HAA/ENGCOMP 0425: Digital Humanity
Syllabus for Spring 2017
202 Frick Fine Arts
Last Updated: January 4, 2016

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Course Website: http://pittdigitalhumanity.org/

Description
How have computational devices affected the way we think about our own humanity? Our relationship to digitality has changed from the mainframe to the smartphone era, but throughout, computers have processed huge amounts of data, kept track of our (or our enemies') activities, made our lives more fun or at least more complicated, allowed us to communicate with each other and archive knowledge on a broad scale. What roles do computers play in our lives, and what role do we play in theirs? What are the borders between humans and computers, or can they be drawn at all?

This course prepares students to critically examine the intersections between digital devices and human life. Covering topics such as the relationship between computers and humans, surveillance, big data, and interactivity and games, we question what it means to be human in a space of pervasive digitality. Students will read philosophy, fiction, essays, book excerpts and watch movies and play games. Assessment will be based on regular online posts to Known (a private Tumblr-like platform), a take-home midterm examination, a final presentation and reflective synthesis of online posts, and class participation, both digital and face-to-face. The course fills the Philosophy General Education requirement and meets three times per week: twice for lecture, once for recitation/lab.

Learning Outcomes
After successfully completing this course, students will be able to:
- Demonstrate a more sophisticated understanding of the ways digital technologies affect their lives and the lives of their peers as well as how these technologies may be used in their academic and professional careers (class discussion, assignments, and readings).
- Assess their own work, including its suitability for particular audiences, and their strengths and weaknesses as composers (reflective synthesis final project).
- Engage with several analytical techniques used by different segments of the humanities, including visual analysis and textual analysis, in order to deepen understanding of human relationships to digital technologies (Known posts and comments).
- Use different software packages or web services that process text, still images, moving images, and audio files in order to reflect on readings and discussion about digital technologies (Known posts).

Instructors and Office Hours

Prof. Alison Langmead	Prof. Annette Vee
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116 Frick Fine Arts (Visual Media Workshop)	628C Cathedral of Learning
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Office Hours: Monday, 10-11am & by appointment	Office Hours: Weds 12-1pm & by appointment
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Assignments

Readings

All readings will be due on the Mondays of the week for which they are listed. There are no required books for the course, and all readings will be available through Known or online.

Known Posts

Each week you will also be asked to post a critical response to the ideas and concepts brought up in class and in the readings to the course Known site. The instructors have provided prompts to guide you in creating your posts to the site, all of which are listed on the syllabus for their given week. Sometimes you will be asked to respond with text, and sometimes with still images, moving images, or audio.

The address of the Known site is: http://pittdigitalhumanity.org/

The weekly posts are due by 11am (class time) on Wednesdays. In other words, readings are due on Mondays; Known posts are due on Wednesdays. You are are also responsible for responding to one other student's Known post (100+ words) each week by Friday at noon.

We will provide graded feedback on your Known posts twice during term, and the entire class will be discussing selected posts periodically in recitation. If you have questions about your Known posts at any time, feel free to get in touch with one of the instructors for feedback.

The Known site is private and invitation-only and will be accessible only to members of the class. The instructors may share the work on this site to selected faculty members at the University of Pittsburgh for purposes of showcasing the course. Any other public use of these materials will be requested specifically from you.

Midterm Exam

The midterm exam will be a take-home assignment. We will distribute the exam prompt on Wednesday, February 22nd, and the exam will be due to Known at noon on Friday, March 3rd.

Reflective Synthesis (Final)

At the end of the semester, we'll ask you to review all of your weekly Known posts (there should be 11 total). What themes or tensions do you find in your posts? What have you wrestled with,

and what have you discovered? Browse through your peers' posts as well to consider which ideas and approaches in your posts are unique to your journey in the course, and which are tapping into collective ideas about human relationships with computers. After reviewing all your posts and browsing others, choose **three** of your own posts that point to some of these themes–these should be strong posts, although they don't need to be your best ones. Then tell the curation story of those posts in a 1250-1750 word paper or a 4-minute polished video, reflecting on your decision-making process and your development in the course, as well as discussing the whole collection in light of the following question: "How do these posts contribute to the conversation about the relationship between humans and computers in the early 21st century?" Your paper/video should connect these three posts together and discuss the themes they highlight from the course.

Peer review will take place in class on April 17. The Reflective Synthesis project, including the story and posts, will be turned in by noon on April 20th.

