Institute of Communication, Culture, Information & Technology
UNIVERSITY OF TORONTO
MISSISSAUGA

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CCT212H5S LEC0101
Hacker Culture
Course Outline - Winter 2020

Class Location & Time	Mon, 02:00 PM - 04:00 PM DV 2082
Instructor	Alex Dean Cybulski
Office Location	
Office Hours	Monday, 4-6pm
E-mail Address	alexander.cybulski@utoronto.ca
Course Web Site	q.utoronto.ca

Course Description

By subverting and re-appropriating technologies, hackers influence both the evolution of computing and the politics of digital media. Hacking contributes to shaping the future of entrepreneurship, free speech, surveillance, and intellectual property. The course will examine the cultural, social, and legal facets of hacking in fields ranging from software production to political activism and the hacker underground. It will be based on social science research on hackers as well as concrete examples of data re-appropriation and technology modification. [24L]

Prerequisite: CCT109H5, CCT110H5 (SSc)
Distribution Requirement: SSc

It is your responsibility to ensure that the prerequisites for course have been met. Students without the prerequisites can be removed at any time. No waivers will be granted.

Goals and Learning Objectives

Students will be able to:

1. Build a strong historial understanding of the origins of hacker culture, its central tenets and philosophy.

2. Distinguish betwen the various meanings of the term hack and the different ways in which the identity of hackers are represented in our culture.

3. Understand the key cultural debates which hackers participate in and their role within these debates.

4. Perform threat research research on hacker organizations, their philosophies, tactics, techniques and procedures (TTP).

5. Consider ethical issues pertaining to hacking, intellectual property and the Internet.

Required Materials

The key course reading materials can be found on the class Quercus site and via the Library Resources link on CCT 212's Quercus site menu.

There is no required textbook for this course, but all readings listed on Quercus are considered essential unless otherwise stated.

Assessment and Grading Policies

Type	Description	Due Date	Weight
Assignment	Course Definitions	2020-01-27	15%
Assignment	Media Analysis: Reverse Engineering	2020-02-13	15%

Assignment	Group Work: Hacker Organizations	2020-03-12	20%
Assignment	Term Paper	2020-04-02	25%
Final Exam	Final Exam	TBA	25%
		Total	100%

You should receive at least one significant mark (15%) before the last day you can drop a course without academic penalty.

Requirements and Criteria

1. Course Definition: 15% - Due Jan 27th

Individual assignment: a short report on 10 pre-assigned terms/concepts that will contextualize students to course topics, themes and concepts.

Length: 600 - 1000 Words

2. Media Analysis: 15% - Due Feb 13th

Individual assignment: a short essay which critically analyzes a representation of hackers in the media. This can include a fiction novel, a non-fiction novel, comic, film, a televsion show, documentary, or videogame.

Length: 1000 - 1,500 Words

3. Group Work - 20% - Due March 12th

Group assignment: Group members will be assigned randomly from the pool of enrolled students. Students will be given time in class to organize infrastructure, roles, etc. Students will e-mail the instructor a single report and individually submit a peer evaluation of their group members on Quercus.

Desrciption: a short report on a hacker group collecting data about the history, tactics, techniques and procedures of a hacker organization or movement (e.g. Wikileaks, APT38, the Cult of the Dead Cow, etc).
Length: 6 - 10 pages

4. Term Essay: 25% - Due April 2nd

Individual assignment, a short essay on one of five assigned topics drawn from the course units (early hacker history, free and open source software, piracy, hacktivism, entreprenurialism & security)
Length: 2,500 words

5. Final Exam: 25% - TBA

The final exam will cover all course material.

Teaching Methods

This course builds on the foundation of knowledge concerning communication, culture and information technology that was covered in CCT 109h and 110h. It includes a review and extension of relevant foundational knowledge that many students will have gained.

