INFO I330/INFO H537/INFO C402
Legal and Social Informatics of Security

Department of Human-Centered Computing
Indiana University School of Informatics and Computing, IUPUI

Section No: 22256, 35055, 27162 *Credit Hours*: 3
Time: Online, asynchronous
Location: N/A
First Class: January 7, 2019
Website: https://iu.instructure.com/courses/1786405

 (Photo of Professor Hook)

Instructor: Sara Anne Hook, B.A. (History), M.L.S., M.B.A. (Finance), J.D.

- Professor of Informatics/Human-Centered Computing, Indiana University School of Informatics and Computing, IUPUI
- Adjunct Professor, Center for Intellectual Property Law and Innovation, Robert H. McKinney School of Law, Indiana University
- Adjunct Professor of American Studies, School of Liberal Arts, IUPUI
- Admitted: Indiana (1994), Supreme Court of the United States (2012)

Office Hours: Office hours are <u>Wednesdays</u> from 2:00 p.m. - 4:00 p.m. (in person, by phone or using the Canvas Chat feature) and by appointment.

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Prerequisites: None. Elective for undergraduate informatics and new media students. Elective for paralegal and other programs. Required course for legal informatics certificate and cognate for the Collaborative B.S. in Informatics degree.

Course Coach (Tipster pointing)

This is my virtual coach for the course. He is a cat and his name is Tipster. He will be helping you throughout the semester with tips, suggestions and encouragement.

Course Etiquette:

Please address me as Professor Hook or Prof. Hook. In terms of social media, please note that I do not accept LinkedIn invitations from current students. I also do not provide letters of recommendation unless I have been your faculty mentor for a thesis, capstone project, independent study or service learning project or you have been my research assistant/teaching assistant (RA or TA).

Course Description

This course examines that set of ethical and legal problems most tightly bound to the issues of information control. The interaction and technology change, but the core issues have remained: privacy, intellectual property, Internet law, concepts of jurisdiction, speech anonymity versus accountability and ethical decision making in the networked environment. This is a case-based course on privacy and security in social contexts. Cases address the specific designs of technologies and discuss how different technically feasible design choices would result in distinct regulatory regimes, business strategies, or support different forms of social interaction. This course focuses on specific security and privacy technologies as sociotechnical systems.

During the semester, we will move from a discussion of broad national and international themes in cybersecurity, including laws, cases and regulations, to the practical application of information security in individual organizations. Providing this course online gives students an opportunity to learn this important facet of informatics and new media in a flexible but structured and supportive format. This course is also part of the legal informatics area of specialization and the legal informatics certificate. Because of the ethical issues related to client confidentiality, law firms must exercise an especially high level of care over the security of information and systems.

Required Textbooks

Shaw, Thomas J. *Information and Internet Law – Global Practice*. CreateSpace, 2017. ISBN 9781535378284. You should be able to find this via Amazon.

Bandler, John. *Cybersecurity for the Home and Office*. Chicago: ABA, 2017. ISBN 9781634259071.

Available at the Barnes & Noble bookstore on the IUPUI campus or various online vendors.

Additional Readings

The textbooks will be supplemented with readings from business, legal and technology journals and books, PowerPoint presentations, websites and sample forms, templates and agreements. This material will be provided via Canvas.

IUPUI Principles of Undergraduate Learning (PUL) - http://due.iupui.edu/Undergraduate-Curricula/General-Education/Principles-of-Undergraduate-Learning

Faculty members are required to designate a PUL of Major, Moderate and Some Emphasis for every course in the undergraduate curriculum. For INFO I330/H537 Legal and Social Informatics of Security,

- Major Emphasis: 3 Integration and Application of Knowledge
- Moderate Emphasis: 2 Critical Thinking
- Some Emphasis: 6 Values and Ethics

Revised (by Anderson) Bloom's Taxonomy (RBT)

Faculty members must also indicate the Revised (by Anderson) Bloom's Taxonomy for each learning outcome in the course.