Known Showcase
During class and recitation time on April 17th (11am-12:50pm), students will informally present their chosen posts and ideas from their Reflective Synthesis in small groups. From these groups, we'll select a few of the most interesting posts from the term and showcase them on April 19, the last day of class.

Digital Participation
This class is both in-person and online, and online discussions are designed to contribute to the development of ideas in the course. Your digital participation grade will be based on your weekly comments on your peers' Known posts, and the successful completion of all of your Known posts. A good digital participation grade will reflect active discussion and engagement with ideas from the course online.

Face-to-Face Participation
It will be important to attend lectures and recitations as this is where the group will mull over and extend the information found in the readings for the week. Missing more than two lectures or recitations will negatively affect your face-to-face grade. We will be offering two movie nights during the term, either one of which can be used to replace attendance for one missed lecture or recitation.

Assessment

First Feedback on Known Posts	Week of February 20th	15%
Second Feedback on Known Posts	Week of April 10th	20%
Midterm Exam (take-home)	March 3rd (noon to Known)	20%
Reflective Synthesis (Final)	April 20th (noon to Courseweb)	20%
Digital Participation	all term	10%
Face-to-Face Participation	all term	15%

Academic Integrity Policy

Cheating or plagiarism on any assignment or exam will not be tolerated. Plagiarism is using someone else's words, research, or ideas as if they are your own. If you ever use someone else's text word for word in your own writing, you must enclose those words in quotation marks and cite the source; if you paraphrase from a source, you must cite it as well. If you try to pass off someone else's writing or research as your own in any assignment for the course, you will receive an F for the course, and be reported to the Dean's office for disciplinary action pursuant to the school's academic integrity code (http://www.as.pitt.edu/faculty/policy/integrity.html).

Disability Policy

If you have a disability for which you are or may be requesting an accommodation, please contact me and Disability Resources and Services, 140 William Pitt Union, 412-648-7890 or 412-383-7355 (TTY) as early as possible in the term. DRS will verify your disability and determine reasonable accommodations for this course.

University Policy on Email Communication

If you do not ordinarily use your Pitt email address, please make sure that the Pitt address is forwarding properly to whatever email address you do use, since I will be sending messages this way. Each student is issued a University email address (username@pitt.edu) upon admittance. This email address will be used by the University for official communication with students. Students are expected to read email sent to this account on a regular basis. Failure to read and react to University communications in a timely manner does not absolve the student from knowing and complying with the content of the communications. The University provides an email forwarding service that allows students to read their email via other service providers (e.g. Google, Yahoo). Students that choose to forward their email from their pitt.edu address to another address do so at their own risk. If email is lost as a result of forwarding, it does not absolve the student from responding to official communications sent to their University email address. To forward email sent to your University account, go to http://accounts.pitt.edu, log into your account, click on Edit Forwarding Addresses, and follow the instructions on the page. Be sure to logout of your account when you have finished. (For the full email Communication Policy, go to http://www.bc.pitt.edu/policies/policy/09/09-10-01.html.)

Weekly Chart

Week	Subject
1. January 4	Introduction
2. January 9/11	Creating Computers
3. January 18	Hardcoding Abstractions
4. January 23/25	Learning Then and Now
5. January 30/February 1	Processing Encoded Information
6. February 6/8	Surveillance Society
7. February 13/15	Watching Networks Watching You
8. February 20/22	Computers + Humans: Augmentation or Symbiosis?
9. Feb 27/March 1	Midterm Week
	Spring Break

10. March 13/15	Artificial Intelligence and the Human Mind
11. March 20/22	Human Labor in Computing
12. March 27/29	Old-School Games
13. April 3/5	Networks are Weird
14. April 10/12	Becoming a Digital Citizen
15. April 17/19	Project Showcases

Class Schedule

This schedule will change somewhat over the course of the semester–readings cut or swapped out, etc. Please check http://pittdigitalhumanity.org/pages/syllabus for the up-to-date version of this syllabus.

Week 1 (January 4): What Are Computers? What Are Humans?

- **Known for Week 1**: Set up your Known profile, post your initial thoughts on what you would like to learn from this course. Send us the associated email address, and accept the invitation to join the group blog.

