Hackers, The Class
COMS 501
Department of Art History and Communication Studies, McGill University
Professor Gabriella Coleman — gabriella.coleman@mcgill.ca
Tuesdays 2:35-5:25 West Arts 220
Office Hours =   by appointment
Winter 2020

Overview

This course examines computer hackers to interrogate not only the ethics, diversity, and technical practices of hacking, but to examine more broadly how hackers and hacking have triggered and transformed changes in law, policy, computing, and journalism. We will examine how hacker values are realized and constituted by different legal, technical, and ethical activities of computer hacking—for example, free software production, gaming, hacktivism, security, among others. We will pay close attention to how ethical principles are variably represented and thought of by hackers, journalists, and academics and we will use the example of hacking to address variety of topics such as: surveillance, secrecy, play, gender and diversity, communication, security, direct action and more.

Learner Objectives

This will allow us to 1) demonstrate familiarity with variants of hacking 2) critically examine the multiple ways hackers draw on and reconfigure dominant ideas and practices around security freedom, and privacy through their diverse moral codes and technical activities 3) broaden our understanding of politics of the Internet by evaluating the various political effects and ramifications of hacking. Students will be responsible for leading discussions on the readings and critically engaging the readings and class conversations.

Requirements, Method of Evaluation, And Assignments

1. Class Participation   20%
2. Weekly Write Up of Texts or Questions*   30%

3. Final Assignment: A 10-15 double spaced page **review essay** based on readings from one class and some of the suggested/extra graduate readings   50%

The following is a "working schedule." *Class materials are subject to change* based on the interests, understanding, and general pace of the class. More often than not, I cut readings but like to include the full list at the start of the semester.

Week 1

January 7: Perspectives on Hacking, Perspectives on History

/Gabriella Coleman, "Hackers." *Digital KeyWords*, 2016 http://culturedigitally.org/wp-content/uploads/2016/07/Coleman-2016-Hacker-Digital-Keywords-Peters-ed.pdf
/Roy Rosenzweig, "Wizards, Bureaucrats, Warriors, and Hackers: Writing the History of the Internet." *The American Historical Review.* 1998.
http://www.pne.people.si.umich.edu/PDF/ahrcwreview.pdf
/Adam Serwer, "The Fight Over the 1619 Project Is Not About the Facts." *The Atlantic*, 2019 https://www.theatlantic.com/ideas/archive/2019/12/historians-clash-1619-project/604093/
/Stevent Levy, *Hackers: Heroes of the Computer Revolution*, 1984 pp. 3-13 and p. 27-38
https://classes.visitsteve.com/hacking/wp-content/Steven-Levy-Hackers-ch1+2.pdf
/Jargon File, "Hacker History 3" http://catb.org/~esr/writings/hacker-history/hacker-history-3.html

Recommended:

/Kristin Ross, "May 68 and its Afterlives." 2002. (Introduction)
/Tom Streeter, "Internet." *Digital Keywords*, ed. Benjamin Peters, 2016.
/Joy Rankin, *A People's History of Computing in the United States*, 2018.

MODULE ONE: FROM UNDERGROUND HACKING TO THE SECURITY INDUSTRY

Week 2

January 14: The Hacker Underground & Secrecy

/Ron Rosenbaum, "Secrets of the Little Blue Box." Esquire Magazine, 1971
http://www.lospadres.info/thorg/lbb.html
/Bruce Sterling, *The Hacker Crackdown*, 1992 https://www.mit.edu/hacker/part2.html
/George Simmell, "The Sociology of Secrecy and of Secret Societies." *American Journal of Sociology*, 1906 (undergraduate's will read selections, grad students read the full thing)
https://www.jstor.org/stable/pdf/2762562.pdf
/"Phreaking." *Hack_Curio*: https://hackcur.io/category/phreaking/
/Joan Donvan, "Joybubbles: Phone Hacking in the 1960s." *Hack_Curio: Decoding the Cultures of Hacking*, 2019 https://hackcur.io/the-original-phone-intruder/

Graduate students:
/Kembrew McLeod, "Pranksters: Making Mischief in the Modern World." 2014 (chapter 1)

Recommended:
/Graham Jones, "Secrecy." *Annual Review of Anthropology*, 2014
/Phil Lapsley, *Exploding the Phone*. 2013 (chapters 1 and 13)

Week 3

January 21: Security & Cybersecurity*
* it is not as bad as it looks. Most of these are short or videos.

