

People & Big Data: Building for a Sustainable Future

AEB 2810

Fall 2025-3 credits



Instructor

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Class Times Location

Lecture online and Thursday Breakouts Periods 7, 8, 9 MAEB 0234

Course Description

Can big data save the world? This course explores the uses of big data in the social sciences and the social implications of big data. This course includes analyzing how big data is used for tracking and providing insight for solution generation on pressing issues, including the Sustainable Development Goals.

More Details about the Course

Drawing on traditional and applied social science disciplines, this course introduces students to basic approaches, methods, and ethical concerns in understanding the uses (and misuses) of big data. Class discussion and readings will cover examples of social processes at the macro-level (structures, policies), meso-level (institutions, business), and micro-level of individual perceptions and behaviors. This 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

Upon completion of this course, students will be able to...

- 1. Identify, describe, and explain current applications of social science big data at the personal (micro), institutional (meso), and societal (macro) levels.
- 2. Identify, describe, and explain usages and ethical considerations of social science big data for different disciplines and fields.
- 3. Evaluate current usages and future potential opportunities for usage of social science data through ethical and change lenses.

- 4. Evaluate digital footprints and big data points for individuals.
- 5. Critically analyze usages of big data and research for creating change and evaluating progress on Sustainable Development Goals and other world issues.
- 6. Develop and present in clear writing on social science big data and generate conclusions based on the analysis of individual, institutional, and societal problems.
- 7. Communicate orally and in writing findings from big data analysis and implications and conclusions to societal issues.

Quest and General Education Credit

- Quest 2
- Social & Behavioral Sciences

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.

This course accomplishes the <u>Quest</u> and <u>General Education</u> objectives of the subject areas listed above. A minimum grade of C is required for Quest and General Education credit. Courses intended to satisfy Quest and General Education requirements cannot be taken S-U.

Instructor Team Communication & Feedback

First and foremost, this class should be fun and enjoyable! With that, this is an interactive class with a high level of student engagement – you must participate. This course is pragmatic in its approach, and it is one that you will find useful in your future contacts and work with people.

Communication - The instructor and graders are committed to responding to your Canvas and email messages within 24 hours when feasible during the work week, Monday through Friday, except holidays. The major assignments will be graded, with meaningful feedback provided, within one-two weeks of their submission.

All students are expected to check Canvas (http://elearning.ufl.edu) on a regular basis. Please ensure that you have access to this service. Additional handouts, readings and supplemental material will be housed on Canvas, this includes your grades.

Requirements

Required Readings:

Required readings are provided on canvas and through Perusall. See course weekly schedule for more detailed information.

Technology:

To succeed in this course, you must have access to the following technology:

- Desktop Computer or Laptop
 - o Audio Capabilities
 - o Webcam and Microphone for synchronous sessions
- Microsoft Office Programs
 - Microsoft Privacy Statement
 - Microsoft Accessibility Information
 - Word Microsoft 365 basics video training
- Adobe Reader
 - Acrobat tutorials
 - Adobe Privacy Statement
 - Adobe Accessibility Statement
- Zoom
 - Zoom Privacy Policy
 - Zoom Accessibility Information
- Internet Connection with access to Canvas
 - Canvas is the course management system at the University of Florida in which students will find course content, links to video lectures, assignments, quizzes, discussions, and grades. The use of this system will vary by instructor, but the following videos describe the most common tools in Canvas. The <u>full student</u> <u>quide</u> is provided if you have additional questions.
 - Canvas Privacy Policy
 - Canvas Accessibility Standards
- Web Browser Chrome is the preferred browser for Canvas. If you do not have Chrome, you can download it.
- University of Florida Email
 - Students are expected to check their my.ufl emails daily. View the <u>Student</u> <u>Computing Requirements</u> page for information on technology requirements and expectations.

Prerequisite Knowledge:

No pre-requisite

Expected Technical & Digital Literacy Skills:

Minimum skills required:

- Proficiency in utilizing Canvas and navigating the internet effectively.
- Competence in using email for communication purposes, including sending and receiving messages and managing attachments.
- Familiarity with commonly used word processing applications (such as Microsoft Word or Google Docs), including the ability to create, edit, and format documents.
- Basic computer skills, including understanding fundamental operations like file management, using menus and toolbars, and navigating between different applications.
- Using online search tools for specific academic purposes, including the ability to use search criteria, keywords, and filters.
- Analyzing digital information for credibility, currency, and bias.