Week 2 (January 9/11): Creating Computers
Where did computers come from, and what makes them tick? We'll start to look at the history of information processing and digital computing and learn a bit about how contemporary computers and peripherals actually work (desktops, laptops, smartphones, remote sensing devices, scanners, 2-D/3-D printers, etc…).
- Martin Campbell-Kelly, William Aspray, Nathan Ensmenger, and Jeffrey Yost, *Computer: A History of the Information Machine*, Third Edition (Boulder, CO: Westview Press, 2014), 21-40 ("The Mechanical Office"), 65-85 ("Inventing the Computer"), 253-274 ("Broadening the Appeal"). [Available to read online through PittCat]
- Bettina Bair, "Inside Your Computer," *TED-Ed*, July 1, 2013. https://youtu.be/AkFi90lZmXA
- Wilton L. Virgo, "How Does Your Smartphone Know Your Location?" *TED-Ed*, January 29, 2015. https://youtu.be/70cDSUI4XKE

- **Known for Week 2**: Write a Known post, using both text and images, documenting one full day of your interactions with computational devices.

Week 3 (January 18): Hardcoding Abstractions
You may have heard that computers really just understand 1's and 0's. So, how do the things you type into your computer get translated into language the computer can understand?
- Charles Petzold, *Code: The Hidden Language of Computer Hardware and Software* (Redmond, WA: Microsoft Press, 1999), 54-68 ("Alternatives to Ten"), 69-85 ("Bit by Bit by Bit"). Available through PittCat as an ebook.
- **Known for Week 3**: Choose a contemporary news story, cultural event, or specific social context that has to do with the relationship between humans and computers. Thinking mainly about this relationship (that is to say, thinking mainly about the theme of this class), make a 1- to 2-minute movie about the ways in which digital computers and humans conspire to make that story/event/context tick.

Week 4 (January 23/25): Learning Then and Now
How students learn now is nothing like in the past, and it will be totally different again 10 years from now. Technologies such as smartphones, virtual reality, personalized learning, and AI teachers change everything! Except they don't. Or at least not in the ways they're often sold as "changing everything." You're in a moving landscape of educational technologies, but this has always been true for students. What's new now, and what should you do to learn best?
- Elizabeth Losh, *War on Learning* (Cambridge, MA: MIT Press, 2014). [Chapter 6: Honor Coding, 151-168, available as pdf on Pitt Box.]
- John Seely Brown, "Tinkering as a Mode of Knowledge Production in the Digital Age," 10min video excerpted from The Carnegie Foundation for the Advancement of Advancement of Teaching, Stanford, CA, Oct 23-25, 2008. https://vimeo.com/2183356
- danah boyd, "Are We Training our Students to Be Robots?" *Brightreads*, April 7, 2015, https://brightreads.com/are-we-training-our-students-to-be-robots-1196e5c15d26#.f6gydkdy4
- Audrey Watters, "Clippy and the History of the Future of Educational Chatbots," *Hack Education*, September 14, 2016, http://hackeducation.com/2016/09/14/chatbot

- **Known for Week 4:** You've been in school for at least 15 years now. What's the earliest educational technology you remember? (Keep in mind that chalkboards, pencils, and library card catalogs are ed tech!) When did digital technologies show up in your personal history of ed tech, and what was your impression of them then? What other digital technologies have you used in your education since then, and what do you use now? After telling a brief history of your personal ed tech, reflect on how these technologies have shaped your education. Consider: Which ed tech have you chosen, and which have been chosen for you? How does the ed tech you've used affect the relationships between you and your teachers? How does it shape the way you learn and the way you think about learning? Post should be in audio-only format, approximately 2 minutes. You can upload audio directly to Known, but you may alternatively want to use SoundCloud to host your audio clip.

Week 5 (January 30/February 1): Processing Encoded Information
One of the reasons humans turn to computers is that they can process a lot more information than our brains can, and much faster. Historically we've used computers to scale up information processing beyond the capacity of the individual human brain: artillery tables, mathematical fractals, reading millions of historical or literary texts, or handling exabytes of data per day from the proposed Square Kilometer Array of radio telescopes. What does it mean to rely on a computer to deal with all the details? How do computers make sense of things that we cannot? Or can they? What are the compromises and assumptions we are making?
- Paul Ford, "What is Code," *Businessweek*, electronic edition, June 11, 2015, http://www.bloomberg.com/graphics/2015-paul-ford-what-is-code/, Section 1 (all), Section 2-2.4, Section 4 (all), Section 7.5.
- James Gleick, *The Information* (New York: Pantheon Books, 2011), 398-412 ("New News Every Day"). Available for download here: https://pitt.box.com/v/theinformation.
- "30 for 30 Shorts: The Schedule Makers," directed by Joseph Garner, ESPN, 2013 [https://vimeo.com/75943437]

- **Known for Week 5:** Look back over your post for week 2, and think about all the ways that you change your behavior for the computer...that is, you would do it differently if you were free to do it any way you wished? What are the pros and cons of fitting yourself to the needs of the machines? Or is it the machines you are serving? Post should be in a text-only format. You're aiming for around 500 words.

