IST343 Data in Society
Mondays & Wednesdays 12:45 – 2:05, Hinds Hall 021

Instructor: Prof. Jennifer Stromer-Galley   Email: jstromer@syr.edu
Office: 220 Hinds Hall   Twitter: @profjsg
Office Hours: Fridays 2:30-3:30   Skype: jenny_s-g

Co-Instructor: Olga Boichak   Email: oboichak@syr.edu
Office: ISchool Ice Box (Hinds Hall 3rd floor)   Twitter: @olgarithmic
Office Hours: Thursdays 9:30-11:00

Course Description:
Students will critically examine how individuals, groups, and society create and are created by digital data and algorithms. Students will explore social, political, legal, and professional issues across varying contexts including social media and the Internet of Things.

Additional Course Description:
Our contemporary information environment is fully mediatized, which means that most of what we know as well as how we work, participate in civic and political life, shop, find entertainment, fall in love, maintain our friend and family ties, and learn are done through digital media. The consequence of this is a deep wealth of behavioral data—likes, clicks, shares, comments, views—that marketers, tech giants, businesses, the entertainment industry, the medical industry, politicians, and government now actively use to segment, target for persuasive messaging, and predict future behavior of the public. This course introduces students to the variety of techniques of data gathering and segmentation, and the social, economic, political, and cultural implications of the increasingly data-driven society we live in. This course aims to help students think critically and ethically about the role of data in everyday life.

Prerequisite/Co-requisite:
None

Audience:
Undergraduate students

Credits:
3

Learning Objectives:
After taking this course, students will be able to:
- Analytically interpret and engage with the current and future philosophical implications of digital data on society
- Critique various Internet-enabled technologies and their data in relation to their social impact—both negative and positive—across various domains of social life
- Identify the ethical, moral, and legal implications of digital data on society

- Understand how history and our values have led to the current manifestations of digital data in society
- Have a sense of how people, democratic processes, and citizenship, can affect the impact of digital data on society
- Generate alternative design solutions to remedy issues with the design of Internet-enabled technologies

Required Books and Readings:
Broussard, Meredith. (2018). *Artificial unintelligence: How computers misunderstand the world.* Cambridge, MA: MIT Press.
Cheney-Lippold, John. (2017). *We are data: Algorithms and the making of our digital selves.* New York University Press.
Hersh, Eitan D. (2015). *Hacking the electorate: How campaigns perceive voters.* Cambridge University Press.
Neff, Gina & Dawn Nafus. (2016). *Self-tracking.* Cambridge, MA: MIT Press.

Course Requirements and Expectations:

Expectations:
This course meets the learning objectives through reading the writings of several experts on the topic of data in society. We want you to engage fully with the required books, and so much of our focus will be on their writing and considering current events that highlight or contradict what you see in the readings and then engaging in discussion and activities based on these readings. You will be expected to read approximately *75-100 pages a week*. Yes, it's a lot of reading, but that reading will drive our class-time together, so it's essential you do it so that you can contribute meaningfully.

Attendance is expected. You can't participate if you aren't attending class. If you miss four or more classes without a legitimate reason (such as sports travel, a death in the family, etc.), then your participation grade will drop a full letter grade (e.g. if you had been earning a B+ on participation, your participation grade will drop to a C+).

Prof. JSG and Ms. Boichak want to communicate with you in a timely manner. Please note that we cannot guarantee a timely response to notes sent after 6 pm during the week nor on weekends. We are both trying to maintain some sense of work/life balance. For Prof. JSG email and twitter DMs are the best way to reach her. For Ms. Boichak email is the best way to reach her.

Assignments and Grading:
- Participation (15% of overall grade)
- 4 reading-related activities (5% each - 20% of overall grade)
- In-class writing (30% of overall grade)
- Final Project (35% of overall grade)

Grade Scale:

A 100 - 94	C+ 79 - 76
A- 93 - 90	C 75 - 73
B+ 86 - 89	C- 72 - 70
B 85 - 83	D 69 - 60
B- 82 - 80	F <60

Class Participation:

Participation – We want to create several different ways for you to contribute insights and knowledge to this class to enrich the community we are building together this semester. The first week of class, we will discuss and then select the digital means you would like to participate. In addition, we expect you to come to class fully prepared. That means you will have not only read the required reading but thought about it and sought out examples that you can share with the class that illustrate the ideas from the required reading. Participation grading will be based on *quality* of the contributions related to the readings and connecting them to current events.

