

# Cover Sheet: Request 10989

## IDS4930PeopleandData

### Info

Process	Course New/Close/Modify Ugrad Gen Ed
Status	Pending
Submitter	Stedman,Nicole LaMee Perez nstedman@ufl.edu
Created	5/2/2016 6:32:26 PM
Updated	5/3/2016 7:54:18 AM
Description	We are requesting a temporary S and N designation for this course, which is part of the UF Core program.

### Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Agricultural and Life Sciences - General 514903000	Brendemuhl, Joel H		5/3/2016
Added Syllabus Big Data 5 02 16.doc					5/2/2016
College	Approved	CALS - College of Agricultural and Life Sciences	Brendemuhl, Joel H	This is one of the original Grand Challenge courses that was developed. They are requesting temporary approval for GE Social Science and International for Fall 2016. The college approves.	5/3/2016
No document changes					
General Education Committee	Pending	PV - General Education Committee (GEC)			5/3/2016
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
College Notified					
No document changes					

## Course|Gen\_Ed|New-Close-Modify for request 10989

### Info

**Request:** IDS4930PeopleandData

**Submitter:** Stedman,Nicole LaMee Perez nstedman@ufl.edu

**Created:** 5/2/2016 6:32:26 PM

**Form version:** 1

### Responses

**Course Prefix and Number** IDS4930

**Course Title**People and Data

**Request Type**Change GE/WR designation (selecting this option will open additional form fields below)

**Effective Term**Fall

**Effective Year**2016

**Credit Hours** 3

**Prerequisites**None.

**Current GE Classification(s)**None

**Current Writing Requirement Classification** None

**One-semester Approval?**Yes

**Requested GE Classification**N

S

**Requested Writing Requirement Classification**None

**IDS 4930 - People and Big Data  
FALL 2016**

**COURSE TIME AND LOCATIONS**

Lecture Tuesday 5-6 <sup>th</sup> periods (11:45 am – 1:40 pm)	Room: TURL L011
Breakout Section 23C3, Thursday 5 <sup>th</sup> period (11:45 am – 12:35 pm)	Room: TURL 1101
Breakout Section 23C6, Thursday 6 <sup>th</sup> period (12:50 pm – 1:40 pm)	Room: TURL 2319

**INSTRUCTORS**

Lead Instructor: Dr. M. David Miller, College of Human Development and Organizational Studies in Education  
Office: 119C Norman Hall      Ph# 273-4306      e-mail: [dmiller@coe.ufl.edu](mailto:dmiller@coe.ufl.edu)      Hours: R 9:00-10:30am

Dr. Tanya Koropecj-Cox, Department of Sociology and Criminology & Law, CLAS  
Office: 3227 Turlington      Ph# 294-7177      email: [tkcox@ufl.edu](mailto:tkcox@ufl.edu)      Hours: T 1-2:30pm, W 2-3pm

Dr. Norman Lewis, Department of Journalism, COJC  
Office: 3052 Weimer      Ph# 392-5137      e-mail: [nlewis@jou.ufl.edu](mailto:nlewis@jou.ufl.edu)      Hours: WF 11:45am – 1:40pm

Dr. Michael Martinez, Department of Political Science, CLAS  
Office: 208 Anderson Hall      Ph# 273-2363      e-mail: [martinez@ufl.edu](mailto:martinez@ufl.edu)      Hours: T 3-4:30pm, W 10am-12

Dr. Nicole Stedman, Department of Agricultural Education and Communication, CALS  
Office: 217B Rolfs Hall      Ph# 273-2585      e-mail: [nstedman@ufl.edu](mailto:nstedman@ufl.edu)      Hours: T 1-2PM, W 11am-12

**COURSE DESCRIPTION**

The course introduces students to the uses of big data in the social sciences and the theories, methods, and skills of social research. Drawing on traditional and applied social science disciplines, this course introduces students to basic approaches, methods, and ethical concerns in using and understanding big data. Class discussion and readings will cover examples of social processes at the macro-level (structures, policies), meso-level of institutions, and micro-level of individual perceptions and behaviors. This Grand Challenge course examines the human implications of the big data revolution: how algorithms and massive data sets enable your social network and improve society while exposing your private life to strangers and reshaping the social compact.