Week 6 (February 6/8): Surveillance Society

This week, we explore one of the major uses for computers' ability to process massive amounts of data: surveillance. As you sit at a screen—your smartphone, an ATM, your Facebook News Feed, or a wall of lighted panels presented for public use—you are watching something. Are you being watched back? Spoiler: yes.

- Cory Doctorow, *Little Brother* (New York City: Tor Books, 2008). Available for free download on Doctorow's website. First read the book summary and Doctorow's reasoning for giving away his books for free. Then read Chapters 1-3, pp 6-20 on the pdf version; you can skip the italicized dedications at the beginning of each chapter–they're because of the pdf digitization. This is the beginning of a novel that opens with a game similar to Pokemon GO.
- Rachel Levinson-Waldman, "What the Government does with Americans' Data," Brennan Center for Justice at the New York University School of Law, October 8, 2013. [1-18, "Introduction"] http://www.brennancenter.org/publication/what-government-does-americans-data [scroll down to the Scribd document, or go here: http://www.scribd.com/doc/174279190/What-the-Government-Does-with-Americans-Data]
- Rob Kitchin, "No Longer Lost in the Crowd? How People's Location and Movement Is Being Tracked," *The Programmable City*, December 3, 2015, http://www.maynoothuniversity.ie/progcity/2015/12/no-longer-lost-in-the-crowd-seven-ways-peoples-location-and-movement-is-being-tracked/.
- Brian Merchant, "Looking Up Symptoms Online? These Companies Are Tracking You," *Motherboard*, February 23, 2015, http://motherboard.vice.com/read/looking-up-symptoms-online-these-companies-are-collecting-your-data.

- **Known for Week 6**: In Week 2, we asked you to catalog all the digital devices you interacted with for one day. The prompt for this week is a variation on that theme. We want you to track all of the digital devices that are tracking you. You can focus on one day to remind you of your general activities, but you may find it useful to think about this over a couple of days to get a more general picture of the places and ways in which you're being tracked. Here are some questions to help you:
  - Do you see cameras on campus or in stores?
  - Did you log in to Course Web?
  - Are you using email or your phone?
  - Did you shop with a key card, like at Giant Eagle or Rite Aid?
  - Did you ride the bus and use your ID?
  - Did you use your ID to get into your dorm?

For your post: Write up a list of all of the activities in which you think you are tracked, and then write, reflecting on the following questions: Who has this data? In what form does it exist (database, video, logs, etc.) What permission do they need from you to collect it, if any? What are they using it for? How long will they or can they retain it? How might it be used to benefit you or harm you and your friends or family? What activities could you engage in that would trigger a more thorough evaluation of the data that's been collected on you? Post should be voiceover narrating a series of slides/images, 2 minutes long.

Week 7 (February 13/15): Watching Networks Watching You
Digital technology speeds up and complicates surveillance feedback loops. Who or what is recognizing your face or monitoring your activities? To what degree are you in control of this surveillance? Our modes of looking, typing, hearing and speaking interact to create a system where we are not only being watched by devices, corporations and government institutions, but we are also watching each other.

- Michel Foucault, "'Panopticism' from *Discipline and Punish*," in *Ways of Reading*, 9th ed., eds. David Bartholomae and Anthony Petrosky (New York: Bedford/St. Martin's, 2010 (orig. 1975)), 282-295 (Abridged). Available on Pitt Box.
- Nathan Jurgenson, "The Facebook Eye," *The Atlantic*, January 13, 2012, http://www.theatlantic.com/technology/archive/2012/01/the-facebook-eye/251377/
- Kate Losse, "The Male Gazed: Surveillance, Power, and Gender," *Model View Culture*, January 13, 2014, https://modelviewculture.com/pieces/the-male-gazed
- Either John Oliver's Last Week Tonight on Online Harrassment (Jun 21, 2015), or Ashley Judd's TedTalk, How Online Abuse of Women has Spiraled Out of Control (Jan 18, 2017). Be aware that both of these videos use explicit language and describe some nasty stuff, although it's probably nothing you don't already know. You may avoid watching the videos if it's difficult for you to do so.