Small Projects and Writing:

Writing on the Readings. To help support you doing the readings and to contribute to rich class discussion, there will be short writing tasks at the start of each class on the assigned readings. *Small Projects*. At the beginning of each book, you will be given a specific analysis assignment that allows you to explore ideas from the book, for example to suggest a redesign of a social media platform to enable greater privacy. The class period after we finish the book is set aside as a discussion day where you will briefly share with the class what you did or what you learned, and the analysis will be due that day.

Final Project:

You will download your personal data from the platforms that you frequently use to create your own post-demographic profile (we will teach you how to do this). Bringing in the concepts you've learned in class, you will focus on a few analytical dimensions of your digital footprint across platforms (e.g., identity, lifestyle, travel, political affiliation, consumer preferences, search history, etc.), and use your online data to analyze the digital "portrait" you present to the data collection platforms that hold your data. You will be offered a range of options to structure your final project, and it will be graded based on the creativity and the use of class readings and ideas in your analysis.

Course Policies

Digital Devices: It pains us to have to do this, but there will be a strict NO digital technologies (laptops, tablets, cell phones) during class time, except for the use of assigned reading materials or when the class is allowed to look at online examples or do activities for the purposes of class illustration or discussions. Research has proven that human brains can't multitask, so to facilitate the greatest knowledge transfer, these distractors and tempters will not be allowed. Students who wish to use digital technologies beyond approved times must see Prof. JSG to request an exception.

Use of Blackboard: This course involves the use of Syracuse University's Blackboard system as an online tool. The environment is composed of a number of elements that will help you be successful in both your current coursework and your lifelong learning opportunities. To access Blackboard, go to the following URL: http://blackboard.syr.edu   Use your Syracuse University NetID & Password to log into Blackboard. This specific course will appear in your course list.

To search for answers to your Blackboard questions, visit the Answers self-help knowledge base at https://answers.syr.edu/display/blackboard01/Blackboard. If you have problems logging in or need assistance with Blackboard, contact the ITS Service Center at: help@syr.edu or 315.443.2677. The Syracuse University Blackboard support team will assist you.

Academic Integrity: Syracuse University's Academic Integrity Policy reflects the high value that we, as a university community, place on honesty in academic work. The policy defines our expectations for academic honesty and holds students accountable for the integrity of all work they submit. Students should understand that it is their responsibility to learn about course-specific expectations, as well as about university-wide academic integrity expectations. The policy governs appropriate citation and use of sources, the integrity of work submitted in exams and assignments, and the veracity of signatures on attendance sheets and other verification of participation in class activities. The policy also prohibits students from submitting the same work in more than one class without receiving written authorization in advance from both instructors. Under the policy, students found in violation are subject to grade sanctions determined by the course instructor and non-grade sanctions determined by the School or College where the course is offered as described in the Violation and Sanction Classification Rubric. SU students are required to read an online summary of the University's academic integrity expectations and provide an electronic signature agreeing to abide by them twice a year during pre-term check-in on MySlice. For more information about the policy, see http://class.syr.edu/academic-integrity/policy/.

We take academic integrity very seriously. Misconduct is judged based on the severity and perceived intent. Punishment may range from a reduced score on an assignment to failing the class, depending on the severity of the incident. In all cases, we will report the incident to the Academic Integrity Office.

University Attendance Policy: Attendance in classes is expected in all courses at Syracuse University. Students are expected to arrive on campus in time to attend the first meeting of all classes for which they are registered. Students who do not attend classes starting with the first

scheduled meeting may be academically withdrawn as not making progress toward degree by failure to attend. Instructors set course-specific policies for absences from scheduled class meetings in their syllabi.