/Paul Taylor, "The Professionalization Process." *Hackers: Crime in the Digital Sublime,* 1999
/Nick Dyer-Witherford and Svitlana Matviyenko, *Cyberwar,* 2019 (Introduction, chapter 1)
/Tanczer, Leonie. "50 Shades of Hacking: How IT and Cybersecurity Industry Actors
      Perceive Good, Bad, and Former Hackers." *Contemporary Security Policy*, 2020
/Hack_Curio, "Anti-Security" https://hackcur.io/category/anti-security/
/Chris Kelty, "An Event to Revere Not Fear: The Morris Worm Unleashed on the Internet in
      1988," 2019 *Hack_Curio: Decoding the Cultures of Hacking,* 2018 *https://hackcur.io/an-
      event-to-revere-not-fear/*
/Robert W. Gehl, *"Hacker Tools Include Cake and Balloons," Hack_Curio: Decoding the
      Cultures of Hacking,* 2019 *https://hackcur.io/hacker-tools-include-cake-and-balloons/*
/The Circle of Lost Hackers "A brief history of the Underground scene." *Phrack,* 2007
      http://phrack.org/issues/64/4.html
/Rebecca Slayton, "The Paradoxical Authority of the Certified Ethical Hacker," *Limn: Hacks
      Leaks and Breaches.* Chris Ketly and Gabriella Coleman, ed., 2017
      https://limn.it/articles/the-paradoxical-authority-of-the-certified-ethical-hacker/

In class:
Shon Harris, et al. "Full Disclosure Policy (RainForest Puppy Policy)" *Gray Hat Hacking, 2nd
      Edition,* 2008.
Graduate Students:

/Stephanie Ricker Schulte, "The 'WarGames Scenario': Regulating Teenagers and Teenaged
      Technology." Cached: Decoding the Internet in Global Popular Culture, 2013
Recommended:

/Joseph Menn. *Cult of the Dead Cow,* 2019.

Week 4

January 28: Security and Cybersecurity

/Nick Dyer-Witherford and Svitlana Matviyenko, *Cyberwar,* 2019 (chapter 2)
/Ryan Ellis, *Letters, Power Lines, and other Dangerous Things: The Politics of Infrastructure
      Security,* 2020 [Introduction and chapter 6]
/Sandro Contenta, "How these Toronto sleuths are exposing the world's digital spies while
      risking their own lives." *Toronto* Star, 2019
      https://www.thestar.com/news/canada/2019/12/13/from-a-tower-in-toronto-they-
      watch-the-watchers-how-citizen-lab-sleuths-are-exposing-the-worlds-digital-spies-
      while-risking-their-own-lives.html
/Mathew Jones, "The Spy who Pwned Me." *Limn Magazine, Hacks, Leaks, and Breaches.*
      Gabriella Coleman and Chris Kelty, eds., 2017 https://limn.it/articles/the-spy-who-
      pwned-me/
Dan Geer, "Trends in CyberSecurity" 2013 http://geer.tinho.net/geer.nro.6xi13.txt