Artificial Intelligence (A.I.) Use:

You are expected to be honest in all academic work, consistent with the academic integrity policy as outlined in the Code of Student Conduct and any additional syllabus language. All work is to be appropriately cited when it is borrowed, directly or indirectly, from another source. Unauthorized and/or unacknowledged collaboration on any work, or the presentation of someone else's work, is plagiarism. Content generated by an Artificial Intelligence third-party service or site (AI-generated content) without proper attribution or authorization is another form of plagiarism. If you are unsure about whether something may be plagiarism or another form of academic dishonesty, please reach out to me to discuss it as soon as possible.

Assignments

Last Assignment Policy:

All assignments are due at 11:55pm on the date indicated on Canvas and in this syllabus, unless otherwise noted. Late work is accepted, penalized by 10% per University business day.

Assignment Points & Explanation:

All assignments must be turned in on Canvas on the date assigned by 11:55 pm ET. Emailed assignments will not be accepted unless pre-arranged (this includes through Canvas). All papers are expected to be typed in 12-point Times New Roman or Calibri with 1-inch margins. Each assignment must follow the requirements in the rubric. All rubrics are available on Canvas. All assignments will be returned to students on Canvas.

Perusall Discussion (120 points)

Readings will be assigned each week through Perusall, which is accessible through Canvas. You can stop at any place in the Perusall articles and post comments, questions, or see the questions and comments of other students. This space is intended for reflective discussion and should be a place where you and your peers engage in discussion around application of course concepts. Each Perusall weekly reading is worth 10 points. There are 13 assigned Perusalls, with the lowest score being dropped to a total of $12 \times 10 = 120$ points).

Information on Perusall Grading Standards:

Your participation will be graded based upon your contributions within Perusall. Effective annotations deeply engage points in the readings, stimulate discussion, offer informative questions or comments, and help others by addressing their questions or confusion.

Grades are released throughout the assignment window. Note: You can continue to add annotations and contribute to assignments until the posted deadline. Your scores will automatically update as you add annotations. If you open an assignment but do not complete it, the system will generate a partial participation score. Your participation score will automatically update as you add additional annotations.

Based on the overall body of your annotations, you will receive a score for each assignment as follows:

- Full Credit: demonstrates exceptionally thoughtful and thorough reading of the entire assignment
- Partial Credit: demonstrates superficial reading of the entire assignment OR thoughtful reading of only part of the assignment
- No Credit: demonstrates superficial reading of only part of the assignment Items taken into consideration when your score is generated:
 - Annotation Content the content of the comments you post are scored through Perusall's quality algorithm
 - Opening Assignment breaking up work on the assignment into multiple sittings
 - Reading to the End reading the entire document
 - Active Engagement Time time spent actively engaging with the assignment
 - Getting Responses writing comments that elicit responses from other students
 - Upvoting writing comments that are upvoted by other students and upvoting other students comments
 - Quizzes responding to quiz questions that are part of an assignment

Each category listed above is assigned a specific percentage weight that contributes to the overall grading system. However, the Perusall platform offers flexibility for instructors to create categories that may collectively exceed 100%. This grading structure acknowledges that different students may exhibit varying strengths and areas of expertise. By allowing for a diversified assessment approach, students have the opportunity to demonstrate their mastery and proficiency in the aforementioned categories, thus enabling them to achieve their full potential regardless of any individual variations or challenges they may encounter.

Attendance/Playposit Participation (50 points)

Each student is expected to attend class and engage in the course experience, including PlayPosit online lectures, to receive points. Your attendance points are awarded for attending your weekly lab section, and participation is assessed by completing the weekly assigned PlayPosit videos. The percentage of lab attendance and participation in PlayPosit videos will be used to assess your grade and will be converted to the total number of points earned (i.e. 90% completion = 40 points). PlayPosit videos will not be graded on the correctness of your answers to embedded checkpoints, but rather reflective of effort and participation. Attendance at lab sessions is an expectation. If you need to miss a lab session, you should inform the course instructor and the TA. Approved absences will not impact your attendance and participation grade. The attendance policy is in line with the university attendance policy: https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/

Big Data Footprint (50 points)

The big data fingerprint assignment requires that you analyze and reflect upon your own digital fingerprint. You'll explore your digital fingerprint in lab and be asked to provide a 500 – 1,000-word reflection on what information may exist in your digital fingerprint, including number of companies sending you emails a week, types of advertisements attached to you, how searchable you are, and social media information. In this essay, you'll be asked to reflect on "the good, the bad, and the ugly" side of a digital fingerprint. How is this beneficial to you and how might this impact you personally?

Big Data in a Discipline (50 points)

The big data in a discipline assignment provides you with an opportunity to explore how big data it utilized in your own discipline or potential future career path. We'll spend time throughout the semester discussing big data in many different fields and labs will provide an opportunity for you to consider how the concepts and topics apply directly to your future career path and current discipline. You'll provide a 500 – 1,000-word reflection on how big data is currently and could be used in the future in your field. You'll be asked to provide examples of how UF and other researchers/industry are currently utilizing big data in your discipline. You'll then provide a reflection on these usages and a new opportunity you have for the utilization of big data in your discipline.