- **Known for Week 7:** Choose one of the surveillance systems or devices that you listed and wrote about for Week 6 and dive more deeply into how it works. Figure out as much as you can about who owns it, what technological mechanisms and algorithms are behind it, where your data is held and for how long, what it can be used for, etc. You may find it helpful to read privacy policies (you might want to check out the website "Terms of Service; Didn't Read," https://tosdr.org/), search for relevant legal cases, publicity announcements about an amazing new system that will blah blah blah… Write up the interesting stuff you found, as well as what you couldn't find. How does all of this impact you? You may choose any medium you wish to express yourself. If it is time-based, make it around 2 minutes long, if it is text-based make it around 500-words.

Week 8 (February 20/22): Computers + Humans: Augmentation or Symbiosis?
- Doug Englebart, "Augmenting Human Intellect: A Conceptual Framework," *SRI Summary Report AFOSR-3223*, Prepared for the Director of Information Sciences, Air Force Office of Scientific Research, Washington DC, Contract AF 49(638)-1024, SRI Project No. 3578, 1962, excerpts. Posted to Box here: https://pitt.box.com/s/u89f3nzmvl36o375shw0wxqfosoj48z8

- Neal Stephenson, *Diamond Age* (New York: Bantam Books, 1995), 1-21. Posted to Box here: https://pitt.box.com/s/f9k6icfq523a51bstok7z48u6qedof07
- J.C.R. Licklider, "Man-Computer Symbiosis," in *IRE Transactions on Human Factors in Electronics,* vol. HFE-1, no.1 (March 1960): 4-11. http://groups.csail.mit.edu/medg/people/psz/Licklider.html

- **Known for Week 8:** Using concepts and readings from the course so far, reinvent yourself as a cyborg. Choose at least three enhancements and changes that reflect somehow who you believe yourself to be. Create a diagrammatic image of what that would look like. Your diagram could be hand-drawn or digitally constructed, but should be posted digitally.

Week 9 (February 27/March 1): Midterm Week
- No readings this week. Class/recitations on Monday will meet as normal. Wednesday's class will be optional office hours with Profs. Langmead and Vee.

Spring Break

Week 10 (March 13/15): Artificial Intelligence and the Human Mind
Can computers truly become thinking, sentient beings? Can humans become digital computers? Massive and intricate computational systems attached to government defense programs in the 1960s were called "command and control" systems for the way that they allowed centralized control and coordination both of the artillery and the humans who ran them.

- Hilary Putnam, "Artificial Intelligence: Much Ado about Not Very Much," *Words and Life: Hilary Putnam*, edited by James Conant (Cambridge: Harvard University Press, 1994 (writing originally published in 1988), 391-402. Available on Box here: https://pitt.box.com/s/sbzaio3o9vdayhh5av6685optgr11bmc.
- Sherry Turkle, *Life on the Screen* (New York: Simon and Schuster, 1995), 102-124 ("Chapter 4: Taking Things at Interface Value"). Available on Box here: https://pitt.box.com/s/mc77nwm4ohch86yroy1hahfem3n541u4.
- Brian Cantwell-Smith, "The Limits of Correctness," *ACM SIGCAS Computers and Society*, 14/15 (January 1, 1985): 18-26. Available on Box here: https://pitt.box.com/s/3iikxjxy9id03b0omro2xvhifygpog4z

- **Known for Week 10**: Tell a structured narrative–using only images–about the improbability, possibility, or inevitability (choose one) of computers surpassing humans in intelligence. Use 10 images or fewer. You can use images you find online, pictures you take yourself, or images you design yourself (say in Photoshop or old fashioned pen-and-ink).

Week 11 (March 20/22): Human Labor in Computing
Before we created devices in metal and glass to calculate, humans did this work: women "computers" performed the complex calculations that were needed for warfare and science

until the 1940s. Now, there's a lot of talk about how computers will replace humans in certain jobs. This was true for human mathematical calculators in the 1940s, it has been true in some manufacturing contexts, and now computers threaten to replace drivers. But computers also introduce new jobs, too--jobs to keep humans from using computers for ill.

