The Ethics of Data Science

This course addresses topics at the intersection of political communication, data science, ethics, and policy. We will examine how changes in the structure and forms of political communication affect the relationships between government actors, the media, and the public; and 2) affect the production of data that can be used to study those relationships, with added consideration of the ethical implications of the creation, sharing, and analysis of that data. While the course will emphasize the effects of the Internet and social media, it will do so in the context of understanding the similarities and differences of these effects compared to earlier historical transformations of the media and information environment. The study of political communication presents many intriguing questions. What has been the historical impact of “democratizing” news sources? How have Facebook and Twitter altered the way that elected officials communicate with, and campaign to, their constituents? How has the proliferation of news availability affected the public's information consumption and political knowledge? Who uses the data that people create through their mobile devices and online behavior, what are they doing with the data, and how is that data being protected? What kinds of data do campaigns have about potential voters, and why does that matter? We will tackle these and other questions during the semester.

Foundations

Teaching Philosophy and Course Goals
These upper-division electives are designed to teach you a set of fundamental concepts about topics related to communication and data analytics in contemporary American politics. The experience should give you the cognitive infrastructure and vocabulary to analyze the behavior of elites and masses in the American political context and empower you to apply that understanding to the world outside the classroom environment.

This course is also part of the core sequence in the Data Science program. In its role in this context, the course provides an introduction to social, ethical, and moral issues surrounding data and society. It blends social and historical perspectives on data with ethics, policy, and case examples to help students develop a workable understanding of current ethical and policy issues in data science. The course examines the ethics and morality of studying human subjects, documenting workflows, and communicating results. We will critically assess issues surrounding privacy, surveillance, discrimination, transparency, responsibility, and trust throughout the data lifecycle - from collection and creation, to storage and analysis, to the application and sharing of data.

Specifically, by the end of the experience, you should be able to:

1. Explain a set of fundamental concepts related to political communication, public opinion, and the application of data analytics within the realm of politics.
2. Analyze the data-driven decisions of political and media elites in the American political context with an eye toward their consequences on the attitudes and behavior of the American public.

3. Identify where politically-relevant data collection, analytics, and algorithms depend on human judgment or assumption in order to assess the ethical, privacy, and policy concerns of a given course of action in data-driven political decision-making.

4. Apply your understanding of the course material to real world situations.

The subject matter of a course serves as a tool to help you develop skills to become a better thinker and communicator. Therefore, to serve their function in a liberal arts curriculum, these courses are designed to facilitate critical thinking and communication skills. Long after you’ve forgotten what “non-response bias” is, for example, I hope that what will endure is improvement in these foundational learning goals:

*Ask good questions.* Learning necessitates curiosity.

*Assess and synthesize information.* Use the course material to arrive at informed opinions.

*Engage in analytical reasoning.* Respectfully discuss and deliberate ideas.

*Communicate effectively.* Continue to improve the skills necessary to write or present a clearly argued and well-developed discourse.

**General Expectations**

I recognize that we are immersed in unprecedented global, societal, and local uncertainty (more on that below). I aim to make this experience worth your time, and I ask for the same in return. I expect that you will stay on top of the course material according to the schedule provided and come prepared to participate actively in our synchronous sessions. I am eager to help you succeed. If you take your education seriously and communicate with me (with plenty of advance notice) about obstacles or challenges that may affect your performance in the course, I am happy to work with you to find mutually agreeable solutions. It is imperative in a remote learning environment to keep lines of communication clear and open. If you discover that you are struggling, I want to hear about it so that we can work together to get you back on track.

**Writing Expectations**

My standards for writing are high and I expect students to produce concise and precise prose. Because of this, I do my best to make my expectations clear at the outset of the course and offer you low stakes opportunities to get feedback on your writing early in the semester. I encourage you to take advantage of the fact that I like to help students improve their writing; office hours are a great time to meet with me to discuss your work before or after due dates. I also recommend that you consult at least one of the following writing guides if you are consistently receiving negative feedback about the quality of your writing:


**Course Structure**

This course will keep you busy! You are receiving three credit hours for the course, and you should anticipate spending between nine and 12 hours a week on this course each week. (The
standard calculation is one contact hour and two-three hours of additional work for every credit hour.) You will need to manage your time efficiently and responsibly.

