized piece of paper with notes into the exam (two-sided, hand written or typed, any size font is acceptable). The exam is comprehensive and may cover any material presented in class or contained in the required readings. Students must use laptops to write the exam. The exam will be submitted online via Canvas. If you do not have access to a laptop for the exam, please inform the instructor as soon as possible, preferably at least two weeks prior to the exam, so a suitable loaner laptop can be arranged. Any reference to (reviewing, reading, etc.) additional sources, besides those outlined above, is not allowed, and students found cheating during the exam will receive 0 points for the exam.

Graduate Students (additional assignments):

7. **Position paper (final draft).** For their final paper, students should update and expand their earlier position paper based on additional research as well as feedback from the instructor. The final paper should meet the basic requirements from the first draft assignment, with the additional requirements that the student should include a reflective paragraph in which they summarize the changes they made and why they made them, the paper should be significantly

updated based on feedback and additional time to think about the issues and should be approximately four to six pages in length.

COURSE GRADING

Undergraduate Grading Scale

[90% – 100%] = A (Exceptional Achievement)
[80% – 89%] = B (High Achievement)
[70% – 79%] = C (Average Achievement)
[60% – 69%] = D (Below Average Achievement)
[0% – 59%] = F (**Fail**)

Graduate Grading Scale

[90% – 100%] = A (Exceptional Achievement)
[80% – 89%] = B (High Achievement)
[70% – 79%] = C (Average Achievement)
[60% – 69%] = **E (Fail)**

Expectations for Graduate Students Beyond the Expectations for Undergraduates

Graduate students enrolled in the course will need to revise and expand their initial position paper, as outlined above.

Grading Rubric for Written Assignments

The following grading rubric will be employed to evaluate submitted written assignments:

Written communication (50 %)

Organization

- Professional quality (25 %): The essay can be easily followed. A combination of the following is apparent: Effective transitions are used; a professional format is used.
- Adequate (20 %): The essay can be easily followed. A combination of the following is apparent: Basic transitions are used; a structured format is used.
- Needs Improvement (15 %): Organization of the essay is difficult to follow, due to inadequate transitions and/or rambling format.
- Inadequate (10 %): There appears to be no organization of the essay's contents.

Mechanics and grammar

- Professional quality (25 %): The essay is clear and concise and contains no grammatical or mechanical errors.
- Adequate (20 %): The essay contains minimal grammatical or mechanical errors.
- Needs improvement (15 %): The essay contains numerous grammatical and mechanical errors.
- Inadequate (10 %): Sentences and paragraphs are difficult to read and understand due to poor grammar or mechanics

Content (50 %)

Correctness of facts

- Professional quality (25 %): All facts are correct, and the technical explanation is both concise and complete.
- Adequate (20 %): Technical details are generally correct.
- Needs improvement (15 %): Some facts are wrong.
- Inadequate (10 %): Most facts are wrong.

Completeness

- Professional quality (25 %): Addressed all questions completely.
- Needs improvement (15 %): Addressed the questions, but provided few details.
- Adequate (20 %): Address the questions, but left out some details.
- Inadequate (10 %): Did not address some of the questions.

Midterm Grade Policy

Mid-term grades for undergraduate students will be posted in myUK by the deadline established in the Academic Calendar (<http://www.uky.edu/registrar/content/academic-calendar>); however, since there is no mid-term exam and many of the graded assignments happen at different times during the semester for different students, the mid-term grade will only reflect those assignments completed by the deadline (Oct. 20, 2017).

Final Exam Information

The final exam will be held from 6:00 to 8:00pm on Tuesday, December 11, 2018, in LCLI 312 (the same room that we meet in all semester). Please see the summary of the exam above for more details.

SUBMISSION OF ASSIGNMENTS

All written assignments (including the short paper and online discussion questions—and final paper for graduate students) are due by 11:59pm on the dates indicated above, unless otherwise indicated. Written assignments must be submitted online via Canvas. **All written assignments should be submitted in letter format with 12pt Times New Roman text and single or 1.15-line spacing, and with standard (e.g., 1 inch) margins.**

LATE SUBMISSIONS: If you submit a piece of coursework after the deadline but within 24 hours of the deadline, your mark will be reduced by 25 percent (i.e. you will receive 75 percent of what you would have received if the assignment was turned in on time). Assignments turned in more than 24 hours (but less than 48 hours) after the deadline will receive a 50 percent deduction. Assignments turned in 48 or more hours late will not be accepted and will not be graded (i.e. you will get zero points for that assignment). The only exceptions to these rules will be for excused absences, which will be handled according to University policies (see Senate Rule 5.2.4.2; more details are outlined below in the General Course Policies section of the syllabus) and for situations where the instructor deems an extension reasonable.