- Adrian Chen, "The Laborers Who Keep Dick Pics and Beheadings Out of Your Facebook Feed," *Wired.com*, October 23, 2014, http://www.wired.com/2014/10/content-moderation/. [Please be forewarned, this article contains references to explicit violent and sexual content on the Internet. If you would like to avoid this content, please read this article instead: Marc Burrows, "They Called it the Worst Job in the World: My Life as a *Guardian* Moderator," *The Guardian.com*, April 18, 2016, https://www.theguardian.com/technology/2016/apr/18/welcome-to-the-worst-job-in-the-world-my-life-as-a-guardian-moderator]
- Sarah T. Roberts. "Behind the Screen." *YouTube video.* Presentation at re:publica 2016. Berlin, May, 2016, https://www.youtube.com/watch?v=J19Xa3-SN1M (29min). (This presentation is about content moderation, like the Chen article above, but it concentrates on the American labor market and is not explicit. Transcript available here: http://opentranscripts.org/transcript/politics-of-commercial-content-moderation/)
- Thomas Davenport and Julia Kirby, "Beyond Automation," *Harvard Business Review* (June 2015): https://hbr.org/2015/06/beyond-automation. (About how computers are taking our jobs, and what to do about it.)
- Lisa Nakamura, "Indigenous Circuits (backstory)," *Computer History Museum Blog*, January 2, 2014: http://www.computerhistory.org/atchm/indigenous-circuits/. (In this blog post, Nakamura describes her research process for uncovering some of the surprising and racialized history of semiconductor manufacturing. *Optional* reading: the article she refers to is available here: Lisa Nakamura, "Indigenous Circuits: Navajo Women and the Racialization of Early Electronic Manufacture," *American Quarterly* 66 (December 2014): 919-941, https://lnakamur.files.wordpress.com/2011/01/indigenous-circuits-nakamura-aq.pdf.)

- **Known for Week 11**: Give us a glimpse at an algorithm you perform regularly. Help us understand how you think about the patterns of habit in your life, and consider what you automate through the computer, what you potentially could automate, and what you don't or can't or really don't want to automate. Your post could be in the form of a screen capture, video, audio, a series of still images, a written post, hybrid image/text, whatever. (Please note that while the format for this week is open, you should keep in mind our time/length guidelines for other Known posts: keep time-based media to around 2-3min, and text only should be around 500 words, etc. If you want a bit of help understanding what an algorithm is, the first 30sec of this Khan Academy video might help: https://www.khanacademy.org/computing/computer-science/algorithms/intro-to-algorithms/v/what-are-algorithms)

Week 12 (March 27/29): Old-School Games
Initially conceived almost entirely as a device for work (and destruction), computers quite quickly became an area for creativity and play. We make music, play games, socialize and challenge ourselves on our computers. This week, we'll look at some of the games and fun of computers in the 1970s and '80s.

- Stewart Brand, "Spacewar: Fanatic Life and Symbolic Death Among the Computer Bums," *Rolling Stone* (December 7, 1972): 50-58. Available from Box here: https://pitt.box.com/s/lk973ugus0u13tsznsbo31rkz366pdoj.
- Leigh Alexander, "The Original Gaming Bug: *Centipede* Creator Dona Bailey" [Interview], *Gamasutra*, Aug 27, 2007. http://www.gamasutra.com/view/feature/130082/the_original_gaming_bug_centipede_.php?page=all
- Adrienne Lafrance, "How Early Games Influenced Internet Culture," *The Atlantic*, April 14, 2016, http://www.theatlantic.com/technology/archive/2016/04/how-early-computer-games-influenced-internet-culture/478167/

- **Known Week 12**: Play a game on the Internet Arcade (https://archive.org/details/internetarcade). Write a review of the game (250 words) and excerpt the most interesting game moments in an accompanying audio or video walkthrough that lasts no longer than 2 minutes.

Week 13 (April 3/5): **Networks are Weird**
What is it about the Internet that makes it so hospitable to weird things? Memes, virality, hashtags, trolling, tweetstorms, flaming: are these new practices, or just regular old human behavior in networked form? We don't know the answer, but as we look more closely at some Internet-weirdness this week, we hope you can shed some light on what's up with the Internet. (These readings may change to reflect current trends. Also, please note that there are references to white supremacy and misogyny here.)