Course Units
The experience will be divided into five units. We will have a different substantive focus for each unit, but each unit will follow a similar schedule, blending together several different types of activities. These include:

Asynchronous Components
Each unit will include material through which you will work independently. This will include approximately 100-120 minutes of asynchronous content designed to substitute for one class session a week (two class sessions a unit). This will also include ~4 hours of reading (or ~2 hours of reading/week). Some units will have slightly more, some will have slightly less.

Course Readings: You will be assigned a set of academic journal articles or book chapters to read for each unit. I strongly recommend you read them in the week in which they are assigned.

Lectures: I will prerecord a set of lectures (each ~15 minutes in length) that connect the course readings for that week to the broader academic literature on the topic. You need to watch these in advance of the discussion at the end of the week. I strongly recommend you read them in the week in which they are assigned.

Other Multimedia: Some units will include podcasts, documentaries, or video clips of speakers.

Accompanying this asynchronous material will be:

Unit Note Outline: a structured handout I provide to help you synthesize together the unit material. While I will not collect or grade these, the note outlines will be essential for you as you prepare for the midterm and final exam.

Pause and Connect Group Blog: each unit will include two or more activities where you connect with your peers to share your ideas. This will utilize the group blog feature on Blackboard.

Clarification Discussion Board: a discussion board where you can post questions and clarifications you need from the readings, lecture, and supplementary course material.

Synchronous Components
Although we will not be meeting in person, I hope to use a combination of Zoom and Google Docs to structure our remote synchronous sessions in a worthwhile way.

Group Office Hours: I encourage you to attend synchronously on Tuesdays during our assigned class time, but with a handful of exceptions, attendance on Tuesdays will be OPTIONAL. We will convene at 12:30 for you to ask questions about the course materials or for us to talk about connections between the course material and events in the news. When there are no more student-driven questions or discussion topics, we'll break. I will record the session and make it available after the fact. Students who would like to meet to work on their group projects can stay on the class Zoom or move to a different Zoom. You should keep your calendars open on Tuesdays for the duration
of the semester because you will occasionally be required to attend. Those dates are noted on the syllabus but may change.

Weekly Discussion: You are required to attend the weekly course session during our assigned time on Thursdays. We’ll meet as a whole class—sometimes breaking out to smaller groups—to address questions you have about the course material and to work together to synthesize what we’re learning. Attendance is REQUIRED and I will NOT record the session.

Suggested Weekly Schedule
It is up to you to set your own schedule about when to complete your work. I've provided my recommendation below about how to proceed through each unit. The most important thing is not to fall behind, so that you can take full advantage of the synchronous discussions each week.

<table>
<thead>
<tr>
<th>Before Tuesday at 12:30</th>
<th>Tuesday, 12:30-1:50</th>
<th>Between Tuesday and Thursday</th>
<th>Thursday, 12:30-1:50</th>
<th>After Thursday class ends at 1:50</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete weekly course readings and take notes</td>
<td>Attend group OH</td>
<td>Reconcile your lecture and reading notes on the unit note outline</td>
<td>Attend class</td>
<td>Work on long term course assignments</td>
</tr>
<tr>
<td>Watch/listen to asynchronous materials</td>
<td>Meet with long-term project group</td>
<td></td>
<td>Complete Pause &amp; Connect activity</td>
<td></td>
</tr>
<tr>
<td><strong>Week 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete weekly course readings and take notes</td>
<td>Attend group OH</td>
<td>Reconcile your lecture and reading notes on the unit note outline</td>
<td>Attend class</td>
<td>Polish unit note outline</td>
</tr>
<tr>
<td>Watch/listen to asynchronous materials</td>
<td>Meet with long-term project group</td>
<td></td>
<td>Complete Pause &amp; Connect activity</td>
<td>Work on long term course assignments</td>
</tr>
</tbody>
</table>