1. Remembering
2. Understanding
3. Applying
4. Analyzing
5. Evaluating
6. Creating

Program-level Learning Outcomes (PLO)

Finally, we are required to indicate which of the B.S. in Informatics Program-level Learning Outcomes are addressed in the course:
http://soic.iupui.edu/undergraduate/degrees/informatics/learning-outcomes/

Learning Outcomes

Upon completion of the course, students will be able to:

- Express the global and local nature, including the risks and threats, of information security and privacy. [PULs 2 and 3][RBT 4][PLO 2 and 3][DF, E, CS, SR]
- Assess the information security and privacy lifecycle. [PULs 2 and 3][RBT 5][PLO 3][DF, E]
- Evaluate the impact of the Internet on information security and privacy, including access, jurisdiction, speech and intellectual property. [PULs 2 and 3][RBT 5][PLO 2 and 3][DF, E, CS, SR]
- Interpret state, national and international laws, regulations and other obligations for information security and privacy. [PULs 2 and 3][RBT 5][PLO 3][DF, E, AR, CS]
- Reframe the issues of information security and privacy based on unlawful versus lawful data disclosure. [PULs 2 and 3][RBT 5][PLO 3][DF, E, CS]
- Interpret the duty of confidentiality as it relates to medical, financial and personal information under federal and state laws and outline what to do if there is a breach. [PULs 2, 3 and 6][RBT 5][PLO 2, 3 and 5][DF, E, CS, SR]
- Analyze a variety of case decisions related to information security and privacy. [PULs 2 and 3][RBT 4][PLO 3][DF, E, CS]

- Articulate the special legal and ethical obligations of attorneys and the legal team for information security and privacy. [PULs 2, 3 and 6][RBT 3][PLO 3 and 5][DF, E, AR, CS, SR]
- Classify the criminal and civil liability that organizations may face for improper security and privacy measures and what the penalties might be. [PULs 2 and 3][RBT 4][PLO 3][DF, E, CS]
- Implement a process for risk assessment based on the various types of threats that can occur. [PULs 2 and 3][RBT 6][PLO 3][DF, E, CS]
- Compare and contrast the methods for providing information security and privacy controls. [PULs 2 and 3][RBT 5][PLO 5][DF, E, CS]
- Analyze the standards, guidelines and best practices for information security and privacy. [PULs 2 and 3][RBT 4][PLO 2 and 3][DF, E, AR, CS]
- Interpret the information privacy and security implications of new and emerging technologies, such as social media, artificial intelligence, the Internet of Things, cloud computing, mobile devices and e-commerce. [PULs 2, 3 and 6][RBT 5][PLO 3][DF, E, AR, CS]
- Create a plan for implementing basic and advanced security measures for networks, devices and data for an organization, including remote access and infrastructure. [PULs 2 and 3][RBT 6][[PLO 3][DF, E, CS]
- Examine the role and responsibilities of technologists as advisors on information security and privacy. [PULs 2, 3 and 6][RBT 4][PLO 3 and 5][DF, CS, SR]
- Prepare comprehensive memoranda about information security and privacy for specific types of organizations, including recommendations. [PULs 2, 5 and 6][RBT 6][PLO 3][CS]

E=Exam
DF=Discussion Forum
AR=Article Review and Critique
CS=Case Study
SR=Self-Reflection on Cybersecurity

Software Used

Any software and related materials will be provided by vendors at no charge to students or the school.

Expectations/Guidelines/Policies

Assignments are due by the stated deadline, although you can certainly submit them earlier if you wish. **If you need an extension, you must have prior approval via email - and if you are granted an extension, I reserve the right to deduct points from your assignment.** <u>**PLEASE NOTE: I no longer provide a one-week grace period. Assignments are due by the stated deadline unless you have been granted an extension.**</u> Again, <u>**NO LATE WORK**</u> will be accepted <u>**unless**</u> you have been granted an extension via email before the due date. P**lease use the Canvas email system to communicate with me – I log into Canvas on the weekends, but not regular IU/IUPUI email, so Canvas is the fastest way to contact me.** Please note that all

written assignments (Case Studies, Article Review and Critique), except the Self-Reflection on Cybersecurity, are due on Fridays by 5:00 p.m.

Exams will open on Fridays at 5:00 p.m. and be available until Sundays at 5:00 p.m. Responses to the Discussion Forum questions are due on Sundays by noon. The Self-Reflection on Cybersecurity will be due on Monday, April 29 by 5:00 p.m.

There is no final examination for this course. Also, there is no opportunity for extra credit in this course. Due to time constraints and wanting to be fair to all students, I do not review and provide feedback on assignments prior to submission. If technical difficulties with your submission mean that I cannot download or access your assignment, I will contact you and you will have one week to email the assignment to me in a file format that I can access. This will be especially important with the assignments that require you to use any software that we cover in the course.

