University of Waterloo Faculty of Arts, Stratford Campus Global Business and Digital Arts 303 Innovation, Project, and Change Management Fall 2016

Course Director: Philip J. Boyle

Office: DMS 2014 (Stratford)

PAS 2051 (Waterloo)

Phone: 519-888-4567 ext. 31577 (Waterloo), ext. 23002 (Stratford)

Email: pjboyle@uwaterloo.ca

Class Hours: Section 1: Tuesday 2-3:50pm; Section 2: Tuesday 10-11:50am

Tutorial Hours: Section 1: Friday 1-1:50pm; Section 2: Friday 9-9:50am

Office Hours: Tuesdays & Fridays by appointment

Classroom: All Seminars: DMS 3129

All Tutorials: DMS 3022

Calendar Description

This course focuses on a key challenge of the 21st century: how do individuals contribute to social innovations, new ways of doing and seeing, which provide breakthrough solutions to intractable problems? The course will review the literature both on social change and transformation and on private sector innovation. Students will be challenged to draw from these two disparate literatures to form working hypotheses for initiating, building, and disseminating social innovation.

Detailed Description

This course will examine the digital information economy as a force for disruptive innovation. We will focus in particular on the <u>promise of 'big data' to provide new ways of doing and seeing</u> that disrupt established models of public governance and private enterprise. We will also develop an evaluative stance towards the digital information economy in order to understanding of the promise and pitfalls of living in a time of information saturation.

Course Goals and Learning Outcomes

- Students will, through a series of directed and self-selected topical analyses, understand how the information economy is changing established models of business, scientific, and social enterprise
- Students will be familiar with the strengths and shortcomings of the fair information practice principles (FIPPs) in the context of the digital information economy
- Students will exercise skills in data visualization in order to simplify and communicate complex problems to a wide audience
- Students will become familiar with established principles of intellectual property (IP), including the IP policies of the University of Waterloo

Required Resources

Neef, D. 2015. *Digital Exhaust: What Everyone Should Know About Big Data, Digitization, and Digitally Driven Innovation*. Pearson Education. [Available at university bookstore.]

Slee, T. 2016. *What's Yours in Mine: Against the Sharing Economy*. Between the LinesPress. [Available in hardcopy or ebook directly from publisher at link below or major online retailers.]

http://www.orbooks.com/catalog/whats-yours-is-mine-by-tom-slee/

Other resources will be made available on Learn as needed.

Course Deliverables & Assessment

Students will be assessed through the following deliverables:

Assignment	<u>Weight</u>	<u>Due Date</u>
Small Assignments (5; Individual)	25% (5% each)	Throughout semester
Book Review (Individual)	25%	To be determined
Privacy Scorecard & Infographic (Group)	25%	Oct 21
Data Visualization Project (Group)	25%	Nov 29

Small Assignments – 5 @ 5% each

You will be required to complete 5 small assignments throughout the semester. These may include in-class quizzes, short answer assignments, or other formats as determined by the instructor. These will not be scheduled in advance; they will be 'surprise' assignments to be completed in class.

Book Review - 25%

You are required to write a 5-page (double spaced) book review of *What's Yours is Mine: Against the Sharing Economy* by Tom Slee. Consult the following web page from the University's library when writing your review:

http://subjectguides.uwaterloo.ca/content.php?pid=257515&sid=2386985

You should adhere as close as possible to the six objectives outlined on this page. Note that describing the contents of the book is only one of these objectives; as such, you should restrict summarizing the book to one page or less. Your final submission should include a cover page with a title (not the title of the book), your name, student ID number, course name, my name, and the date. Book reviews are to be submitted on Learn by the due date.

Privacy Scorecard & Infographic - 25%

In groups to be assigned by the instructor you must create an Infographic suitable for display on the Christie wall that communicates your group's assessment of the privacy practices of a social media platform of your choosing. Your assessment should center on the extent to which the policies and practices of your firm align with the Fair Information Practice Principles (FIPPs). Your Infographic must include an explicit 'final grade' (A, B+, C-, etc.) and be accompanied by a four page (double spaced) justification of your assessment. This assignment will be discussed in greater detail in class.

Data Visualization Project - 25%

In groups assigned by the instructor you must use Processing (processing.org) to visualize a dataset of your choosing in a way that is suitable for display on the Christie wall. Your group will need to find a source of open data that is appropriate for the task. Using these data, your task is to visually represent some aspect of our increasingly global, urban, and polarized world. Your final product may use real-time (streaming) data or fixed longitudinal data, but your visualization must be dynamic rather than static. The final deliverable must be accompanied by a four page (double spaced) statement that explains what your visualization communicates, the significance of what you have selected to visualize in terms of understanding our rapidly changing world, your data source, and anything else that is important to your project. This assignment will be discussed in greater detail in class.

Classroom Policies

Please read and observe the following classroom policies. The University's policies on Academic Integrity and Accommodation for Students with Disabilities appear after the Course Schedule & Reading List. You are expected to adhere to all classroom and University policies.

A Note on (Your) Expectations

This course has more academic content than a studio or skills acquisition course. This means that you will be expected to read, think, synthesize, and apply ideas in written and verbal forms. Grades of 85%+ are reserved for students who exceed expectations in all categories of evaluation.