- On Anonymous: Biella Coleman, "Our Weirdness is Free," *Triple Canopy,* Jan 13, 2012: https://canopycanopycanopy.com/issues/15/contents/our_weirdness_is_free
- Zeynep Tufekci, "'Not This One:' Social Movements, the Attention Economy, and Microcelebrity Networked Activism," *American Behavioral Scientist* 57(7): 848-870, https://www.researchgate.net/profile/Zeynep_Tufekci2/publication/258122778_Not_This_One_Social_Movements_the_Attention_Economy_and_Microcelebrity_Networked_Activism/links/54071cf10cf23d9765a83867.pdf
- On Pepe the Frog as a hate symbol meme: Abby Ohlheiser, "Why Pepe the Frog's Nazi Phase Doesn't Worry His Creator," *The Washington Post,* September 14, 2016, https://www.washingtonpost.com/news/the-intersect/wp/2016/09/14/why-pepe-the-frogs-nazi-phase-doesnt-worry-his-creator/?utm_term=.142729cc08b7. Olivia Nuzzi, "How Pepe the Frog Became a Nazi Trump Supporter and Alt-Right Symbol," *The Daily Beast,* May 26, 2016, http://www.thedailybeast.com/articles/2016/05/26/how-pepe-the-frog-became-a-nazi-trump-supporter-and-alt-right-symbol.html
- On hashtags activism: #Ilooklikeanengineer, Isis Anchalee, "You May Have Seen My Face on BART," *Coffeelicious*, August 1, 2015, https://medium.com/the-coffeelicious/you-may-have-seen-my-face-on-bart-8b9561003e0f#.pxuz64p29
- On Trump's Tweets: David Robinson, "Text Analysis of Trump's Tweets…" *Variance Explained* [blog], August 9, 2016, http://varianceexplained.org/r/trump-tweets/ . "I. You. Great. Trump. A Graphic Analysis of Trump's Tweets in Five Slides." *Politico Magazine,* May/June 2016.

- **Known Week 13:** Your task this week is to design a viral campaign. It could support a local or global political cause, but it doesn't have to be. Your campaign could simply be interesting or weird. (Although please do steer clear of misogyny, hate speech, etc.) Your campaign's central artifact could take the form of a meme-image, a hashtag, a Facebook post, or something else you think could be potentially viral. To accompany this artifact, write a 250-word plan for deploying your viral campaign.

Week 14 (April 10/12): Becoming a Digital Citizen
How would you describe the relationship humans have with computers? What changes us when we interact with them? How might we all go out into our various workplaces and fields of study and consider this relationship differently? The concluding week will focus on student work and drawing overall conclusions from the discussions that have taken place over the term.

- Bonnie Stewart, "Digital Identities: Six Key Selves of Networked Publics," *thetheoryblog*, May 6, 2012, http://theory.cribchronicles.com/2012/05/06/digital-identities-six-key-selves/
- ICANN's Beginner's Guide to Domain Names: https://www.icann.org/en/system/files/files/domain-names-beginners-guide-06dec10-en.pdf
- Troy Hunt, "Going dark: online privacy and anonymity for normal people" troyhunt.com, May 17, 2016, https://www.troyhunt.com/going-dark-online-privacy-and-anonymity-for-normal-people/
- Farhad Manjoo, "'Right to be Forgotten' Online Could Spread," *The New York Times,* August 5, 2015, http://www.nytimes.com/2015/08/06/technology/personaltech/right-to-be-forgotten-online-is-poised-to-spread.html?_r=0

Digital Humanity Midterm

Distributed in class (and posted to CourseWeb) on Wednesday, February 22nd, 2017.
To be submitted via a Known post (#midterm), by noon on Friday, March 3rd, 2017.

The overall goals for this midterm are for you to synthesize, analyze, compare, and contrast the ideas and concepts you have been exposed to so far in this class from different thinkers and between different units. We expect that you will use the midterm to demonstrate what you have learned up to this point about humanity's relationship with computers in the context of this course, as well as within this community of learners. The exercise is focused on demonstrating your ability to work through—not just regurgitate—the content of the course. We are also asking for a bit of self-reflection in the form of four short-form questions we would like you to answer once you have completed your analytical work.

We would like you to produce a 5-minute long video that engages with a number of concepts covered thus far. You may make this video in whatever way you want, including slide/narration, screencast, live action, stop motion, animation, fiction or nonfiction, etc… If you would like to run your ideas for video format past one of the instructors, do not hesitate to ask one of us. At minimum, we would like you to engage with 3 assigned readings/videos from class, from at least 2 different weeks. You do not have to formally cite these readings or mention them explicitly in the video, but we ask you to list them in the short answer portion of the midterm.

First, please choose one concept from each column below: one A, one B and one C (environment). Second, construct your own directed question that will guide you in the process of creating your analysis of the themes at hand. This question should look at the relationship between humans and computing, focusing on the areas you have chosen (for example, augmentation-gender-school or security-labor-workplace). Example: How are the gender expressions (B) of our future past (A) refracted in our current office/productivity (C, workplace) software?

Please bring this question into class on Monday, February 27.