Course Objectives

By the end of the course, students should be able to:

1. Extol the promise and the peril in big data.
2. Identify evolving vocational opportunities in big data and the skills required.
3. Compare and contrast international approaches to issues raised by the big data era.
4. Debate the ethical tension between retaining privacy and withholding information and discuss how these perspectives vary across different cultural and political settings.
5. Write a paper on the uses of big data within a chosen discipline.
6. Present a meaningful group analysis on the human implications of big data.

## ABOUT THE COURSE

This faculty team-taught course invites students to collaborate to produce presentations based on a critical analysis of big data to address important contemporary social science research questions. The social science research questions are found in the Grand Challenges of our society. The use and interpretations of big data are one of the grand challenges being faced today. Some examples of questions raised by the challenges with big data include the following: As our daily lives increasingly become digital and public, how do we set boundaries for how that data is collected, stored, and used? How do we encourage an informed and active democratic society?

By approaching the Grand Challenges from a multidisciplinary approach, students will be exposed to perspectives of experts from social science disciplines in liberal arts and sciences (e.g., political science, sociology) as well as applied social scientific work in journalism, education, and the agricultural and life sciences. This multidisciplinary approach encourages the development of critical thinking skills in students by challenging their understanding and beliefs about the world around them.

This course is part of the general education requirements. The general education objective for the Social and Behavioral Sciences that this course is part of is:

Social and behavioral science courses provide instruction in the history, key themes, principles, terminology, and underlying theory or methodologies used in the social and behavioral sciences. Students will learn to identify, describe and explain social institutions, structures or processes. These courses emphasize the effective application of accepted problem-solving techniques. Students will apply formal and informal qualitative or quantitative analysis to examine the processes and means by which individuals make personal and group decisions, as well as the evaluation of opinions, outcomes or human behavior. Students are expected to assess and analyze ethical perspectives in individual and societal decisions.

## PRE-REQUISITES

None

The Social and Behavioral Sciences General Education Student Learning Outcomes addressed in this course are the following:

<b>CONTENT</b>	Content is knowledge of the concepts, principles, terminology and methodologies used within the discipline. Students demonstrate competence in the terminology, concepts, methodologies and theories used within the discipline.
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<b>COMMUNICATION</b>	Communication is the development and expression of ideas in written and oral forms. Students communicate knowledge, ideas, and reasoning clearly and effectively in written or oral forms appropriate to the discipline.
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<b>CRITICAL THINKING</b>	Critical thinking is characterized by the comprehensive analysis of issues, ideas, and evidence before accepting or formulating an opinion or conclusion. Students analyze information carefully and logically from multiple perspectives, using discipline specific methods, and develop reasoned solutions to problems.
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The Content SLO will be covered through the midterm and final exams, content on the final project, and brief quizzes. The communication SLO will be covered through participation in the break out groups, weekly assignments, and the final project. The focus of the final project is on critical thinking. However, critical thinking will be developed throughout the course and will be assessed in the weekly assignments.

**This course is also designed to fulfill the General Educational – International requirements.**

International courses provide instruction in the values, attitudes and norms that constitute the culture of countries outside the United States. These courses lead you to understand how geographic location, development level and geopolitical influences affect these cultures. Through analysis and evaluation of your own cultural norms and values in relation to those held by the citizens of other countries, you will develop a cross-cultural understanding of the rest of the world.

The International General Education Student Learning Outcomes addressed in this course are the following:

**CONTENT**

Students know the values, attitudes and norms that shape the cultural differences of peoples who live in countries other than the United States. Students know the roles of geographic location, development level and geopolitical influences on the lives of citizens in other countries.

**COMMUNICATION**

Students communicate knowledge, ideas, and reasoning clearly and effectively in written or oral forms appropriate to the discipline.

**CRITICAL THINKING**

Students analyze and evaluate their cultural norms and values in relation to those held by citizens in other countries..