Watch:
/Jennifer Granick, "The LifeCycle of a Revolution," BlackHat Keynote, 2015
      https://www.youtube.com/watch?v=Tjvw5fz_GuA
Listen:
/Jason Koebler and Ben Makuch "Trolls, Hackers, Spies: The Cyber Decade." *Cyber
      Motherboard Podcast*, 2019

https://podcasts.apple.com/ca/podcast/cyber/id1441708044?i=1000460810972
Graduate students:
/Alberto Cortez Jimenez and Chloe Nahum-Claudel, "The anthropology of traps: Concrete
　　technologies and theoretical interfaces." Journal of Material Culture, 2019
　　　https://journals.sagepub.com/doi/full/10.1177/1359183518820368
Recommended:
/Erik Skare, "Digital Surveillance/Militant Resistance: Categorizing the "Proto-state Hacker."
　　Television and New Media, 2018

MODULE TWO: PROTEST, POLITICS & HACKTIVISM

Week 5

February 4: Hacker & Nerd Politics

/Gabriella Coleman, "From Internet Farming to Weapons of the Geek". *Current Anthropology*,
　　2017 https://www.journals.uchicago.edu/doi/pdfplus/10.1086/688697
/Jon Postill, *The Rise of Nerd Politics*, 2018 (Introduction, chapter 1, 2).
/"Hacktivism." *Hack_Curio: Decoding the Cultures of Hacking*
　　https://hackcur.io/category/hacktivism/ + watch at least 5 videos under this category

Graduate Students:
　/Jon Postill, *The Rise of Nerd Politics*. (chapter 3).
Recommended:
/Molly Sauter, *The Coming Swarm. DDOS Actions, Hacktivism, and Civil Disobedience on the
　　Interne*t, 2014.

Week 6

February 11: Hacker & Nerd Politics vs. Digital Activism

/Jon Postill, *The Rise of Nerd Politics*, 2019 (chapters 4 & 5)
/Jen Scharadie, *The Revolution That Wasn't How Digital Activism Favors Conservatives*
　　[chapters TBD].
/Sarah Jackson, "Twitter made us better." *New York Times*, 2019
　　https://www.nytimes.com/interactive/2019/12/27/opinion/sunday/twitter-social-
　　media.html?auth=login-email&login=email

Graduate students:
/Johan Soderberg, "Determining social change: The role of technological determinism in the
　　collective action framing of hackers." *New Media and Society*, 2013
　　https://journals.sagepub.com/doi/full/10.1177/1461444812470093
Recommended:
/Todd Wolfson, *Digital Rebellion: The Birth of the Cyber Lef*t. 2014. (Introduction and
　　chapter 1)
/Andrew Schrock, "Civic hacking as data activism and advocacy: A history from   publicity to
　　open government data." *New Media and Society,* 2016.
http://nms.sagepub.com/content/early/2016/02/15/1461444816629469.abstract

/Nathaniel Tkacz, "From open source to open government : a critique of open politics."
Ephemera: Theory and Politics in Organization, 2012

Week 7

February 18: Politics of Direct Action Hacking, Anonymity, & Piracy

/Kavita Philip, "Keep on Copyin' in the Free World? Genealogies of the Postcolonial Pirate
Figure." *Postcolonial Piracy: Media Distribution and Cultural Production in the Global South*,
Lars Eckstein and Anja Schwarz, eds. 2014.
/William E. Scheuerman, "Digital disobedience and the law." *New Political Science*, 2016.
http://www.tandfonline.com/doi/full/10.1080/07393148.2016.1189027
/Ernesto, "Piracy, Highlights of the Decade from Limewire to IPTV," 2019
https://torrentfreak.com/piracy-highlights-of-the-decade-from-limewire-to-iptv-
191230/
/Gabriella Coleman, "The Public Interest Hack,"*L imn: Hacks Leaks and Breaches.* Chris Ketly
and Gabriella Coleman, ed., 2017
https://limn.it/articles/the-public-interest-hack/