Course Assignments
All course assignments are described in detail in separate handouts. Some assignments have interim, ungraded deadlines.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pause and Connect Blog (5%)</td>
<td>Last day of unit</td>
</tr>
<tr>
<td>Thursday Synchronous Sessions (10%)</td>
<td>Day of discussion</td>
</tr>
<tr>
<td>Individual Assignment (20%)</td>
<td>February 28&lt;sup&gt;th&lt;/sup&gt;/April 11&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>Group Project (20%)</td>
<td>March 16&lt;sup&gt;th&lt;/sup&gt;/April 23&lt;sup&gt;rd&lt;/sup&gt;</td>
</tr>
</tbody>
</table>
Midterm (20%)  
Final (25%)  
March 25th  
May 14th

Course Policies

Grades
I reserve A’s for excellent work. B’s are for solid, above-average work while C’s are for work of average quality. D’s indicate work that is below average, and F’s indicate work that is substantially below expectations.

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade A</th>
<th>Grade B+</th>
<th>Grade B</th>
<th>Grade C</th>
<th>Grade C-</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-93</td>
<td>89-87</td>
<td>79-77</td>
<td>76-73</td>
<td>72-70</td>
<td>etc.</td>
</tr>
<tr>
<td>92-90</td>
<td>86-83</td>
<td>79-77</td>
<td>76-73</td>
<td>72-70</td>
<td></td>
</tr>
<tr>
<td>82-80</td>
<td>82-83</td>
<td>76-73</td>
<td>72-70</td>
<td></td>
<td>etc.</td>
</tr>
</tbody>
</table>

Attendance
Class attendance in synchronous sessions is required, though participation points will not be awarded simply for showing up. You have two unexcused absence for our Thursday synchronous sessions. Each unexcused absence after the second will result in a two-point deduction in your participation grade. Habitual tardiness to class bothers me and extreme cases can affect your participation grade; if you anticipate that you will be late with some frequency (for example, you have a class right before ours), please make me aware of the situation.

If you, a member of your family, or someone you live with contracts COVID-19, please alert me immediately. I will accommodate these attendance policies in the event of your own illness or the illness of someone in your family or residence.

Late Policies—Exams
The only valid reasons for missing and rescheduling an exam are due to a university-approved reasons (a documented illness, religious observance, death in the family or similarly grave family emergency, or a W&M-sponsored commitment that you have discussed with me before the assignment is due), or, during final exams only (as W&M allows), you have several exams in a row. If you are sick enough to miss a test, you are sick enough to go to the doctor. You must 1) email me before the exam to let me know about your illness; and 2) make every effort to take the test in the most expeditious manner possible. I prefer to give students the benefit of the doubt, but if I perceive that you are taking advantage of the situation, you will be subject to a penalty.

If you miss an exam for another reason, you can take a makeup exam for which the maximum grade you can earn is a C (75%).

Late Policies—Written Assignments
I believe it is a lose-lose situation if you scramble to complete a paper for a deadline and don’t turn in your highest quality work: you’ve missed out on an opportunity to become a better thinker and writer, and I have to grade a sub-par paper. Therefore, I have created a grade penalty system for extensions and late work that I hope incentivizes you to prioritize turning in your best work, even with a slight penalty, as opposed to adhering to a deadline and turning in sloppy work.

For the individual writing assignment, you can formally request an extension of up to one week in length. Up to two weeks before the due date, you will receive only a 1% deduction on the assignment for making the request. An additional 1% deduction is added each day you delay
your request within the two-week window. Therefore, if you ask for a change on the day the assignment is due, the maximum grade you can receive is an 85%.