If you believe that I have made an error in grading your assignment (points are not added correctly, etc.), you must contact me within seven calendar days. Please do not wait until the end of the semester and then begin looking for ways to increase the number of points on assignments, exams, etc. because you are unhappy with your final course grade.

It would also be wise NOT to wait until the last minute to submit homework assignments, take exams and post your responses to the Discussion Forum questions – and be sure to leave time to read the responses of other students and provide a **Reply** to at least one student. If you have technical difficulties or there are issues with Canvas, this will generally not be a valid excuse and will likely mean that your work is late and thus not eligible for any points.

Administrative Withdrawal

A basic requirement of this course is that you will conscientiously participate and complete all required course activities and/or assignments. Please notify me via email if you are unable to participate or complete an assignment on time. (See the information in the previous paragraph about requests for extensions and late assignments.) If you miss more than the first 25% of the course without contacting me, you may be administratively withdrawn from the course. Since our course is online and we do not meet, I use the Discussion Forums to monitor course participation. If you have not participated in these activities by the stated deadlines, you may be withdrawn. An administrative withdrawal may have academic, financial and financial aid implications. The administrative withdrawal will take place after the full refund period and if you are administratively withdrawn from the course, you will not be eligible for a tuition refund. If you have questions about the administrative withdrawal policy at any point in the semester, please contact me.

Incomplete

The grade of Incomplete used on the final grade report indicates that a substantial portion (75%) of the course work has been satisfactorily but not entirely completed as of the end of the semester. The grade of Incomplete may be given only when the completed portion of the student's work in the course is of passing quality. Instructors may award the grade of Incomplete upon a showing of such hardship to a student as would render it unjust to hold the student to the time limits previously established for the completion of his or her work. All unfinished work

must be completed by the date set by the instructor. Left unchanged, an Incomplete automatically becomes an F after one year. You can find the policy at: https://studentcentral.iupui.edu/grades-progress/incompletes.html

Other Policies

Work must be your own and it must be identified as such. Work of others, such as quotes used in a paper, must be properly identified and cited. Studying together either in person or via the Internet and email is encouraged; however, sharing significant amounts of work or presenting the work of others as one's own is not allowed. Please let me know if you have questions about the proper way to use quotations and citations. Also, please state the answers to assignments (Discussion Forums, Case Studies, etc.) in your own words rather than cutting and pasting text from Modules, websites, databases or other materials.

I typically upload graded assignments with my feedback to Canvas. According to campus policy, I am only required to keep your assignments for one month after they are graded and I reserve the option to dispose of them after that time.

Regulations, policies, guidelines, requirements and updates are to be followed, including those of Indiana University, IUPUI and the School of Informatics and Computing. This includes those that are printed in the IUPUI Spring 2019 Class Schedule, the current IUPUI Campus Bulletin, posted or referenced in the course's website on Canvas, posted in a classroom, laboratory, office or other campus building or those presented or noted by faculty and staff members. There are a number of campus-wide policies governing the conduct of courses at IUPUI. A Syllabus Supplement is also provided on the left side of the course's Canvas site which includes important campus policies.

I reserve the right to revise the syllabus as needed during the semester.

Course Management and Helpful Hints

There are no class meeting times per se for this course. Instead, this course is conducted "asynchronously", which means that we will be sending and receiving email messages and participating in "virtual discussions" using the Canvas Discussions tool. Please make an effort to participate in the Discussion Forum questions regularly - not only is this 20% (40 points) of your final course grade, but it will be a much more rewarding course if we all share our thoughts and expertise. Points will be taken off if all questions in a Discussion Forum are not responded to and also if you do not Reply to another student's response as indicated in the instructions for a Module. Responses to Discussion Forum questions are due on Sundays by noon. This is a 3-credit hour course and we cover a great deal of material, so you can expect to be at least as busy as you would be in a course that meets face-to-face every week.

The course will be divided into weekly Modules. Each Module will officially begin on Monday. Modules will officially end at noon on Sundays, but once I have posted a Module, it will be available throughout the semester in case you want to review. You will use Canvas to access the Modules.

For each Module, there will be a reading assignment, designated by a book icon. Many of the reading assignments will be from the course textbooks, but I will also upload, reference or provide a link to other materials as well. Whatever I upload will be provided through Canvas.

As part of eight of the Modules, there will also be a series of online discussion questions, indicated by a desktop computer icon. We will use the Discussion Forums in Canvas to share the responses to these questions. Responses to the Discussion Forum questions are due by Sundays at noon. Be sure to Reply to another student's response as indicated in the instructions for the Module.