Throughout the course, the readings and class discussions will include and compare examples of the values, attitudes, and norms regarding digital activity, privacy, and identity in different countries as well as specific concerns about legal, social, and ethical norms regarding the collection and analysis of big data. These examples will include legal constraints developed by the European Union and by specific countries with regard to digital privacy, collection of cookies, information and permissions provided in digital interactions, extent of control over digital information and identity, use of geo-locational tracking (GPS), concerns about surveillance and human rights, etc. These concerns will be discussed in relation to the roles of geographic location, development level, and geopolitical influences on interactions, ethics, and legal issues with regard to the collection and analysis of big data. These will be discussed within the context of the attitudes and norms in particular countries, and students will be encouraged to consider and evaluate their own cultural norms and values in relation to those held by citizens in other countries.

**COURSE STRUCTURE**

The course will require attending larger sessions led by faculty and breakout sessions led by faculty or TAs. Weekly assignments will be submitted in the breakout sections or online as required. Class meetings will be spent on presentations, group discussion, and exercises relating to the material. In addition, students will work on a semester-long group project, both in and outside of class that will develop a novel approach to addressing a social science issue. **Students are required to bring a laptop or other web-enabled device to each class meeting.**

## COURSE WEBSITE and COMMUNICATION

The course website will run via **Canvas** through the UF e-learning website; go to <http://lss.at.ufl.edu/> and click on the Canvas Login button. The course site will be used to post relevant announcements, reading, lecture materials, links, assignments and quizzes, etc. You are responsible for checking this site for announcements and to verify that your grades are recorded correctly.

## COURSE TEXTS

Required text: None. Weekly required readings will be available online.

## GRADING

There a total of 1000 points available throughout the semester and include both team project assignments and individual assignments and quizzes. 600 points will be based on the Tuesday lectures and 400 points will be based on the Thursday breakouts.

For the Tuesday lectures, the following points will be available:

	# of Questions	Points each	Pts for Category	# in Category for Term	Total Points
Weekly reading quizzes (online)	5	1	5	13	65
Module quizzes (online)	5	5	25	5	125
Midterm (in person)	32	5	160	1	160
Final (cumulative, in person)	50	5	250	2	250

Category	Description	Points
Online quizzes	Online quizzes will be given on 13 weeks to assess readings and preparation for the lecture presentations. Each quiz Each quiz has 5 questions worth 1 points each for 5 points each quiz. Professors prepare 20 questions for each quiz that Canvas assigns each student at random. A total of 13 quizzes will be given (see schedule below).	65
Module quizzes	5 module quizzes will be given to cover the material from the lectures (see schedule below). The module quizzes will consist of 5 questions each worth 5 points each. Thus, each of the 5 quizzes will be worth 25 points.	125
Midterm exam	From class and readings. (see schedule below) 32 questions worth 5 points each.	160
Final exam	From class and readings. (see schedule below) 50 questions worth 5 points each. Cumulative	250
	<b>Assignments for Thursday Break Outs (see larger descriptions below)</b>	
Group project	A group project will be completed in the breakout sessions on a topic in Big Data and its use in a chosen discipline. The project will include a proposal for 50 points, a draft for 50 points and a final project for 100 points.	200

Individual Assignments	Three individual assignments will be completed through the Thursday breakouts. The projects include describing your Big Data Fingerprint (50 points), a Voice Thread describing Big Data from your discipline (75 points) and a paper describing the essential data captured at the community level (75 points).	200
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**FINAL GRADE SCALE**

Based on the total score of 1000 points.

A = ≥950,      A- = 900-949      B+ = 870-899      B = 830-869      B- = 800-829  
 C+ = 770-799      C = 700-769      D+ = 670-699      D = 630-669      D- = 600-629      E < 600

There will be no ‘rounding up’, but your participation and eagerness to learn will be used to aid final grade determination in borderline situations. **\*Note:** An earned grade of ‘C-’ grade or below does not qualify for major, minor, Gen Ed, or college basic distribution credit.

*For further information on UF's Grading Policy, consult:  
<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>*

**EXAMS**

Everything associated with the class, including on-line material and in-class discussions and exercises are fair game on the exams. If missed, make-ups for exams will only be given by pre-arrangement or under extraordinary circumstances. The University-established final exam time is set and is not negotiable. Please plan accordingly.