<table>
<thead>
<tr>
<th>Action</th>
<th>Days +/- Due Date</th>
<th>Penalty</th>
<th>Max Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment switch or extension requested (Form submitted electronically to Professor Settle)</td>
<td>-14 or more</td>
<td>1%</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td>-10</td>
<td>5%</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>-5</td>
<td>10%</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>-2</td>
<td>13%</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>-1</td>
<td>14%</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td>Due Date</td>
<td>15%</td>
<td>85</td>
</tr>
<tr>
<td>Assignment submitted (Assignment submitted electronically to Professor Settle for time-stamping; hard copy submitted ASAP)</td>
<td>Due Date, after class</td>
<td>10%</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>+1</td>
<td>15%</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>+2</td>
<td>20%</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>+3</td>
<td>25%</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>+4</td>
<td>30%</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>+5</td>
<td>35%</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>+6 or more</td>
<td>40%</td>
<td>60</td>
</tr>
</tbody>
</table>

Because I give you this option in advance, I do not grant extensions without penalty on assignments except in the case of the university-approved reasons outlined above. (The earlier you let me know about a situation that may affect your ability to turn in your paper on time, the better.) Computer malfunctions will not be considered a legitimate excuse for the late submission of assignments, so plan accordingly.

All assignments should be submitted to Blackboard by 11:59 p.m. on the date they are due. Assignments turned in after the deadline are subject to a 5% penalty for each day (or fraction thereof) they are late until the maximum grade possible is a 60. Weekend days count. So, if you turn in an assignment the day after the assignment is due (even at 1:00 a.m.), the maximum grade possible is a 95. An assignment turned in two days after the due date will receive a maximum score of 90; three days late will receive a maximum of 85; three days late, 80, etc. If you are submitting your paper late, you must email it to me for time-stamping purposes.

*I will not accept assignments after the Friday of the last week of regularly scheduled classes.*

**Extra Credit**
Extra credit will rarely, if ever, be available. Consequently, it is imperative that you do your best on each and every assignment.

**Grade Appeals**
If you are dissatisfied with your grade on an assignment, you can choose between two options. If you want to talk about your work and discuss ways you can improve on future assignments, I am happy to meet with you in office hours or by appointment. You cannot appeal your grade after we have this conversation. Therefore, if you are positive that you want to appeal your grade, you need to write a one-page double-spaced explanation of why you think your work merits a higher grade. After reading your appeal, I will re-grade your assignment. Your grade can go up, stay the same, or go down. We will then schedule a meeting to talk about your work.

You are expected to adhere to the Honor Code.
The College of William & Mary has had an honor code since at least 1779. Academic integrity is at the heart of the College, and we all are responsible for upholding the ideals of honor and integrity. I assume that students take the Honor Code and plagiarism as seriously as I do and that academic misconduct will not become an issue in this class. The student-led honor system is responsible for resolving any suspected violations of the Honor Code, and we will report all suspected instances of academic dishonesty to the honor system. The Student Handbook (www.wm.edu/studenthandbook) includes your responsibilities as a student and the full Code. Your full participation and observance of the Honor Code is expected. To read the Honor Code, see www.wm.edu/honor.

I will make clear for the exams what resources/aids you may use while still being compliant with the Honor Code. I do NOT intend to use Honorlock or any other proctoring technology for the exams.

**Misc. Policies**

**“These Unprecedented Times” Accommodations**

We are in the middle stages of a global pandemic. Our country is deeply politically fractured. Collectively we are grappling with a much-needed and overdue racial reckoning. In combination, these factors greatly increase the uncertainty and discomfort we experience in our daily lives. How do we account for this in our learning experience?

First, I recommend that you appropriately define what success this fall will look like to you given these circumstances. Some of you see major benefits in remote learning, while others find it hard to stay motivated or connected. Some of you will be deeply personally affected by COVID-19, some of you will simply be deeply inconvenienced. Some of you will find that real world matters are more important to you than academic matters, while some of you will find solace in pouring yourself into schoolwork. Acknowledge your reality and set your goals accordingly.