Column A	Column B	Column C (Environments)
Surveillance, sousveillance, and/or veillance	Privacy	Workplace
Security	Power	School
Human-Computer interaction	Labor	Personal life
Augmentation	Gender	Research contexts
Our Future Past	Digitization	
Modalities of Expression	Encoding	

Course-Directed v. Goal-Directed Instructions	Rights	
Convenience	Freedom	

When you have finished making your video, please then address the following four short-answer questions (around 150-200 words each):

1. What have you learned about this cluster of concepts through your work for the course so far, including producing this midterm exercise? That is to say, what change(s) in your thinking can you identify?
2. How did our chosen medium of expression (video) contribute (or detract) from your learning experience for this midterm?
3. How did you select your triad of terms? Was the choice easy for you? Why or why not? Was there another triad that fought for your attention? If so, what was it and why was it attractive?
4. Finally, list the readings you consciously engaged with in your video and how you incorporated them. (Note that we are asking you to engage with at least 3 from 2 different weeks.) Why did you choose these readings over others from the course?

Some tips for completing the midterm:
1. The best responses will: synthesize ideas from readings rather than doing "drive-by" mentions; connect ideas across weeks; engage with ideas beyond what we've talked about in class, for instance, aspects of the readings we never got to; and make their own connections.
2. Take a look at the #bestof collection of Known posts. These are posts that are pretty good for their use of medium, thoughtfulness, and originality. They may help you see what works well for a post or they may inspire some ideas.
3. Look at http://pittdigitalhumanity.org/tag/week3 and http://pittdigitalhumanity.org/tag/week6 for a variety of ways that people created videos. Lots of different online and local software packages and techniques are in evidence for those weeks.
4. Feel free to peer review or get together with someone else in the class to bounce off ideas and get feedback. You'll ultimately have to make your own video, of course, but the thinking and revision process can involve others.
5. Email your instructors (Prof. Langmead, Prof. Vee or Leslie) or visit office hours for answers to questions about the midterm.

Tech resources:
1. The English Digital Media Lab (in the English dept, but everyone can use it as this class is crosslisted as EngCmp 0425): http://dmap.pitt.edu/dml. There is equipment, open homework hours and really, really nice Macs there to work with, plus it's not too busy and there's always a ugrad or grad assistant who can help you with video if you need it. Spring hours are listed there as Spring 2016, but they're actually Spring 2017.
2. The University Center for Teaching and Learning has tech for you to check out in the basement of Alumni Hall. You need either Prof. Langmead or Prof. Vee to send them an

email to get permission. Just let us know and we can send that email. More info here: http://www.teaching.pitt.edu/classroom-services/students/

3. Hillman Library has a One Button Video station you can reserve. See here: http://www.library.pitt.edu/one-button

4. The INTERNET/WWW has lots of resources! Including tutorials by 10yo Hungarians, which can be very helpful.

Digital Humanity Final

Digital Humanity Reflective Synthesis (Final Exam)

Begin by reviewing all of your weekly Known posts (there should be 11 total). Take notes as you review: What themes or tensions do you find in your posts? What have you wrestled with, and what have you discovered? What did you pull from the texts and discussions in class, and what have you added of your own ideas? What questions remain unanswered? Browse through your peers' posts as well to consider which ideas and approaches in your posts are unique to your journey in the course, and which are tapping into collective ideas about human relationships with computers.

After reviewing all your posts and browsing others, choose **three** of your own posts that point to some of these themes–these should be strong posts, although they don't need to be your best ones. Then tell us about your selection process of those posts in a **1250-1750 word paper**, reflecting on your decision-making process and your development in the course, as well as discussing the whole collection in light of the following question: "How do these posts contribute to the conversation about the relationship between humans and computers in the early 21st century?" Your paper/video should connect these three posts together and discuss the themes they highlight from the course. We expect you to make reference to at least two of your peers' posts and three readings. Note that this is an expository paper--a fictional approach won't work here.

Peer review will take place in recitation on April 17. You should have a good draft of your paper in class on that day.

The Reflective Synthesis project, including the story and posts, will be turned in by noon via CourseWeb on April 20th.

As we read your exams, we'll be asking ourselves these questions.

- Did you trace the ways you have changed your opinions or learned in the class?
- How have you reflected on the course in a metacritical way?
- How have you reflected on your relationship to computers in a metacritical way?
- What kinds of ideas are you bringing in from your own background?
- How are you connecting with ideas from the readings or from your peers?

The best exams will make unique connections, show critical engagement with the ideas from the course, and may extend observations even beyond the course. They will also be polished and thoughtful pieces of writing.