Each week, I will also provide a mini-lecture or outline of the topic of the Module, designated by the microphone icon.

For many of the Modules, there may also be a PowerPoint presentation, guest lecture or online demonstration, which will be indicated by a movie projector icon. You will use Canvas to access these materials.

For each Module, I will provide a Fireside Chat, designated by a bonfire icon, to remind you about deadlines, explain concepts or alert you to new issues. You will use Canvas to access the Fireside Chats.

Finally, if you have questions (question mark icon), please do not hesitate to email or telephone me.

(Tipster relaxing) Tipster says, "The most important advice for the course is to stay organized."

Tipster cannot stress enough the importance of keeping up with the reading assignments and responding to the Discussion Forum questions. He has noticed a direct correlation between responding regularly to the Discussion Forum questions and doing well in the course.

If this is your first online course, please understand that the burden is on you to stay organized, to know what needs to be done each week and to pay attention to the deadlines for assignments. I will use the Announcements feature in Canvas to let you know when Modules are available and to remind you when assignments are due.

Equipment Needed

Because this is an online course delivered through Canvas, you will need weekly access to a computer and a sufficiently stable network to handle large files. You will need to be able to listen to podcasts, view PowerPoint presentations and short videos, download and print materials and search the Internet and library databases. My TA and I need to communicate with you by email, so all students will need to provide a valid email address. **Please use the Canvas email system to communicate with me – I log into Canvas on the weekends, but not regular IU/IUPUI email, so Canvas is the fastest way to contact me.**

Grading Information

There are 180 points total in the course.

- **Exam #1 (covers Modules 1-4):** Available from Friday, February 8 at 5:00 p.m. until Sunday, February 10 at 5:00 p.m. 20 points [Corresponds to PULs 2, 3 and 6]
- **Article Review and Critique:** Due Friday, February 15 at 5:00 p.m. 10 points [Corresponds to PULs 2 and 3]
- **Exam #2 (covers Modules 5-7):** Available from Friday, March 1 at 5:00 p.m. until Sunday, March 3 at 5:00 p.m. 20 points [Corresponds to PULs 2, 3 and 6]
- **Case Study #1:** Due Friday, March 8 at 5:00 p.m. 20 points [Corresponds to PULs 2, 3 and 6]
- **Exam #3 (covers Modules 8-10):** Available from Friday, March 29 at 5:00 p.m. until Sunday, March 31 at 5:00 p.m. 20 points [Corresponds to PULs 2 and 3]
- **Case Study #2:** Due Friday, April 19 at 5:00 p.m. 20 points [Corresponds to PULs 2, 3, and 6]
- **Exam #4 (covers Modules 11-13):** Available from Friday, April 19 at 5:00 p.m. until Sunday, April 21 at 5:00 p.m. 20 points [Corresponds to PULs 2, 3, and 6]
- **Self-Reflection on Cybersecurity:** Due Monday, April 29 by 5:00 p.m. 10 points [Corresponds to PULs 2, 3 and 6]
- **Participation in Discussion Forums:** 40 points (5 points per Discussion Forum) – due Sundays by noon. [Corresponds to PULs 2, 3 and 6] It will be important to read the responses from other students to get the maximum benefit from the course. Points will be taken off if questions in a Discussion Forum are not responded to, including not providing a **Reply** to another student's responses as indicated in the instructions for the Module.

Final course grades are calculated by adding up all of the points that you earned in the course and dividing by 180. This will give you a percentage. See the Grading Scale below for the minimum percentage that you need for each grade. I don't round up the grades, so if you want an A in the course, you need to achieve at least a 93%.

I use Canvas to post grades and provide feedback on your assignments.

Grading Scale [percentages and/or points]

180 points possible.

Minimum percentages for each course grade:

93% A
90% A-
87% B+
83% B
80% B-
77% C+
73% C
70% C-
67% D+
63% D
60% D-
Below 60% F

Undergraduate Students: No credits towards major, minor or certificate requirements are granted for a course grade below a C. No credits towards general education or elective requirements are granted for a course grade below a C-. In other words, you should strive to earn at least a C in this course.

Please note that earning an A means that a student must achieve true excellence in the course. We have a strict policy against grade inflation and our school's Associate Dean for Academic Affairs scrutinizes final course grades to be sure that a faculty member does not have a pattern of awarding too many A grades.