Second, communication with me is imperative. I’d love to hear more about your priorities, goals, and circumstances when we meet in office hours at the beginning of the semester. You must keep me posted as situations develop this fall. I can’t help you if I don’t know what is going on in your life that will affect your performance in this course. I will be as flexible as I can, and the earlier you communicate the better.

Third, I expect you to comply with the University’s Healthy Together Community Statement. Although we will not be meeting face-to-face this semester, you stand a better chance of keeping yourself, the people you care about, and our broader community safe if you abide by these policies and norms.

**Technology**

I prefer that students keep their cameras on during synchronous sessions. I understand there are reasons this may present a challenge for some students. If you need to keep your camera off, I will respect your choice. In return, I ask that you compensate in some way to signal that you are as engaged with me, your peers, and the course material as are the students with their cameras turned on: writing longer or higher quality blog posts or using the clarification discussion board on Blackboard; making use of the chat function or the reaction buttons on Zoom; or coming more regularly to individual or group office hours.
It will be obvious to me and your peers if you are doing something on your computer other than engaging in class. Please be conscious of the signals you are sending to me and to your peers with your body language and eye contact.

Turn off your cell phones before signing into a synchronous session. If you are expecting an important call, tell me before class, keep your phone on vibrate, and turn your camera off when you receive the call.

**Omnibus Project**
You will be required to participate in the Social Science Research Methods Center’s Omnibus Project. The project is a collaborative subject pool for survey and experimental research conducted by students and faculty. To help introduce you to the field of political science, you will have the opportunity to participate as a subject in one or more research projects this semester. An alternative writing assignment will be offered to students who do not want to participate in the Omnibus Project or are not old enough to participate. The total time required will be approximately one hour.

**Contact Policies**
My preference is to meet during office hours on Zoom for all substantive questions. Email is my preferred form of communication for anything about which I will need a record (an excused absence, setting up a meeting time outside of office hours, etc.) If we need to schedule a phone call, I will email you my cell number.

**Add/Drop Policies**
The add/drop deadline is Friday, February 5th. The last day to withdraw is Monday, March 29th.

**Disability Services**
William & Mary accommodates students with disabilities in accordance with federal laws and university policy. Any student who feels they may need an accommodation based on the impact of a learning, psychiatric, physical, or chronic health diagnosis should contact Student Accessibility Services staff at 757-221-2512 or at sas@wm.edu to determine if accommodations are warranted and to obtain an official letter of accommodation. For more information, please see [www.wm.edu/sas](http://www.wm.edu/sas).

**Course Materials**

**Books to Purchase**

Wachter-Boettcher, Sara. *Technically Wrong: Sexist Apps, Biased Algorithms, and Other Threats of Toxic Tech*

**Articles, Excerpts, Documentaries, Podcasts, and Reports**

Posted on Blackboard
Course Schedule

Note: I reserve the right to make modifications to this schedule, but I will not increase the workload.

Unit #1
People as Data: Data Generating Processes from Humans

Unit Introduction
In this unit, we will study the way that people make data as it relates to their political attitudes and behaviors. Traditionally, quantitative social scientists have collected data about people using survey research. However, the advent of digital technologies and the Internet have created a plethora of new ways for people to generate data, whether they are aware they are doing so, or not. After we assess the evolving methods used to collect systematic information about people’s political behavior, we will think about the role of human choice and bias in the way that data are collected, and how we should interpret data given what we know about the processes that generated it. Finally, we’ll consider some of the privacy implications involved in the creation of human-generated “big data.”

Core Questions
1. How have the data collection procedures in the field of political behavior evolved over time?
2. What are the strengths and weaknesses of unobtrusively collected data? Of social media data in particular?
3. What principles should guide the way we collect “big data” in the digital political sphere?
4. What privacy concerns are raised with the collection and analysis of “big data” in the digital political sphere?
5. In what ways are biases built into the platforms and algorithms that are used to collect and analyze behavior in the digital political sphere?