**ATTENDANCE AND ABSENCE POLICY**

Students are expected to complete all requirements (quizzes, exams, presentation) on the specified dates and will not be granted an alternate date unless they have a documented acceptable reason for their absence (e.g., absences due to medical emergency, observance of religious holidays, military obligation) or pre-arranged consent of the instructor. However, you may receive an extension on an assignment by pre-arranged consent of the instructor or in extraordinary circumstances. These requests must be timely and accompanied by all necessary written documentation.

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

**CLASSROOM POLICY**

Students are encouraged to bring to each class meeting a laptop or similar device for use in taking notes, summarizing in-class activities, and accessing the Internet. However, use of mobile devices and computers during class for purposes other than viewing readings or conducting sanctioned research is not allowed. Cell phones and other electronic devices must be silenced during class. Students who receive or make calls or text messages or engage in other disruptive behavior during class will be asked to leave and will not be allowed to turn in the assignment due on that day. You should also bring a pen/pencil and paper to each class.

**ACADEMIC HONESTY POLICY**

Students must conform to UF’s academic honesty policy regarding plagiarism and other forms of cheating. This means that on all work submitted for credit by students at the University of Florida, the following pledge

is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

The university specifically prohibits cheating, plagiarism, misrepresentation, bribery, conspiracy, and fabrication. For more information about the definition of these terms and other aspects of the Honesty Guidelines, see <http://www.dso.ufl.edu/sccr/process/student---conduct---honor---code/>. All students found to have cheated, plagiarized, or otherwise violated the Honor Code in any assignment for this course will be prosecuted to the full extent of the university honor policy, including judicial action and the sanctions listed in paragraph XI of the Student Conduct Code. For serious violations, you will fail this course.

### **DISABILITY RESOURCE CENTER**

Please do not hesitate to ask for accommodation for a documented disability. Students requesting classroom accommodation must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drp/>). The Dean of Students Office will provide documentation to the student, who must then provide this documentation to the Instructor when requesting accommodation. Please ask the instructor if you would like any assistance in this process. Please provide this information to your TA within the first two weeks of the semester.

### **ON-LINE EVALUATION**

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

### **SOFTWARE USE**

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate.

### **ADDITIONAL RESOURCES**

Students facing difficulties completing the course or who are in need of counseling or urgent help may contact the Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc/Default.aspx>, 392-1575; or the University Police Department: 392-1111 or 9-1-1 for emergencies.

Other Resources available on-campus for students include:

- a. Student Mental Health, Student Health Care Center, 392-1171, personal counseling;
- b. Sexual Assault Recovery Services (SARS), Student Health Care Center, 392-1161, sexual counseling;
- c. Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.



## People and Data: Big Data Edition

(details will be posted, along with links to specific readings, in Canvas)

Wk	Tuesday	Topic	Instructor	Thursday Topic	Assessment
1	Aug. 23	<b>Introduction:</b> Why you love to hate Facebook	Dr. Lewis	Introduction to the Discussion/Lab Section	
2	Aug. 30	<b>Terminology:</b> How “big data” differs from “data”	Dr. Lewis	Big Data, A Lens to See the World	Reading quiz 1 Module quiz 1
3	Sept. 6	<b>Surveillance:</b> Government and business know a lot about you	Dr. Martinez	Small Group Breakout	Reading quiz 2
4	Sept. 13	<b>Datification:</b> Sensors and the Internet of things rule our lives	Dr. Martinez	My data fingerprint (lead in for individual assignment)	Reading quiz 3
5	Sept. 20	<b>Policing:</b> Is predicting crime or terrorism best for society?	Dr. Martinez	Big Data at UF	Reading quiz 4 Module quiz 2
6	Sept. 27	<b>Dating:</b> Can big data find you a better date and a better mate?	Dr. Koropecykj-Cox	Big Data, Disciplinary Perspectives (lead in for individual assignment)	Reading quiz 5
7	Oct. 4	<b>Amusement:</b> Do Spotify and Netflix personalize or pander?	Dr. Koropecykj-Cox	Group Project Check In	Reading quiz 6
8	Oct. 11	<b>Community:</b> Why should I have to pay for bad drivers and unhealthy people?	Dr. Koropecykj-Cox	Big Data in my Community(lead in for individual assignment)	Reading quiz 7 Module quiz 3
9	Oct. 18	<b>Midterm</b>			
10	Oct. 25	<b>Marketing:</b> How Google became a behemoth at your expense	Dr. Lewis	Group Project Check In	Reading quiz 8
11	Nov. 1	<b>Wearables:</b> Why we want to collect data about ourselves	Dr. Lewis	How much is enough? Data dependency	Reading quiz 9
12	Nov. 8	<b>Dataism:</b> How does a greater reliance on data affect us as people and a society?	Dr. Lewis	Small Group Breakout	Reading quiz 10 Module quiz 4
13	Nov. 15	<b>Education:</b> Careers and jobs in big data and educational assessment	Dr. Miller	Big Data and Your Career	Reading quiz 11
14	Nov. 22	<b>Ethics:</b> Which matters more: your privacy or a better society?	Dr. Miller	Presentations	Reading quiz 12
15	Nov. 29	<b>International:</b> How and why the U.S. sees big data differently than other countries do	Dr. Miller	Presentations	Reading quiz 13 Module quiz 5
16	Dec. 6	<b>Final Exam</b> (in fall semesters)			