Course Schedule Detail

Module 1: Week of 1/7
Topic: Introduction to Information and Internet Law
Reading Assignment: Chapter 1 in Shaw
Discussion Forum #1 (covers Module 1): due Sunday, January 13 by noon

Module 2: Week of 1/14
Topic: Privacy and Information Security Law – Part 1
 Reading Assignment: Chapter 2 in Shaw, pages 33-72 and Chapter 2 in Bandler

Module 3: Week of 1/21
Topic: Privacy and Information Security Law – Part 2
Reading Assignment: Chapter 2 in Shaw, pages 73-116 and Chapter 3 in Bandler
Discussion Forum #2 (covers Modules 2-3): due Sunday, January 27 by noon

Module 4: Week of 1/28
Topic: Data Protection and Privacy Law in the EU
Reading Assignment: Chapter 3 in Shaw, pages 117-164 and Chapter 4 in Bandler

Module 5: Week of 2/4
Topic: Data Protection and Privacy Law Elsewhere
Reading Assignment: Chapter 3 in Shaw, pages 165-187 and Chapter 5 in Bandler
Exam #1 (covers Modules 1-4): Available from Friday, February 8 at 5:00 p.m. until Sunday, February 10 at 5:00 p.m.
Discussion Forum #3 (covers Modules 4-5): due Sunday, February 10 by noon

Module 6: Week of 2/11
Topic: Unlawful Data Disclosure – Part 1
Reading Assignment: Chapter 4 in Shaw, pages 189-220 and Chapter 6 in Bandler
Article Review and Critique: due Friday, February 15 at 5:00 p.m.

Module 7: Week of 2/18
Topic: Unlawful Data Disclosure – Part 2
Reading Assignment: Chapter 4 in Shaw, pages 221-258 and Chapter 7 in Bandler
Discussion Forum #4 (covers Modules 6-7): due Sunday, February 24 by noon

Module 8: Week of 2/25
Topic: Lawful Data Disclosure – Part 1
Reading Assignment: Chapter 5 in Shaw, pages 259-285 and Chapter 8 in Bandler
Exam #2 (covers Modules 5-7): Available from Friday, March 1 at 5:00 p.m. until Sunday, March 3 at 5:00 p.m.

Module 9: Week of 3/4
Topic: Lawful Data Disclosure – Part 2
Reading Assignment: Chapter 5 in Shaw, pages 286-305 and Chapter 9 in Bandler
Case Study #1: Due Friday, March 8 at 5:00 p.m.
Discussion Forum #5 (covers Modules 8-9): due Sunday, March 10 by noon

Week of 3/11
Enjoy your Spring break!

Module 10: Week of 3/18
Topic: Internet Foundations - Access
Reading Assignment: Chapter 6 in Shaw, pages 307-330 and Chapter 10 in Bandler

Module 11: Week of 3/25
Topic: Internet Foundations - Jurisdiction
Reading Assignment: Chapter 6 in Shaw, pages 331-354 and Chapter 11 in Bandler
Exam #3 (covers Modules 8-10): Available from Friday, March 29 at 5:00 p.m. until Sunday, March 31 at 5:00 p.m.
Discussion Forum #6 (covers Modules 10-11): due Sunday, March 31 by noon

Module 12: Week of 4/1
Topic: Internet Content - Speech
Reading Assignment: Chapter 7 in Shaw, pages 355-381 and Chapter 12 in Bandler

Module 13: Week of 4/8
Topic: Internet Content - Intellectual Property
Reading Assignment: Chapter 7 in Shaw, pages 382-412 and Chapter 13 in Bandler
Discussion Forum #7 (covers Modules 12-13): due Sunday, April 14 by noon

Module 14: Week of 4/15
Topic: Internet Commerce
Reading Assignment: Chapter 8 in Shaw and Chapter 14 in Bandler
Case Study #2: due Friday, April 19 at 5:00 p.m.
Exam #4 (covers Modules 11-13): Available from Friday, April 19 at 5:00 p.m. until Sunday, April 21 at 5:00 p.m.

Module 15: Week of 4/22
Topic: Remaining Issues and New Trends
Reading Assignment: Chapter 15 and Conclusion in Bandler
Discussion Forum #8 (covers Modules 14-15): due Sunday, April 28 by noon

Week of 4/29
Self-Reflection on Cybersecurity: due Monday, April 29 at 5:00 p.m.

(Tipster carrying something heavy) Tipster says, "Good luck and welcome to the course!"