Core Outcomes
By the end of this unit, you should be able to:

- CO1 Explain the key terms and concepts from the Unit 1 Note Outline
- CO2 Analyze the role of human choice and bias in the creation and interpretation of political data generating processes
- CO3 Identify the ethical considerations and privacy concerns involved in the collection of politically-relevant digital trace data
- CO4 Formulate questions for our speakers about the processes, decisions, and interpretations they make in their daily work
| Week 1  (February 1st) | 1.1 Foundations of Data Collection in American Political Behavior  
1.2 Trace Data in Politics  
- Lazer et al. “Computational Social Science” *Science* 323(5915): 721-723 (3 pages)  
1.3 Construct Validity  
- *Reading for reference only to accompany the lecture:* Trochim and Donnelly. “Chapter 3: The Theory of Measurement.” Section 3.1 (pages 56-65) on construct validity  
1.4 Social Media Behavior as Data  
- Barbera and Steinert Threlkeld 2020. “How to Use Social Media Data for Political Science Research” (~25 pages)  
- Excerpts from *Everybody Lies*, by Seth Stephens-Davidowitz (~50 pages, but it’s easy, light reading) |
| Tuesday 12:30-1:50p.m. | Thursday 12:30-1:50p.m. | 2/2: Group OH | 2/4: Discussion |

| Week 2  (February 8th) | 1.5 Garbage In, Garbage Out  
- Read *Technically Wrong: Sexist Apps, Biased Algorithms, and Other Threats of Toxic Tech* by Sara Wachter-Boettcher (~200 pages, but easy, light reading)  
| | 2/9: Group OH | 2/11: Discussion |
Unit #2
Campaigns and Big Data

Unit Introduction
In this unit, we will study the way that political campaigns in the United States use data to communicate with voters in order to influence their electorate’s political attitudes and behavior. A series of reforms around the turn of the 21st century made possible, for the first time, digital voter registration records available by state. Paired with increased access to other forms of public and proprietary records, and increased data processing capabilities, political campaigns underwent a revolution in their ability to identify and target potential voters. After we assess the evolving methods used by campaigns, we will think about the possible new frontiers created by pairing this information with digital trace data. Finally, we’ll consider the normative implications of the use and abuse of this data for our understanding of democratic representation.

Core Questions
1. How have electoral campaigns historically identified and targeted their electorate?
2. How are campaigns making use of newer forms of data to refine their targeting approaches?
3. In what ways has consumer and proprietary data shaped our understanding of political attitudes and behaviors?
4. What assumptions are built into data-driven campaign strategies?
5. What are the normatively desirable outcomes of campaigns’ strategic behavior? The normatively undesirable outcomes?

Core Outcomes
By the end of this unit, you should:

CO1 Explain the key terms and concepts from the Unit 2 note handout
CO2 Analyze how the data available to political elites shapes their interpretation of the attitudes and behavior of the American public
CO3 Identify the implications for democratic representation in the application of politically-relevant data in campaign analytics
CO4 Formulate questions for our speakers about the processes, decisions, and interpretations they make in their daily work

<table>
<thead>
<tr>
<th>Asynchronous Content</th>
<th>Tuesday 12:30-1:50p.m.</th>
<th>Thursday 12:30-1:50p.m.</th>
</tr>
</thead>
</table>
| Week 1 (February 15th) | 2.1 Foundations of Campaign Strategy  
• Excerpts from Eitan Hersh. 2015. Hacking the Electorate: How Campaigns Perceive Voters. Chapters 1, 2, and 6 (~60 pages) | 2/16: Group OH Required | 2/18: Discussion |
2.2 The Evolution of Voter Targeting
- Kreiss and McGregor: “Technology Firms Shape Political Communication: The Work of Microsoft, Facebook, Twitter, and Google with Campaigns During the 2016 Presidential Cycle” (21 pages)
- Watch interview excerpts with Meg Schwenzfeier, Data Science Lead at Biden for America 2020 (~12 minutes)

