

Environment, Technology & Society (CAP 3140) Summer 2013

Time and Place: 9:50 AM - noon Monday to Thursday in ITT 322

Web-site: <http://www.cs.uni.edu/~fienup/cap3140sum13/>

Class Email List: Send messages to Google group for the course at CAP-3140-02-summer@uni.edu

Instructor: Mark Fienup (fienup@cs.uni.edu)

Office: ITTC 313

Phone: 273-5918 (Home 266-5379)

Office Hours: MTWTh: 9-9:50 and 1:10-2:30

“Official” Description: “Emphasis on relationships and interactions of physical, biological, technological, and cultural components of environment. Study of selected interdisciplinary problems. Elaborates on student's previous university experience and develops environmental literacy.”

This course will consider digital (computing) technology and cultural components of our environment. We will use the *Blown to Bits* (“B2B”) book as a starting point in:

- gaining knowledge about digital technology in our society, particularly about Internet-related technology
- examining/recognizing the impact of technology in our society, particularly with respect to privacy and security of personal information
- critically examining policy issues relating to digital technology, specifically considering the appropriateness of existing or proposed laws and regulations

Goal: To make you an informed user of technology, and improve your critical thinking skills with respect to technology and society.

Text: *Blown to Bits: Your Life, Liberty & Happiness*, Author: Abelson, Ledeen & Lewis

ISBN: 978-0137135592 (Download the textbook FREE at: <http://www.bitsbook.com/> to get the Appendix)

Course Pedagogic Approach: “Guide on the side -- not sage on the stage”. Often, I won’t have the right answers -- I’ll be lucky to ask the right questions! I’ll tend to break up the “lecture” with active and group learning exercises to aid learning. Preparation by you **before each class** is critical, so you can provide meaningful and informed ideas and opinions during group discussions! Thus, I will formally grade your pre-class preparation, attendance, and classroom participation (20% of your grade).

Grading policy: There will be four tests (including the final). Tentative weighting of course components is:

Class preparation, attendance, and participation:	25 %
Take-home Test 1: Internet operation and usage information	20 % (Due: 5/23)
Take-home Test 2: Encryption and privacy-risk mitigation	20 % (Due: 5/30)
Take-home Test 3: Policy issues	20 % (Due: 6/6)
In-class Final:	15 % (Thursday, June 6)

Grades will be assigned based on straight percentages off the top student score. If the top student's score is 92%, then the grading scale will be, i.e., 100-82 A, 81.9-72 B, 71.9-62 C, 61.9-52 D, and below 52 F. Plus and minus grades will be assigned for students near cutoff points.

Scholastic Conduct: You are responsible for being familiar with the University’ Academic Ethics Policies (<http://www.uni.edu/pres/policies/301.shtml>). Copying from other students is expressly forbidden. Doing so on exams or assignments will be penalized every time it is discovered. The penalty can vary from zero credit for the copied items (first offense) up to a failing grade for the course. If an exam/assignment makes you realize you don't understand the material, ask questions designed to improve your understanding, *not* ones designed to discover how another student answered the exam/assignment. The solutions to exams and assignments should be **individual, original** work unless

otherwise specified. Any substantive contribution to your assignment solution by another person or taken from a publication (**or the web**) should be properly cited in writing. Failure to do so is plagiarism and will necessitate disciplinary action (e.g., don't copy sentences or paragraphs from the Internet). *Be a grownup—do your own work and give credit where credit is due.* Keep in mind that word sequences, images, etc. are subject to copyright, while basic ideas are not.

Special Notices:

- In compliance with the University of Northern Iowa policy and equal access laws, I am available to discuss appropriate academic accommodations that may be required for students with disabilities. Requests for academic accommodations are to be made during the first three weeks of the semester, except for unusual circumstances, so arrangements can be made. Students are encouraged to register with Student Disability Services, 103 Student Health Center, to verify their eligibility for appropriate accommodations.
- I encourage you to utilize the Academic Learning Center's assistance with writing, math, science, reading, and learning strategies. There is no charge for currently-enrolled UNI students. UNI's Academic Learning Center is located in 007/008 ITTC. Visit the website at <http://www.uni.edu/unialc/> or phone 319-273-2361 for more information.

CAP 3140 Schedule for Summer 2013

Lect #	Day	Reading /Discussion Topic
1	5/13 M	Course introduction; discussions RE: learning, human decision-making, role/purpose of government
2	5/14 T	B2B Ch. 1: role/purpose of government; interaction of technology and laws/regulations
3	5/15 W	B2B Appendix: how the Internet works (available in the .pdf download)
4	5/16 Th	B2B Ch. 8: telephone & radio and the Internet; interaction of technology and laws/regulations
5	5/20 M	Internet operation (continued) and information leak risks
6	5/21 T	B2B Ch. 2: Threats to privacy; Why privacy is important; some related laws/regulations
7	5/22 W	B2B Ch. 3: more privacy; Digital representation of data; interaction of technology and laws/regulations
8	5/23 Th	B2B Ch. 4: Information access/search & effects; monetization; related laws/regulations Exam I (Internet operation and information leakage) due
-	5/27 M	No class due to Memorial Day
9	5/28 T	B2B Ch. 5: Encryption & privacy risk mitigation; related laws/regulations
10	5/29 W	B2B Ch. 6: Intellectual property/information ownership; related laws/regulations
11	5/30 Th	B2B Ch. 7: Expression and speech on the Internet; related laws/regulations Exam II (Encryption and mitigation of information leakage) due
12	6/3 M	B2B Conclusion: Issue overview
13	6/4 T	Environmental Impact of Technology
14	6/5 W	
Exam III (Policy issues) due		
Final: Thursday, June 6 from 9:50 to 12 (noon) in ITT 322		