The course provides a basis for later courses in the Communication Culture, Information and Technology major program in ICCIT and will also be relevant to other ICCIT programs such as DEM and PWC. It presents the perspective of a sociologist and consultant working in the area of information security, hacker culture, labour and geopolitics. In particular, this course considers the societal role that hackers play in mediating the relationship between technology, politics and culture.

Course Meetings: The course consists of 11, two hour lectures and the screenining of one film.

Participation and attenance: discussion and interaction in the lectures are important ways to learn. Time will be provided during every lecture to ask the instructor about course materials and to engage with other classmates. The film screening is considered

mandatory.

Readings and Media: On the course website in Quercus the course reaidng list will indicate a number of readings, videos and other media that are intended to accompany each lecture. There is an absolute requirement for students to prepare for each class by reading the material indicated for that week. On average, for every 1 hour of lecture strudents will be expected to allocate at minimum 2 hours for readings and assignments. As a courtesy to the students the instructor has kept each week's readings to below 35 pages.

Procedures and Rules

E-Culture Policy

Only student U of T email accounts should be used for course communication and all emails from students must include the course code in the subject line and should be signed with the full student name and student number.

Most e-mails should receive a response in a *minimum of 48 hours*: keep this in mind with respect assignment deadlines, lectures and any significant dates in the course and academic calendar. Students addressing complex or lengthy questions will be directed to approach the instructor during office hours.

It is your responsibility to read your U of T email on a regular basis. This will ensure that you receive important information from your instructors and the university.

It is your responsibility to read your email regularly and check course information updates and announcements through Quercus. Students who choose to opt out of receiving messages through Quercus are still responsible for actions required, or changes communicated through those announcements and messages.

Learning Technology

All individual assignments should be submitted through Quercus. Group work will be e-mailed to the instructor and students will submit peer evaluations through Quercus.

Late Penalties

You are expected to complete assignments on time. There will be a penalty for lateness of 10% deducted per day and work that is not handed in one week after the due date will not be accepted.

Missed Tests and Extensions on Assignments - Special Consideration Requests

Students who miss a test or an assignment deadline due to circumstances beyond their control (e.g. illness or accident) can request special consideration from the ICCIT department for approval.

IMPORTANT: Please review the ICCIT Special Consideration Request (SCR) policy here, and follow the procedure to submit a special consideration request online. You have three days or 72 Hours (including weekends) from the assignment deadline or date of the missed test/quiz to complete the SCR process in full: https://www.utm.utoronto.ca/iccit/students/late-assignments-extensionsmissed-tests-quizzes

If you are registered with AccessAbility at UTM and/or Accessible Learning Services at Sheridan,and the reason for missing a test or a deadline **pertains to a disability**, you are still required to submit an SCR at the link above. In such cases, the department will accept documentation supplied by the UTM AccessAbility Resource Centre. If you require further information, please speak with your accessibility services advisor. Please see the section on "AccessAbility" for more information.

This course will involve a film screening. If a student identifies as visually impaired an alternative arrangement will be determined in conjunction with accessible learning services.

Religious Observance: Information about the University's Policy on Scheduling of Classes and Examinations and Other Accommodations for Religious Observances is at
http://www.viceprovoststudents.utoronto.ca/publicationsandpolicies/guidelines/religiousobservances.htm

U of T Mississauga students are required to declare their absence from a class, for any reason, through theirACORN accounts in order to receive academic accommodation for any course work such as missed tests, late assignments, and final examinations. Absences include those due to illness, death in the family, religious accommodation or other circumstances beyond their control.

Re-marking Pieces of Term Work

General

A student who believes that his or her written term work has been unfairly marked may ask the person who marked the work for re-evaluation. Students have up to one month from the date of return of an item of term work or from the date the mark was made

available to inquire about the mark and file for an appeal. For example, should the work be returned or the mark be made available on March 3rd, the student has until April 3rd to inquire in writing and start the re-marking process. Instructors must acknowledge receipt of a student request for re-marking within **3-working days**, and decisions should be provided in a timely fashion.