2.3 Social and Cultural Sorting
- Hetherington and Weiler 2018. *Prius or Pickup*, Chapter 4 (32 pages, but light)

### Week 2

2.4 Predictions from Big Data
- Watch interview excerpts with Michael Frias, CEO of Catalist (~22 minutes)

2.5 Cambridge Analytica
- See the Unit Note Outline for more details
- Familiarize yourself with the case (watch The Great Hack and/or read news articles)
- Read academic article and prepare for discussion

| 2/23: Group OH | 2/25: Discussion |
| Required attendance for group projects | |

“SPRING BREAK” – No asynchronous work or class session the week of March 1st
Unit #3
Market Forces in Media Production

Unit Introduction
In this unit, we will explore the production of news, applying theories from economics to explain the evolution of the media ecosystem over time. We’ll consider factors that have remained relatively consistent over the changing mediums of the 20th and 21st centuries—such as news values and the properties of news as market goods—as well as factors that have changed, such as the democratization of news production, the identity of editorial gatekeepers, and the availability of information about audience preferences. Our case study will focus on the idea of “clickbait” and audience metrics, assessing the way that data have altered the incentives for news production and examining how journalistic ethics might need to adapt to accommodate those changes.

Core Questions
1. How does the market inform the production of news?
2. What is “news” in the social media era and who produces it?
3. What are the consequences of changes in news production?
4. Can the media fulfill its role as the “fourth branch”? 

Core Outcomes
By the end of this unit, you should:

- CO1 Explain the key terms and concepts from the Unit 3 note handout
- CO2 Analyze how the data available to media elites about demand affects the supply of news that is produced and disseminated
- CO3 Identify the implications for democratic representation of changes in the way that news that is produced and disseminated
- CO4 Formulate questions for our speakers about the processes, decisions, and interpretations they make in their daily work

Lecture Topics and Associated Readings

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Lecture Topics and Associated Readings</th>
<th>Tuesday 12:30-1:50p.m.</th>
<th>Thursday 12:30-1:50p.m.</th>
</tr>
</thead>
</table>
| (March 8th) | 3.1 Theories of News Production  
|          | 3.2 News Production in the Age of Social Media |                         |                         |
- Munger, Kevin. 2020. “All the News That’s Fit to Click: The Economics of Clickbait Media”
- Watch interview excerpts with Josh Lederman, reporter for NBC News

### 3.3 Media as the Fourth Branch

### 3.4 Journalistic Responsibility
- Jay Rosen’s “View from Nowhere”
- Watch excerpts from *Hindsight 2020: The Unprecedented Year*

### 3.5: The Ethical Use of Audience Metrics
- Option 1
  - Read the background readings on Blackboard
  - Then, listen to the interview here: https://www.youtube.com/watch?v=SMbn4awPF1o
- Option 2
  - Listen to one of these podcasts:
    - journalismnews podcast: Changing the metric: What attention time means for journalists
      https://www.journalism.co.uk/podcast/changing-the-metric-what-attention-time-means-for-journalists/s399/a564942/
    - Data Framed: Data Science at Buzzfeed and the Digital Media Landscape
      https://www.datacamp.com/community/podcast/buzzfeed-digital-media
  - Watch interview excerpts with Scott Lucas, BuzzFeed (posted on Blackboard)

<table>
<thead>
<tr>
<th>Week 2 (March 15th)</th>
<th>3/16: Group OH</th>
<th>3/18: Discussion</th>
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<tbody>
<tr>
<td>3.4 Journalistic Responsibility</td>
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<tr>
<td>3.5: The Ethical Use of Audience Metrics</td>
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<tr>
<td>Midterm Week (March 22\textsuperscript{nd})</td>
<td>Study for midterm</td>
<td>3/23: Midterm Q&amp;A</td>
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Unit #4
Psychology meets Computer Science: Media Consumption in the Digital Media Era

Unit Introduction
What kinds of effects does the media have on the way people think about politics, and how has that changed in the era of social media? Which factor is a more powerful influence on the information we encounter online: our own choices or the choices that algorithms make for us? In this unit we will explore how human psychology affects the way people process political information and the manner in which human choice interacts with the algorithms underpinning digital media technologies. We’ll assess the normative implications of this interaction as it relates to 1) echo chambers and polarization, 2) algorithmic harm more broadly, and 3) the potential of algorithm audits to identify problematic or discriminatory algorithms.