## **Thursday Assignments:**

### **Group Assignment: 3 parts – 200 points**

Students will be organized into groups of 5 in order to complete this assignment. Potential topics include: Big Data and... a) Social Media, b) Health, c) Policy, d) Education, and e) Finance.

They will need to cover: State/National implications, International/Global implications, Ethics, and Outcomes. They will need to make a formal proposal for how big data in their assigned context should be managed and governed.

Proposal – 50 points

Students will identify their topic and salient issues with respect to Big Data

Draft – 50 points

Students will submit a draft of their PPT for review in class

Final – 100 points

Students will make a formal presentation of their work in class.

## **Individual Assignments:**

### **My Big Data Fingerprint – 50 points**

Students will record for a 48-hour period the following information:

- Hours on social media
- Number of tweets and other electronic posts
- Debit, credit, and online purchases
- Information tracked using your devices
  - How much do you use your location on apps?
  - Is your personal data turned on to track steps, etc.?
  - Data reporting (app or program crashes)
- School Profile information
  - What does your school know about you?
- Health Profile Information
  - What does healthcare record?
- Others???

In class, students will discuss and evaluate issues of privacy, ethics, social networking, and other social implications as they relate to their big data fingerprint.

### **Big Data, Disciplinary Perspectives – 75 points**

Students will submit a Voice Thread (narrated PPT) describing Big Data from the discipline of their current, or intended major. What Big Data exists within this context? How is it being used to drive your discipline forward? If not, why not? Where is the gap and why does it exist within your discipline?

**Big Data in my Community – 75 points**

Students will submit a paper outlining the essential data that is captured at the community level.

Students may explore their home community to determine how big data is being used to make decisions and influence policy. Ethical considerations will be explored as students take on big data at the local level.

**APPENDIX**  
**For General Education Committee Review**

**Expanded People and Big Data course plan, Fall 2016 – Course development outline**  
Revised May 2, 2016

Since the course is currently being revised and developed, we do not have all of the details worked out in the syllabus. However, the syllabus above includes a schedule with an outline of the topics, instructors, and planned assessments.

In order to provide you with more detail on the specific weekly topics and the likely readings that will be used to inform the lectures and/or serve as assigned readings for students, we provide a more detailed outline of the topics with notes, objectives, and links to readings.

Note –Ethics and International appear as the topics for weeks 12 and 13, respectively. However, these are foundational issues that will be introduced in the first weeks of the course, and each topic throughout the course will include specific considerations of both ethical concerns and international variations. The discussions in weeks 12 and 13 will provide an opportunity to compare, analyze, and synthesize the examples and concerns raised throughout the semester.

These are still under development and will be planned in detail for the launch of the pilot course in Fall 2016.