If an academic misconduct case is in progress for the piece of term work in question, a student may not appeal until the matter is resolved.

Details
Regrade requests for term work worth less than 20% of the final mark may be submitted to the person who marked the work for re-evaluation. The student must submit (1) the original piece of work and (2) a written explanation detailing why they believe the work was unfairly/incorrectly marked. If the student is not satisfied with this re-evaluation, he or she may appeal to the instructor in charge of the course if the work was not marked by the instructor (e.g., was marked by a TA). In these instances where the instructor was not the one who marked the work, the student must now submit to the instructor (1) the original piece of work, (2) the written reasons as to why he or she believes the work was unfairly/incorrectly marked, and (3) communications from the original marker as to why no change in mark was made. If a re-marking is granted by an instructor, the student must accept the resulting mark as the new mark, whether it goes up or down or remains the same. Continuing with the remark or the appeal means the student accepts this condition. Instructors and TAs should ensure all communication with the student is in writing (e.g. follow-up email) and keep a copy for later reference.

Only term work worth at least 20% of the course mark may be appealed beyond the instructor. Such appeals must first follow the same guidelines as those mentioned directly above for work worth less than 20%. To escalate an appeal beyond the instructor, the student must submit to the department (1) all previous communications between the student, original marker, and the instructor (2) the detailed reason(s) documenting why the mark for the work was inappropriate and (3) the original piece of work. If the department believes that re-marking is justified, the department shall select an independent reader. The student must agree in writing to be bound by the results of the re-reading process or abandon the appeal. Again, the student must accept that the mark resulting from the appeal may be higher or lower or the same as the original mark. Where possible, the independent reader should be given a clean, anonymous copy of the work. Without knowing the original assigned mark, the reader shall determine a mark for the work. The marking of the work should be considered within the context of the course of instruction for which it was submitted. If the new mark differs substantially from the original mark, the department shall determine a final mark taking into account both available marks.

The final level of appeal is to the Dean's Office. Appeals must already have been considered at the two previous levels (Instructor followed by Department), with the decision reviewed by the head of the academic unit, before they will be considered by the Dean's Office. **Appeals must be submitted in writing, and include all previous correspondence, as soon as possible after the student receives the final response from the academic unit, but no later than one month after.** Appeals to the Dean's Office about the marking of term work will be reviewed to ensure that appropriate procedures have been followed in earlier appeals, that the student has been treated fairly, and that the standards applied have been consistent with those applied to other students doing the assignment. Any mark resulting from such an appeal will become the new mark, whether it is higher or lower or the same as the previous one. This process applies only to term work; appeals for re-reads of final examinations are handled directly by the Office of the Registrar.

Issues Pertaining to Term Work and Instructional Activities

Issues arising within a course that concern the pedagogical relationship of the instructor and the student, such as essays, term work, term tests, grading practices, or conduct of instructors, fall within the authority of the department. Students are entitled to seek resolution of these issues, either orally or in writing to the course instructor and, if needed, the ICCIT Director for resolution.

Following a response from the ICCIT Director, students may submit an appeal, in writing, to the Vice-Principal, Academic and Dean.

Missed Final Exam

Final examinations are scheduled, administered and governed by the policies set by the Office of the Registrar. Any student that is granted a deferral by the Office of the Registrar will be required to write a deferred examination at the next exam-writing session scheduled by the Office of the Registrar. Students should note that the deferred exam may not follow the same format as the exam given in the regular writing session.

Students who cannot write a final examination due to illness or other serious causes must file an online petition **within 72 hours of the missed examination**. Original supporting documentation must also be submitted to the Office of the Registrar **within 72 hours of the missed exam**. Late petitions will **NOT** be considered. If illness is cited as the reason for a deferred exam request, a U of T Verification of Student Illness or Injury Form must show that you were **examined and diagnosed at the time of illness and on the date of the exam, or by the day after at the latest**. Students must also record their absence on ROSI on the day of the missed exam or by the day after at the latest. Upon approval of a deferred exam request, a non-refundable fee of $70 is required for each examination approved.