Watch:
/Katharain Tai, "What the World Can Learn From Hong Kong, From Unanimity to
Anonymity" Chaos Computer Club Conferences, 2019
https://media.ccc.de/v/36c3-10933 what_the_world_can_learn_from_hongkong
Graduate Students:
/Hans Asenbaum, "Anonymity and Democracy." *American Science Political Review*, 2018.
https://politicalsciencenow.com/anonymity-and-democracy/
In class:
/Subcowmandante Marcos, "Hack Back: A DIY guide to rob banks," 2019
https://pastebin.com/raw/8rXhtqgr
Recommended:
Lawrence Liang, "Beyond Representation: The Figure of the Pirate." Access to Knowledge in
the Age of Intellectual Property, ed. Gaëlle Krikorian and Amy Kapczynski, 2010.
Phillip Rogaway, "The Moral Character of Cryptographic Work." Asiacrytp 2015.
http://web.cs.ucdavis.edu/~rogaway/papers/moral-fn.pdf
Édouard Glissant, "Poetics of Relation." 1990. http://shifter-magazine.com/wp-
content/uploads/2015/10/Glissant_For_Opacity.pdf
Adam Morris, "Whoever, Whatever: On Anonymity as Resistance to Empire." Parallax, 2012.
http://dx.doi.org/10.1080/13534645.2012.714560
Gabriella Coleman, "Reconsidering Anonymity in the Age of Narcisssim."
https://gabriellacoleman.org/wp-content/uploads/2019/09/Coleman-end-trust-
anonymity.pdf

MODULE 3: BODIES, LABOR, & PUBLICS

Week 8

February 25: The Spirit of Entrepreneurial Capitalism & Hacking.

/Lilli Irani, *Chasing Innovation: Making Entrepreneurial Citizenship in India*, 2019. [Chapters

TBD]
/Johan Söderberg and Alessandro Delfanti, "Hacking Hacked! The Life Cycles of Digital Innovation." Science, Technology & Human Values, 2015. http://sth.sagepub.com/content/40/5/793.extract
/Avi Asher-Shapiro "Move Fast and Build Solidarity." *The Nation*, 2019 https://www.thenation.com/article/tech-workers-google-facebook-protest-dsa/

Graduate Students:
More of the Irani [tbd]
Recommended:

/Fred Turner, "Burning Man at Google: a cultural infrastructure for new media production." *New Media and Society*, 2009.

Week 9

March 10: Hacking Gender, Gender & Hacking

/Joan Scott, "Gender: Still a Useful Category of Analysis?" *Diogenes*, 2010 https://journals.sagepub.com/doi/pdf/10.1177/0392192110369316
/Christina Dunbar-Hester, *Hacking Diversity : The Politics of Inclusion in Open Technology Cultures*. 2019 [chapters TBD]
/Meredith Patterson, "When Nerds Collide." 2014 https://medium.com/@maradydd/when-nerds-collide-31895b01e68c
/"Inclusions+Exclusions." *Hack_Curio: Decoding the Cultures of Hacking* + watch/read all the entries under this section https://hackcur.io/category/inclusions-exclusions/

Watch: Naomi Ceder, "Farewell and Welcome Home: Python in Two Genders," PyCon 2014 https://www.youtube.com/watch?v=4R6FXtZl154&feature=youtu.be

Graduate Students:
/Jennifer Light, "When Computers Were Women," *Technology and Culture*, 2009
/Mar Hicks, *Programmed Inequality*, 2017 (introduction)
 Recommended:
/Claire Evans, *Broad Band: The Untold Story of the Women Who Made the Internet*, 2018.
/Nathan Ensmenger, *The Computer Boys Take Over*, 2010.
/Mar Hicks, *Programmed Inequality*, 2017

Week 10

March 17: Circulation, Publics and Cosmopolitanism
/Luis Murillo, "Hackerspace Network: Prefiguring Technopolitical Futures? *"American Anthropology*. 2019.
/Chris Kelty, Recursive Publics, *"Geeks, Social Imarginaries and Recursive Publics" Cultural Anthropology*, 2008.