**1. Introduction: Why you love to hate Facebook (Lewis)**

Objectives:

- Identify both the promise and the peril in big data
- Describe how big data is changing society in the U.S. and in other countries

**2. Terminology: How “big data” differs from “data” (Lewis)**

Objectives:

- Debate whether big data is a set of tools or a mindset
- Identify the tools that enable big data such as unstructured databases and sensors
- Evaluate how national and cultural differences shape definitions of data

Key Readings Before Class:

- [Anderson, end of theory](#) (Wired)
- [Duhigg, pregnancy algorithm](#) (NYT)
- [Funk-e Studios, what is big data](#) (YouTube)
- [Harrison, big data changing Africa](#) (blog)
- [Learning Tree, Hadoop](#) (YouTube)
- [McAfee & Brynjolfsson, revolution](#) (Harvard Biz Review)
- [Ward & Barker, defined](#) (arXiv)

**3. Surveillance: Government and business know a lot about you (Martinez)**

Objectives:

- Debate the merits of requiring that cellphone companies install security “back doors”

- Delineate the merits and dangers of companies owning data about you
- Discuss and evaluate how big data are collected and used within political processes (e.g., campaigns) and their potential implications for societies
- Describe how national customs regarding surveillance change privacy expectations

Key Readings Before Class:

- [Blumenstyk, blowing off class](#) (NYT)
- [Cardwell, lights are watching](#) (NYT)
- [Dvoskin, city tracking you](#) (WSJ)
- [de Montjoye etc., reidentifiability](#) (Science)
- [Lohr, workplace surveillance](#) (NYT)
- [Lyon, Snowden & surveillance](#) (Big Data & Society journal)
- [Nelson, college grad rates](#) (Vox)
- [Pybus etc., teen mobile data](#) (Big Data & Society journal)
- [Sengupta, surrendering data](#) (NYT)
- [Singer, Acxiom knows you](#) (NYT)
- [Wintour & MacAskill, UK surveillance](#) (Guardian)

#### 4. **Datification: Sensors and the Internet of things rule our lives (Martinez)**

Objectives:

- Cite examples of how sensors can benefit individuals and society
- Describe the benefits and costs of open data
- Identify how the Internet of things, or interconnected devices, affects humans
- Discuss examples of international variations in how sensors and big data are experienced and regulated

Key Readings Before Class:

- [Baack, open data and Germany](#) (Big Data & Society journal)
- [Elliott, datification](#) (blog)
- [Giannetto, pro football](#) (Huffington Post)
- [Newell & Marabelli, social implications](#) (Journal of Strategic Info Systems)
- Chapter 1 from *The Formula* by Luke Dormehl
- Chapter 5 from *Big Data* by Mayer-Schonberger & Cukier

#### 5. **Policing: Is predicting crime or terrorism best for society? (Martinez)**

Objectives:

- Identify how data can improve policing and safety
- Debate whether identifying likely crime (or potential criminals) would benefit society
- Debate distinctions between surveillance and spying and how these interpretations and their implications may vary across cultures

Key Readings Before Class:

- [Eligon & Williams, predicting criminals](#) (NYT)
- [Jenkins, mass shootings](#) (WSJ)
- [Neyfakh, predictive policing](#) (Atlantic)
- [Pishko, justice system](#) (Pacific Standard)

## 6. Dating: Can big data find you a better date and a better mate? (Koropecyj-Cox)

(Background reading for professor: *Dataclysm* by Christian Rudder)

Objectives:

- Evaluate how dating websites use and abuse the data we disclose about ourselves
- Describe the benefit and cost of finding a perfect match
- Discuss cross-national variations in online matchmaking and what they reflect about their cultures

Key Readings Before Class:

- [Kelly, how dating sites work](#) (Mashable)
- [Matlin, OKCupid insights](#) (538)
- [Rudder, we experiment on you](#) (OKCupid)
- [Webb, how I hacked dating sites](#) (YouTube)

## 7. Amusement: Do Spotify and Netflix personalize or pander? (Koropecyj-Cox)

Objectives:

- Identify how the entertainment industry has traded serendipity for sure-fire hits
- Debate whether personalized entertainment recommendations increase enjoyment or promote polarization and social segmentation
- Discuss social and political implications of such segmentation and applications of predictive analytics