Academic Integrity

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student's individual academic achievement. As a result, the University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters (www.governingcouncil.utoronto.ca/policies/behaveac.htm) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement.
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.
- Obtaining or providing unauthorized assistance on any assignment.

On tests and exams:

- Using or possessing unauthorized aids.
- Looking at someone else's answers during an exam or test.
- Misrepresenting your identity.

In academic work:

- Falsifying institutional documents or grades.
- Falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. You are instructed to read the following for more information: http://www.utm.utoronto.ca/academic-integrity/office-dean-academic-integrity and http://academicintegrity.utoronto.ca/).

Normally, students will be required to submit their course essays to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site.

Expectations for Conduct in the Academic Setting

Students agree that by taking this course, they agree to adhere to the ICCIT Expectations for Conduct in the Academic Setting set out at https://www.utm.utoronto.ca/iccit/students/policies-procedures/code-conduct.

Copyright in Instructional Settings

If a student wishes to tape-record, photograph, video-record or otherwise reproduce lecture presentations, course notes or other similar materials provided by instructors, he or she must obtain the instructor's written consent beforehand. Otherwise all such reproduction is an infringement of copyright and is absolutely prohibited. In the case of private use by students with disabilities, the instructor's consent will not be unreasonably withheld.

For more information on copyright and the University of Toronto, please visit https://onesearch.library.utoronto.ca/copyright/copyright.

Equity Statement

The University of Toronto is committed to equity and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect. As a course instructor, I will neither condone nor tolerate behaviour that undermines the dignity or self-esteem of any individual in this course and wish to be alerted to any attempt to create an intimidating or hostile environment. It is our collective responsibility to create a space that is inclusive and welcomes discussion. Discrimination, harassment and hate speech will not be tolerated. If you have any questions, comments, or concerns you may contact the UTM Equity and Diversity officer at edo.utm@utoronto.ca or the University of Toronto Mississauga Students' Union Vice President Equity at vpequity@utmsu.ca.
http://www.utm.utoronto.ca/equity-diversity/

Other Resources

AccessAbility

The University provides academic accommodations for students with disabilities in accordance with the terms of the Ontario Human Rights Code, including those who have a physical, sensory, or learning disability, mental health condition, acquired brain injury, or chronic health condition, be it visible or hidden.

If you have a disability or health consideration that may require accommodations, please approach the AccessAbility Resource Centre as soon as possible. The AccessAbility staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. The sooner you let us know your needs, the quicker we can assist you in achieving your learning goals in this course.

To register with AccessAbility*, please call the centre at 905-569-4699 or e-mailaccess.utm@utoronto.ca.
http://www.utm.utoronto.ca/access/

Students attending Sheridan-based courses with accommodation needs must register with the AccessAbility Resources Centre at UTM and the Accessible Learning Services at Sheridan College. For assistance at Sheridan, please contact Accessible Learning Services at 905-845-9430, ext. 2530 or trafalgar.als@sheridancollege.ca. For more information, please visit: https://www.sheridancollege.ca/life-at-sheridan/student-services/accessible-learning-services.aspx.

Robert Gillespie Academic Skills Centre
The centre offers wide-ranging support to help students identify and develop the academic skills they need for success in their studies, including: understanding learning styles; essay and report writing; time management; lecture-listening; note-taking; and studying for tests and exams.
http://www.utm.utoronto.ca/asc

UTM Library (Hazel McCallion Academic Learning Centre)
The UTM library provides access to a vast collection of online and print resources to faculty, staff, and students. Various services are available to students, including borrowing, interlibrary loans, online references, research help, laptop loans and the RBC Learning Commons.
http://library.utm.utoronto.ca