GENERAL COURSE POLICIES

Policies concerning academic integrity, excused absences and academic accommodations due to disability are available online at: <https://ci.uky.edu/sis/sites/default/files/policies.pdf>.

Attendance Policy

You are expected to attend every class session. Some assignments require attendance, and excessive unexcused absences may result in a lower grade. If a student misses 20% or more of the class (3 or more class sessions), the student will fail the course and will be expected to withdraw from the course (SR 5.2.4.1-2) (Senate Rules are available online at <http://www.uky.edu/universitysenate/>). This class is a community whose success depends on everyone's participation, and it is vital for you to attend class in order to be successful. If you are absent on a day when an assignment is due, you will be allowed to hand in or make up that work only if the absence is officially excused. You will be asked to provide official written documentation for excused absences the next time you are in class in order for your absence to be excused. If you know ahead of time that you will be absent from class with an excused absence, please discuss this with your instructor and turn in any assignments ahead of time. Excuses for university-sponsored activities must be made prior to such absences. For any emergency situation that arises, email your instructor as soon as you know about the situation when possible. No make-up work is available for in-class exercises unless approved in advance by your instructor. Students have one week to complete a missed assignment or quiz due to an excused absence upon their return without penalty.

Excused Absences (S.R. 5.2.4.2)

Students need to notify the professor of absences prior to class when possible. Senate Rule 5.2.4.2 defines the following as acceptable reasons for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, and (e) other circumstances found to fit “reasonable cause for nonattendance” by the professor.

Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day in the semester to add a class. Two weeks prior to the absence is reasonable, but should not be given any later. Information regarding major religious holidays may be obtained through the Ombud (859-257-3737, http://www.uky.edu/Ombud/ForStudents_ExcusedAbsences.php).

Students are strongly encouraged to withdraw from the class if more than 20% of the scheduled classes for the semester are missed per university policy. Please reference the definition of excused absences in the current edition of Student Rights and Responsibilities or on the web at http://www.uky.edu/Faculty/Senate/rules_regulations/Rules%20Versions/MASTER%20RULES%20from%20February%202012_clean.pdf.

If a student has excused absences in excess of one-fifth (20%) of the class contact hours for that course, a student has the right to receive a "W", or the Instructor of Record may award an "I" for the course if the student declines to receive a "W" [US: 2/9/1987; SREC: 11/20/1987; US: 2/8/2016].

Per Senate Rule 5.2.4.2, students missing any graded work due to an excused absence are responsible: for informing the Instructor of Record about their excused absence within one week following the period of the excused absence (except where prior notification is required); and for making up the missed work. The professor must give the student an opportunity to make up the work and/or the exams missed due to an excused absence, and shall do so, if feasible, during the semester in which the absence occurred.

Verification of Absences

Students may be asked to verify their absences in order for them to be considered excused. Senate Rule 5.2.4.2 states that faculty have the right to request “appropriate verification” when students claim an excused absence because of illness, or death in the family. Appropriate notification of absences due to University-related trips is required prior to the absence when feasible and in no case more than one week after the absence.

Academic Integrity, Cheating, and Plagiarism

Per University policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in all courses. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the University may be imposed.

Plagiarism and cheating are serious breaches of academic conduct. Each student is advised to become familiar with the various forms of academic dishonesty as explained in the Code of Student Rights and Responsibilities. Complete information can be found at the following website: <http://www.uky.edu/Ombud>. A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited.

Senate Rules 6.3.1 (see <http://www.uky.edu/Faculty/Senate/> for the current set of Senate Rules) states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where

students feel unsure about a question of plagiarism involving their work, they are obliged to consult their instructors on the matter before submission.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording, or content from another source without appropriate acknowledgment of the fact, the students are guilty of plagiarism.

Plagiarism includes reproducing someone else's work (including, but not limited to a published article, a book, a website, computer code, or a paper from a friend) without clear attribution. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work, which a student submits as his/her own, whoever that other person may be. Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student, and the student alone.