Core Questions
1. What kinds of effects does the media have on public opinion?
2. What motivates political news consumption?
3. What is algorithmic harm? How can it be recognized and how might it be remedied?
4. How do algorithms and human psychology interact to affect news exposure?

Core Outcomes
By the end of this unit, you should:

- CO1 Explain the key terms and concepts from the Unit 4 note handout
- CO2 Analyze how algorithms alter a user’s news experience on social media
- CO3 Identify the implications of the use of algorithms for the effect of news on public opinion
- CO4 Formulate questions for our speakers about the processes, decisions, and interpretations they make in their daily work

<table>
<thead>
<tr>
<th>Lecture Topics and Associated Readings</th>
<th>Tuesday 12:30-1:50p.m.</th>
<th>Thursday 12:30-1:50p.m.</th>
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</table>
| **Week 1** (March 29th) | **4.1 A Brief History of Media Effects**  
Group Policy Project participants required to attend | **4/1: Discussion**  
**4.2 The Psychology of Media Consumption**  
- Dunaway and Settle. *Opinion Formation and Polarization in the News* |
<table>
<thead>
<tr>
<th>Week 2 (April 5&lt;sup&gt;th&lt;/sup&gt;)</th>
<th>4.3 Algorithms and Algorithmic Harm</th>
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<tbody>
<tr>
<td>• Data and Discrimination: Collected Essays</td>
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<td>• Eslami et al. 2016. “First I 'like' it, then I hide it: Folk Theories of Social Feeds.”</td>
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<td>• Read interview with Safiya Umoja Noble</td>
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<td>• Listen to Kathy O’Neill keynote talk (first 40 minutes)</td>
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<td>4.4 Auditing Algorithms</td>
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<td>4.5 Humans vs. Algorithms</td>
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|  | SPRING BREAK DAY | 4/8: Discussion |
Unit #5
Pathologies of Media

Core Questions
1. What concerns do Americans have about the media, and how have those concerns evolved over time?
2. What are the consequences of declining trust in media?
3. What are the most sinister current and future threats to our media ecosystem?
4. Who should be responsible for addressing those threats? And how do they do so, without infringing on people’s liberty or causing deleterious unintended consequences?

Core Outcomes
By the end of this unit, you should:

- CO1 Explain the key terms and concepts from the Unit 5 note handout
- CO2 Analyze how “bad actors” influence the media ecosystem
- CO3 Identify the implications of the use of cutting-edge technology for how people process political information
- CO4 Formulate questions for our speakers about the effects of the media ecosystem on the way they do their jobs

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<tr>
<th>Lecture Topics and Associated Readings</th>
<th>Tuesday 12:30-1:50p.m.</th>
<th>Thursday 12:30-1:50p.m.</th>
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<tbody>
<tr>
<td>Week 1 (April 12th)</td>
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<tr>
<td>5.1 Foundations</td>
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<td>5.2 Media [Dis]Trust</td>
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<td>Week 2 (April 19th)</td>
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<td>5.5 Censorship, Repression, and Propaganda</td>
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<td>5.6 Fake News</td>
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- Watch interview excerpts with Zarine Kharazian, The Atlantic Council

5.7 Factchecking
- Reading TBD
- Watch interview excerpts with Angie Holan, PolitiFact

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<thead>
<tr>
<th><strong>Weeks of April 26th and May 3rd</strong></th>
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<tr>
<td>Tuesday, April 27th, Thursday April 29th, and Tuesday May 4th</td>
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<tr>
<td>• Group Projects</td>
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<td>Thursday, May 6th</td>
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<td>• End-of-semester wrap up</td>
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**FINAL:** Friday, May 14th, 9am-12pm