Course Delivery

This course will be run in seminar format, meaning that lecturing will be kept to a minimum in favor of directed discussion and activities. My role will be to act as a facilitator and manager of class time, while your role is to <u>read all assigned material before class</u> and be prepared to <u>discuss the material</u> each and every meeting. The success of our seminar time together depends upon you doing so.

Attendance Policy

You are expected to attend all classes and tutorials. Absences, especially when group work in tutorials is scheduled, should be avoided unless absolutely necessary and due to reasons acceptable to the University. Travel plans are not acceptable reasons for being absent or requesting alternative due dates.

Late Submission Policy

All assignments must be submitted on the due date. Late assignments will be penalized at 5% of the value of the assignment per day.

Electronic Device Policy

Laptop computers and/or tablets may be used in the classroom for learning purposes only. All other uses are prohibited. Mobile phones should be turned off and stored until the end of class. Do not wear headphones in class. Making audio/video recording of class lectures or tutorials without permission is prohibited. You may be asked to leave the classroom if any use of technology is disruptive.

Email Policy

Please keep email correspondence to a minimum. While I will strive to respond to all emails I receive within one business day, most questions can be answered by consulting the course outline, asking your colleagues, or waiting until the next time we meet.

Course Schedule & Reading List [Exact order and distribution of readings may change.]

Sept 9t: Introduction to Course

Theme 1: What is Disruptive Innovation/What is Big Data

Sept 13: Theme: Disruptive Innovation

Required Reading: Bower & Christensen, Catching the Wave [pdf on Learn]

Downes & Nunes, Big bang disruption [pdf Learn]

Sept 16t: Groups assigned; group projects discussion

Sept 20: Theme: Big Data

Required Reading: Neef Ch. 1, The big data big bang

Neef Ch. 11, Living in a big data world

Sept 23t: Groups finalized; group projects initiated

Sept 27: Theme: Privacy Regulations & (Poor) Business Practices

Required Reading: Rushe, Regulators reprimand Snapchat [link on Learn]

FTC, Snapchat Settles FTC Charges [link on Learn]

Lamont, Life after the Ashley Madison Affair [link on Learn]

PCC, Ashley Madison Investigation [link on Learn]

Tynan, WhatsApp Backlash [link on Learn]

Sept 30t: Tutorial: Privacy Scorecard Infographic Work Session

Theme 2: The Personal Information Industry Complex

Oct 4: Theme: Big Data & Personal Information

Required Reading: Neef Ch. 2, Big data & the battle for control of the Internet

Neef Ch. 3, The battle for the Internet gateway into the TV Neef Ch. 4, The battle for the gateway into the mobile Internet

Neef Ch. 5, From social media to digital advertising

Oct 7t: Tutorial: Privacy Scorecard Infographic Work Session

Oct 13: Film: Terms & Conditions Apply

[Note: This class falls on a Thursday]

Oct 18: Film Discussion. [No readings, but you should be reading *What's Yours is Mine*]

Oct 21t: Privacy Scorecard Infographic Due

Theme 3: Visualizing our World with (Big) Data

Oct 25: Theme: Big Data Visualization [w/ Jordan Mandel]

Required Reading: None for this week, but you should be reading What's Yours in Mine

in preparation for November.

Oct 28t: Data Visualization Workshop [w/ Jordan Mandel]

Theme 4: Big Data & (Post)Industrial Society

Nov 1: Theme: The Internet of Things

Required Reading: Neef Ch. 7, The industrial Internet & the Internet of things

Scott, Eight ways the IofT will change the way we live [link onLearn] Cavoukian, Why privacy must be baked-in to the IofT [link onLearn]

Case Studies: Owram, The coming of age of self-driving cars [link on Learn]

Owram, Driver beware [link on Learn]

Nov 4t: Data Visualization Work Session

Nov 8: Theme: Music & Sport

Required Reading: Jonson, The creative apocalypse that wasn't [link on Learn]

Thompson, The Shazam effect [link on Learn]

Lindzon, Wearable tech will transform sport [link on Learn]

Kaplan, Wall Street firms uses algorithms to make sports betting

like stock trading [link on Learn]

Nov 11t: Data Visualization Work Session

Nov 15: Theme: The Sharing Economy

Required Reading: What's Yours is Mine

Nov 18t: Data Visualization Work Session

Nov 22: Intellectual Property Seminar

Required Reading: TBA

Nov 25t: Final Data Visualization Work Session

Nov 29: Data Visualization Showcase

Dec 2t: Book Review Consultation

University Policies

Academic Integrity

In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. See the UWaterloo Academic Integritity Webpage (https://uwaterloo.ca/academic-integrity/) and the Academic Integrity Office Webpage (https://arts.uwaterloo.ca/current-undergraduates/academic-responsibility) for more information.

Grievance

A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read <u>Policy 70, Student Petitions and Grievances, Section 4</u> (https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-70). When in doubt please be certain to contact the department's administrative assistant who will provide further assistance.

Discipline

A student is expected to know what constitutes academic integrity to avoid committing academic offenses and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning how to avoid offenses (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the undergraduate associate dean. For information on categories of offenses and types of penalties, students should refer to Policy 71, Student Discipline (http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm). For typical penalties check Guidelines for the Assessment of Penalties (http://www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm).

Appeals

A decision made or penalty imposed under Policy 70, Student Petitions and Grievances (other than a petition) or Policy 71, Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72, Student Appeals (Policy 72, Student Appeals (Policies/policies/

Note for Students with Disabilities

The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the OPD at the beginning of each academic term.