Watch:
/Kwame Anthony Appiah, "Ethics in a World of Strangers," 2008

https://www.youtube.com/watch?v=esZQ2cf2Gkw

Graduate Students:
/Michael Warner, "Publics and Counter Publics." *Public Culture*, Winter 2002.
/Couture, Stephane, & Sophie Toupin. "What does the notion of "sovereignty" mean when referring to the digital?" *New Media & Society*, 2019.

MODULE 4: CODES OF VALUE & THE CRAFT/CRAFTINESS of HACKING

Week 11

March 24: Social & Technical Infrastructures of Communicating and Hacking

/maxigas, "Keeping Technological Sovereignty, The case of Internet Relay Chat." *Technological Sovereignty*, 2018
https://sobtec.gitbooks.io/sobtec2/en/content/05irc.html
/Paula Bialski, "Code Review as Communication: The Case of Corporate Software Developers." *Communication In Search of Media*, Finn Bruton, Paula Bialaski, and Mercedes Bunz eds. 2019 https://meson.press/wp-content/uploads/2019/01/9783957961464-Communication.pdf
/Clive Thompson, "Constant Frustration and Bursts of Joy." *Coders*, 2019

Graduate Students:
/Mike Annany, "How is Networked Press Freedom a Question of Infrastructure?" N*etworked Press Freedom: Creating Infrastructures for a Public Right to Hea*r, 2018

Recommended:
/Wendy Hui Kyong Chun and Andrew Lison, "Fun is a Battlefield: Software between Enjoyment and Obsession *Fun in Software*. Olga Goriunova, ed*.,* 2014

Week 12

March 31: Blockchain + Bitcoin

/Satoshi Nakamoto, James Bridle (introduction) and Jaya Klara Brekke (contributor). *The White Paper*, 2019
/Primavera De Fillipi and Bejanmin Loveluck, "The invisible politics of Bitcoin: governance crisis of a decentralised infrastructure." *Internet Policy Review*, 2016
https://policyreview.info/articles/analysis/invisible-politics-bitcoin-governance-crisis-decentralised-infrastructure
Nathan Schneider, "I think there's a revolution happening." *Hack_Curio: Decoding the Cultures of Hacking. 2019. https://hackcur.io/i-think-theres-a-revolution-happening/*
Nathan Schneider, "Decentralized Apps, Plus the Skynet Armageddon," *Hack-Curio: Decoding the Cultures of Hacking, 2019* https://hackcur.io/decentralized-apps-plus-the-skynet-armageddon/

Graduate Students:

/Nathan Schneider, "Decentralization: an incomplete ambition." *Journal of Cultural Economy*, 2019. https://www.tandfonline.com/doi/abs/10.1080/17530350.2019.1589553

Recommended:
Finn Bruton, *Digital Cash*, 2019

Week 13

April 7: Long Live Play and Politics (if they can go together)

/Colin Milburn, *Respawn: Gamers, Hackers, and Technogenic Life*, 2019. "(Introduction, Chapter 1, 2.)
/Morgan Ames, "OLPC Charismatic Roots: Constructionsm, MIT's Hacker Culture, and the Technically Precocious Boy." *The Charisma Machine: The Life, Death, and Legacy of One Laptop per Child*, 2019.
/Lepore, Jill, "Edward Snowden and the Rise of Whistle-Blower Culture."*Thew New Yorker*, 2019.* https://www.newyorker.com/magazine/2019/09/23/edward-snowden-and-the-rise-of-whistle-blower-culture
/Edward Snowden, *Permanent Record*, 2019 (short excerpt)
/Olga Goriunova, *Fun in Software*, 2014 (Introduction)
/"Gaming," *Hack_Curio: Decoding the Cultures of Hacking*, 2019 https://hackcur.io/category/gaming/
/Colin Milburn, "The Light It Up Contest: Hacking the PlayStation 3," *Hack_Curio: Decoding the Cultures of Hacking*, 2019 https://hackcur.io/you-may-fire-when-ready-geohot-and-the-light-it-up-contest/
* There is material about gaming.