It is a federal requirement that students who do not attend or cease to attend a class to be reported at the time of determination by the faculty. Students should also review the university's religious observance policy and make the required arrangements at the beginning of each semester.

Disability-Related Accommodations: We value diversity and seek to promote meaningful access to educational opportunities for all of my students. My goal is to create learning environments that are useable, equitable, inclusive and welcoming. If there are aspects of the instruction or design of this course that result in barriers to your inclusion or accurate assessment or achievement, We invite you to meet with us to discuss additional strategies beyond accommodations that may be helpful to your success.

If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS), http://disabilityservices.syr.edu, located in Room 309 of 804 University Avenue, or call (315) 443-4498, TDD: (315) 443-1371 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for coordinating disability-related accommodations and will issue students with documented Disabilities Accommodation Authorization Letters, as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible.

Religious Observances: SU religious observances notification and policy, found at http://hendricks.syr.edu/spiritual-life/index.html, recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes for regular session classes and by the submission deadline for flexibly formatted classes. An online notification process is available for students in *My Slice / StudentServices / Enrollment / MyReligiousObservances / Add a Notificatio*n**.** Instructors may access a list of their students who have submitted a notification in My Slice Faculty Center.

Policy on Student Academic Work: Educational use of student work: Prof. JSG intends to use academic work that you complete this semester for educational purposes in this course during this semester. I intend to use academic work that you complete this semester in subsequent semesters for educational purposes. Before using your work for that purpose, I will either get your written permission via email or render the work anonymous by removing all your personal identification.

Discrimination or Harassment: The University does not discriminate and prohibits harassment or discrimination related to any protected category including creed, ethnicity, citizenship, sexual orientation, national origin, sex, gender, pregnancy, disability, marital status, age, race, color, veteran status, military status, religion, sexual orientation, domestic violence status, genetic information, gender identity, gender expression or perceived gender.

Any complaint of discrimination or harassment related to any of these protected bases should be reported to Sheila Johnson-Willis, the University's Chief Equal Opportunity & Title IX Officer. She is responsible for coordinating compliance efforts under various laws including Titles VI, VII, IX and Section 504 of the Rehabilitation Act. She can be contacted at Equal Opportunity, Inclusion, and Resolution Services, 005 Steele Hall, Syracuse University, Syracuse, NY 13244-1120; by email: titleix@syr.edu; or by telephone: 315-443-0211.

Federal and state law, and University policy prohibit discrimination and harassment based on sex or gender (including sexual harassment, sexual assault, domestic/dating violence, stalking, sexual exploitation, and retaliation). If a student has been harassed or assaulted, they can obtain confidential counseling support, 24-hours a day, 7 days a week, from the Sexual and Relationship Violence Response Team at the Counseling Center (315-443-4715, 200 Walnut Place, Syracuse, New York 13244-5040). Incidents of sexual violence or harassment can be reported non-confidentially to the University's Title IX Officer (Sheila Johnson Willis, 315-443-0211, titleix@syr.edu, 005 Steele Hall). Reports to law enforcement can be made to the University's Department of Public Safety (315-443-2224, 005 Sims Hall), the Syracuse Police Department (511 South State Street, Syracuse, New York, 911 in case of emergency or 315-435-3016 to speak with the Abused Persons Unit), or the State Police (844-845-7269). We will seek to keep information you share with me private to the greatest extent possible, but as a professor we have mandatory reporting responsibilities to share information regarding sexual misconduct, harassment, and crimes we learn about to help make our campus a safer place for all.

Late Assignments and Incompletes: If you have a legitimate reason for an incomplete or a late assignment, a contract for completing the assignments will be drafted. Students who fail to meet that contract will receive a 0 for the missed assignments and a grade will be given based on what was completed for the course. Assignments may be turned in late with a penalty. The penalty is a reduction of 10% to the letter grade for every 24 hours that the assignment is late.

Grade Disputes: Students who wish to dispute a grade may resubmit the assignment for regrading with a one-page statement of explanation of why the paper should be regraded. If the student resubmits, the assignment will be regraded, which means the grade may go up, down, or stay the same. Appeals after this process may be adjudicated by the Program Director.