Key Readings Before Class:

- [Bulygo, Netflix](#) (Kissmetrics)
- [Karp, music biz](#) (WSJ)
- [N.A., shaping what you watch](#) (Wharton school)

## 8. Community: Why should I have to pay for bad drivers and unhealthy people? (Koropecyj-Cox)

Objectives:

- Describe instances in which big data can more accurately identify risky individuals or other emerging societal or health risks
- Debate the costs and merits of reshaping the social compact as it related to benefits for individuals or for communities and societies
- Identify how “common good vs. individual rights” is influenced by nation and culture

Key Readings Before Class:

- [Kirchner, bad data](#) (ProPublica)
- [Levine, finding the unhealthy](#) (Modern Healthcare)
- [Marr, insurance](#) (LinkedIn)
- [Pettypiece & Robertson, donut charges](#) (Bloomberg)
- [Scism, car insurance tracking](#) (WSJ)

## 9. Marketing: How Google became a behemoth at your expense (Lewis)

Objectives:

- Evaluate how Google and Alphabet monetizes you
- Debate the consequences of predictive analytics replacing mass advertising

- Discuss the implications of multinational/supranational institutions collecting big data and how they relate to the rights of individuals and the roles of communities and governance in different settings

Key Readings Before Class:

- [Goel, Facebook krill oil](#) (NYT)
- [Hachman, the price of free](#) (PC World)
- [N.A., little brother](#) (Economist)
- [Singer, data attitudes](#) (NYT)
- [Third-party trackers](#) (Economist)
- [Wood, smartphone beacons](#) (NYT)
- [WSJ quiz, what advertisers know](#) (WSJ)

## 10. Wearables: Why we want to collect data about ourselves (Lewis)

Objectives:

- Identify the mental reward systems that encourage the quantified self
- Evaluate whether the quantified self is healthy or distracting
- Discuss and evaluate how interpretations of the quantified self vary cross-nationally

Key Readings Before Class:

- [Dean, man cures self of Crohn's disease](#) (Quantified Self)
- [Eveleth, women excluded](#) (Atlantic)
- [Feiler, quantified selves](#) (NYT)
- [Ghose, walk more but enjoy it less?](#) (Live Science)
- [N.A., counting every moment](#) (Economist)
- [Wanjek, harmful or helpful?](#) (Live Science)
- [Wolcott, wired up](#) (Vanity Fair)
- [Wolf, quantified self](#) (YouTube)

## 11. Education: Careers and jobs in big data and educational assessment (Miller)

Objectives:

- Identify potential careers in big data and required skill sets
- Identify ways in which a big data approach can benefit existing vocations
- Distinguish data science from statistics or computer science

Key Readings Before Class:

- [Baer, Jeffrey Hammerbacher](#) (Fast Company)
- [Davenport & Patil, skills required](#) (Harvard Business Review)
- [Lagorio-Chafkin, BuzzFeed data-ist](#) (Inc.)

## 12. Ethics: Which matters more: your privacy or a better society? (Miller)

Objectives:

- Debate the ethical tension between retaining privacy and withholding information
- Evaluate ethical systems used to resolve such dilemmas and how they vary across different regions, countries, and societies

Key Readings Before Class:

- [N.A., can we stay anonymous?](#) (Economist)
- [White, disease outbreaks](#) (Pacific Standard)

- [King & Richards, big data ethics](#) (O'Reilly)

### **13. International: How and why the U.S. sees big data differently than some other countries (Miller)**

Objectives:

- Summarize and synthesize how U.S. and international (especially E.U.) approaches vary with regard to privacy, data ownership, human rights concerns, and a right to be forgotten
- Evaluate why social values distinguish the U.S. from other nations in data policies

Key Readings Before Class:

- [Buttarelli, 2015 data white paper](#) (European Union)
- [Dimov, differences in data privacy](#) (Infosec Institute)
- [Lee, how EU and US compare](#) (Privacy Law Blog)
- [N.A., nations differ wildly](#) (Economist)
- [Oliver, right to be forgotten](#) (YouTube)
- [Scott & Singer, European data](#) (NYT)