Graduate students:
/Colin Milburn, *Respawn: Gamers, Hackers, and Technogenic Life*, 2019. "(Chapter 4.)

Recommended:
/Gabriella Coleman, "The Craft and Craftiness of Hacking." Coding Freedom, 2013

Grading

Grade Breakdown

Grade	Grade point	Percentages
A	4.0	85 –100
A-	3.7	80 – 84
B +	3.3	75 – 79
B	3.0	70 – 74
B-	2.7	65 – 69
C +	2.3	60 – 64

C	2.0	55 – 59
D	1.0	50 – 54
F (Fail)	0	0 – 49

Grade Appeals

I am always happy to meet to discuss in further detail the criteria used for grading. Please come see me in office hours or make an appointment, if you would like to meet with me to clarify my standards and procedures. It is rare for me to change grades unless it was based on an error of calculation, which has happened on occasion. Academics place serious weight on the process of peer review, which is based on the ideas that qualified outsiders are the best judge of the quality and strength of work. If you would like to discuss or appeal your grade, please follow the process detailed below.

1. I will correct calculation errors, at any time with apologies.

2. Please set up an appointment or come to my office hours to seek explanation for a grade.

The most likely course of action will be to discuss improvement for subsequent assignments.

3. If a student wishes to dispute a grade, you may choose to follow the university's standard appeals process (note: if an appeal is heard at the university level, it is considered *sui generis*, meaning that the grade could stay the same, be raised or lowered and will be graded by another professor in the University).

Email Policy

During the academic year, I receive a considerable amount of email. In order for me to respond to my email efficiently, please follow the following guidelines:

1. If you cannot see me during my office hours, email me to set up an appointment; I will try to respond as soon as possible but I usually cannot accommodate a meeting in 24 or even 48 hours.

2. I read and reply to email once a day and usually do not read or reply to email after 5 PM or weekends.

3. Grade inquiries and disputes will not be considered or discussed via email. For all grade inquiries and questions about assignments, please set up an appointment with me (see above).

4. I will not reply to email inquiries regarding course matters (assignment requirements, due dates, exam structure, readings, etc.) that arise from missing class or inattention to the course syllabus. Inquiries requesting clarification will receive replies, though I would strongly prefer these inquiries to be made in class or during office hours.

Other Information and McGill Policies

Language: In accord with McGill University's Charter of Students' Rights, students in this

course have the right to submit in English or in French any written work that is to be graded.

Accommodations: Students requiring special testing accommodations or other classroom modifications should notify Prof. Coleman and the Office for Students with Disabilities as soon as possible. The OSD is located in 1010 Sherbrooke Ouest Suite 410, ph: 398-6009 (voice), 398-8198 (TDD), www.mcgill.ca/osd/.

Academic Integrity: McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism, and other academic offenses under the Code of Student Conduct and Disciplinary Procedures. (for more information, see www.mcgill.ca/students/srr/honest/.) L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le site www.mcgill.ca/students/srr/honest/).

Academic resources: Students looking for additional assistance with academic reading, study, research and writing skills should consult the McGill academic resources website at: www.mcgill.ca/students/academicresources/.

Counseling: McGill's Counseling Service provides extensive personal, academic, and career counseling to undergraduate and graduate students, including workshops on study skills, multiple-choice exams, text anxiety/stress management. They are located in Brown Student Services Bldg. 398-3601 www.mcgill.ca/counselling/. A list of groups and workshops can be found at: www.mcgill.ca/counselling/groups/

Illness: Students are responsible for material covered in all classes, including anything missed due to illness. Examinations will not be rescheduled and assignment due date extensions will not be provided, for any reason other than documented illness. Students unable to attend examinations or complete assignments due to illness are expected to contact me prior to the examination or due date by email and by phone. Appropriate documentation will be required to support requests for special consideration due to illness (see http://www.mcgill.ca/students/advising/faq#a14).