When a student's assignment involves research in outside sources or information, the student must carefully acknowledge exactly what, where and how he/she has employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content, and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas, which are so generally and freely circulated as to be a part of the public domain.

Please note: Any assignment you turn in may be submitted to an electronic database to check for plagiarism.

Group Work & Student Collaboration

Unless otherwise noted, all assignments are expected to be done by the individual student. Students are only allowed to collaborate on assignments when explicitly allowed by the instructor or syllabus.

Incompletes

Student requests for an Incomplete (an I grade) will be considered within University guidelines and only in extreme circumstances. See section 5.1.3.2 <http://www.uky.edu/StudentAffairs/Code/part2.html>.

Classroom Behavior

Students are expected to full participate in class. This means having completed all assigned readings prior to class and arriving prepared to discuss the topics for that class period. Participation also includes activity on our Canvas site used to facilitate in-class activities. All students participating in class room discussions are expected to provide relevant discussion, be respectful of other classmates and their opinions, and share any relevant personal experience that may add to the topic at hand. You are encouraged to make your own arguments and state your own opinions about relevant issues we cover in class, but you must do so in a way that respects opposing points of view and does not belittle or denigrate the opinions of others in the class. Additionally, you should be prepared to present and defend the premises of (or logical reasons behind) your arguments and to not simply state conclusions.

Technology use in the classroom

You may use laptops and other devices in the classroom for class-related purposes (completing in-class assignments, reviewing class readings or other lecture and class related materials, etc.). The use of smartphones, tablets, laptops, or other technologies in the classroom for non-class-related activities is not allowed. Violations of this policy may result, at the discretion of the instructor, in changes to this policy and/or penalties to students' participation grades for the course.

Academic accommodations due to disability

If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (DRC). The DRC

coordinates campus disability services available to students with disabilities. It is located on the corner of Rose Street and Huguelet Drive in the Multidisciplinary Science Building, Suite 407. You can reach them via phone at (859) 257-2754 and via email at drc@uky.edu. Their web address is <http://www.uky.edu/StudentAffairs/DisabilityResourceCenter/>.

TECHNOLOGY INFORMATION & RESOURCES

Distance Learning Students are expected to have a minimum level of technological acumen and the availability of technological resources. Students must have regular access a computer with a reliable Internet connection and audio capabilities. Internet Explorer 7 (IE) or Firefox 2.x are the recommended browsers for those using a Windows-based PC. Those using Firefox 3.x may encounter problems with assignment uploads. Those using an Apple computer with MAC OS X (10.5.x) may use Firefox 3.x or Safari 3.x.

Please be certain that your computer and/or browser allow you to view Adobe Reader documents (.pdf). Microsoft Office and other software products are free for students: <http://download.uky.edu/>.

As your instructor, I am your first go-to person for technology problems. If you need more immediate assistance, please contact UKIT.

Information Technology Customer Service Center (UKIT)

<http://www.uky.edu/UKIT/>; 859-218-4357

Library Services & Distance Learning Services

<http://www.uky.edu/Libraries/DLLS>

- Carla Cantagallo, DL Librarian
- Local phone number: (859) 257-0500, ext. 2171; long-distance phone #: (800) 828-0439 (opt. #6)
- Email: dllservice@email.uky.edu
- DL Interlibrary Loan Service:
http://www.uky.edu/Libraries/libpage.php?lweb_id=253&llib_id=16.

For more resources about online classes and student resources, visit <http://www.uky.edu/ukonline/>.

The School of Information Science has a page with a comprehensive list of technology resources here: <http://ci.uky.edu/sis/students/techtips>.

MILITARY MEMBERS AND VETERANS

We recognize the complexities of being a member of the military community and also a student. If you are a member of the military or a military veteran or dependent, please inform your instructor if you are in need of special accommodations. Drill schedules, calls to active duty, mandatory training exercises, complications with GI Bill disbursement, and other unforeseen military and veteran related developments can complicate your academic life. If you are aware of a complication, we will work with you and put you in contact with university staff members who are trained to assist you. Please contact the Coordinator of the University of Kentucky Veterans Resource Center at (859) 257-1148 for additional assistance. Visit <http://www.uky.edu/veterans> for more available resources.