Course evaluations: There will be an end of course evaluation for you to complete this term. This evaluation will be conducted online and is entirely anonymous. You will receive a notification from the Syracuse University Office of Institutional Research & Assessment (OIRA) department in your email account with the evaluation website link and your passcode. Please take the time and fill out this evaluation as your feedback and support of this assessment effort is very much appreciated. The school carefully reviews ratings and comments that you submit, and these factor into decisions about course, program, and instructor development.

Amendments to this Syllabus: We reserve the right to alter this syllabus with sufficient notice to students.

Course Schedule IST 343: Data in Society

Week	Content	Due Dates
M Aug 27	And so it begins …	
What is *Computation* and *Algorithm*?		
W Aug 29	Martin Erwig, Chapter 1 "A Path to Understanding." PDF	
M Sept 3	*Labor Day – No Class*	
Who Are We in the Age of Data-Driven Expression?		
W Sept 5	John Cheney-Lippold, *We Are Data*, Chapter 1, "Introduction" Also available as PDF	
M Sept 10	*We are Data*, Chapter 2, "Categorization: Making Data Useful," and	
W Sept 12	*We are Data*, Chapter 3 "Subjectivity: Who Do They Think You Are?"	
M Sept 17	*We are Data*, Chapter 4, "Privacy: Wanted Dead or Alive"	
W Sept 19	Presentations and Discussions of the Small Project	Project 1
Is Data-Driven Decision-Making Always the Solution?		
M Sept 24	Meredith Broussard, *Artificial Unintelligence,* Chapter 3 "Hello AI"	
W Sept 26	*Artificial Unintelligence,* Chapter 4 "Hello, Data Journalism" + Nikki Usher, *Making News at the New York Times*, Chapter 2 "Three Days in the Lives of New York Times Journalists" PDF	
M Oct 1	*Artificial Unintelligence,* Chapter 5 "Why Poor Schools Can't Win at Standardized Tests"	
W Oct 3	*Artificial Unintelligence,* Chapter 6 "People Problems"	
M Oct 8	*Artificial Unintelligence,* Chapter 7 "Machine Learning: The DL on ML"	
W Oct 10	*Artificial Unintelligence,* Chapter 8 "This Car Won't Drive Itself"	
M Oct 15	*Artificial Unintelligence,* Chapter 9 "Popular Doesn't Mean Good"	
W Oct 17	Presentations and Discussions of the Small Project	Project 2
How Does Big Data Shape Electoral Politics?		
M Oct 22	Eitan Hersh, *Hacking the Electorate*, Chapter 1 "Introduction"	
W Oct 24	*Hacking the Electorate*, Chapter 2 "The Perceived Voter Model,"	
M Oct 29	*Hacking the Electorate*, Chapter 3 "The Policy Roots of Elite Perceptions"	
W Oct 31	*Hacking the Electorate*, Chapter 4 "Campaign Perceptions Quantified"	
M Nov 5	*Hacking the Electorate*, Chapter 5 "The Perceived Partisan"	

W Nov 7	*Hacking the Electorate*, Chapter 6 "The Public Code of Racialized Electioneering"	
M Nov 12	*Hacking the Electorate*, Chapter 8 "Voters Perceived in Social Networks and Consumer Files,"	
W Nov 14	Presentations and Discussions of the Small Project	Project 3
M Nov 19	*Thanksgiving Break – No Class*	
W Nov 21	*Thanksgiving Break – No Class*	
Why Do We Quantify Our Selves?		
M Nov 26	Gina Neff & Dawn Nafus, *Self-Tracking*, Chapter 2 "What Is at Stake? The Personal Gets Political"	
W Nov 28	*Self-Tracking*, Chapter 3 "Making Sense of Data"	
M Dec 3	*Self-Tracking*, Chapter 5 "Self-Tracking and Medicine"	
W Dec 5	Wrap-Up and Discussion of Small Project	Project 4
…. Fin….		
F Dec 14	10:15a – 12:15p	Final Project Due