Course Schedule

Date	Topic
2020-01-06	Unit #1: Early Hacker History **Lecture #1**: **Introduction - Hackademia** No readings
2020-01-13	**Lecture #2: Hackers? What's a Hacker? This Lecture is About a Model Railroad Club** Levy, S. (2010). *Hackers* (1st ed). Sebastopol, CA: O'Reilly Media.**Chapters 1 & 2 (35 pages)** Supplemental: Sarah H. Wright. Obituary: Alan Kotok, 64, created the Joystick http://news.mit.edu/2006/obit-kotok
2020-01-20	**Lecture #3: Early Hacker Groups: the Netwars and Electronic Bulletin Boards** Menn, J. (2019). *CULT OF THE DEAD COW: How the original hacking supergroup might just save the world.* S.l.: PUBLIC AFFAIRS. **Chapters 2 & 3 (27 pages)** Supplemental: Swamp Rat: Fucked Life http://textfiles.com/groups/CDC/cDc-0016.txt
2020-01-27	**Film - Sneakers** Robinson, P. A. (1992). *Sneakers* [Crime, Comedy, Drama, Thriller, DVD]. Universal Pictures. **READINGS** Turkle, S. (1984). *The Second Self: Computers and the Human Spirit* (Twentieth Anniversary Edition). Cambridge, MA: MIT Press. **Chapter 6 (31 pages)** Supplemental: Turkle, Introduction
2020-02-03	Unit #2: Free and Open Source Software **Lecture #5: Free and Open Source Software** Benkler, Y. (2006). *The wealth of networks: How social production transforms markets and freedom.* New Haven [Conn.]: Yale University Press. **Chapter 3 (30 pages)**
2020-02-10	**Lecture #6: F/OSS as a Political Movement** Readings TBA
2020-02-17	**READING WEEK** **Classes do not meet** **HACK THE PLANET**

2020-02-24	Unit 3: Piracy **Lecture #7: Piracy as Media Intervention** Liang, L. (2011). Beyond Representation: The Figure of the Pirate. In G. Krikorian & A. Kapczynski (Eds.), Access to Knowledge in the Age of Intellectual Property (pp. 353-376). New York, NY: Zone Books. http://go.utlib.ca/cat/12578032 **(23 pages)**
2020-03-02	Unit 4: Security **Lecture #8: Information Security in Hacker Culture** Tanczer, L. M. (2020). 50 shades of hacking: How IT and cybersecurity industry actors perceive good, bad, and former hackers. Contemporary Security Policy, 41(1), 108-128. **(20 pages)**
2020-03-09	Unit 5: Hacktivism **Lecture #9: Slowing Down the Internet for Freedom and Lulz** Sauter, M. (2014). *The Coming Swarm: : DDoS actions, hacktivism, and civil disobedience on the Internet* New York: Bloomsbury Academic. **Chapter 2 (19 pages)** *What is a DDoS Attack?* https://youtu.be/z503nLsfe5s
2020-03-16	**Lecture #10: Hack Back! Hacktivists vs the World** *An Interview with Hacker "Phineas Fisher" as a Puppet: CYBERWAR (Extended Scene)* (n.d.). Retrieved from https://www.youtube.com/watch?v=BpyCl1Qm6Xs&feature=youtu.be **READINGS TBA**
2020-03-23	Unit #6: Entrprenurialism **Lecture #11: Hackers Get it Done (Often Without Sleep or Pay)** Neff, G. (2012). *Venture Labor.* Cambridge, MA: MIT Press. **(Chapter 1 p. 1- 31)**
2020-03-30	**Lecture #12: Hacking as a Mode of Production** Irani, L. (2015). Hackathons and the making of entrepreneurial citizenship. Science, Technology, & Human Values, 40(5), 799-824. **(25 pages)**
TBA	Final Examination

Last Date to drop course from Academic Record and GPA is March 8, 2020.

Every attempt will be made to follow this syllabus, but its content are subject to change, according to the rules as outlined in the UTM Instructor's Handbook, section 3.2.2.