Homework (50 points)

Five homework assignments will be given following lab sessions in this course (see course schedule) worth 10 points each. The intention of homework is for you to apply the discussion and course work regarding the big data topic to your own life. You'll be asked to provide information on how the topic and discussion related to you through completion of a provided worksheet or submit a 250-word reflection statement (the method will be dependent on the assignment).

Homework 1: 250-word reflection statement on personal views and usages of big data

Homework 2: Creating research questions that could be answered with big data

Homework 3: News Article Critique based on factfulness

Homework 4: 250-word reflection on big data usage for SDGs

Homework 5: 250-word reflection on big data and artificial intelligence

Big Data Scavenger Hunt (30 points)

During an in-class culminating exercise, you will be sent around the UF campus to identify examples of Big Data. You will be asked to take a pic and share a clear explanation for how your example aligns with the class understanding of Big Data.

Group Research Project & Presentation (150 points)

Groups will be assigned based on topical interest from a provided list. Groups will be provided with a big data set and asked to design research questions related to the data provided. Assistance in analyzing data will be provided to student groups. Feedback on project components will be provided during interaction lab periods. Groups will create an introduction and rationale for the research question, provide an interpretation and discussion of analyzed data findings, and draw conclusions and recommendations from the findings. Groups will create and participate in a 5-minute presentation. Team members will provide evaluations for their team members and themselves that will be used for a team member participation grade.

As a part of your group research project, you'll be asked to give a 5-minute presentation followed by 2-3 minutes of questions. You must be present to be rewarded points for the presentation. A suggested outline for slides is included below: 5-10 Slides Maximum:

- Introduction/Rationale (1)
- Research Questions (1)
- Process (1)
- Interpretation of Findings (1 slide per research question)
- Conclusions/Recommendations (1-3)

Criteria	0-5 points	5-9 points	10-12 points	12-15 points
PowerPoint Presentation				
Inclusion of Introduction, Rationale, research question, findings and interpretation, and conclusions & recommendations	Presentation does not clearly present any of the elements	Two or more of the elements are missing or not clearly presented	One of the elements are missing or not clearly presented	All elements are clearly presented and included
Response to Questions & Collaboration	Responses to questions were not appropriate or connected to findings. Only one presenter responded to questions.	Responses to questions were vague, but applicable. Some presenters contributed.	Responses to questions were accurate, but lacked depth. Most presenters contributed.	Responses to questions provided greater depth and demonstrated an understanding of content. All presenters contributed.
PowerPoint Design & Creativity	The PowerPoint needs significant improvement in design, layout, and neatness.	The project needs improvement in design, layout, or neatness	The project has a nice design and layout. It is neat and easy to read.	The project is excellent in design and layout. It is neat and easy to understand the content.

Written Research Paper

Outline of Word Count & Length Expectations

- Introduction, Rationale, and Research Question- 500-1,000 words
- Interpretation and discussion of findings- Should include tables, graphs, or visualizations of results and approximately a 250-word write-up for each research question that includes an explanation/interpretation of results and discussion of findings
- Conclusions and Recommendations- 500-1,000 words

Criteria	0-5 points	5-9 points	10-12 points	12-15 points
Final Project				
Introduction, Rationale, and Research Question	Report does not include any of the elements clearly.	Is missing TWO of the opening elements: attention- grabber, states main ideas for rationale, provides a research question.	Is missing ONE of the opening elements: attention-grabber, states main ideas for rationale, provides a research question.	Introduction and rationale uses an attention-grabber, states main ideas for rationale, provides a research question.
Interpretation & Discussion of Findings	Cursory discussion of findings	Important content is omitted to interpretation of findings	In-depth discussion and appropriate interpretation of findings	Appropriate interpretation of findings and Indepth discussion & elaboration of findings.
Conclusions & Recommendations	Report includes vague recommendations and conclusions	Only includes 1 conclusion and recommendatio n.	Only includes 2 conclusions and recommendations	Includes 3 conclusions and 3 recommendatio ns.
Cohesiveness	Does not tie together information and reads disjointed.	Sometimes ties together information and has some flow, but lacks a clear outline	For the most part, ties together information and flows with only minor disjointedness.	Ties together information and flows as if it was written by one individual. Headings provide a clear outline and demonstrates an understanding of connection of sections.
Clarity of writing, grammar, and sentence structure	Unacceptable number of spelling and/or grammar mistakes	Noticeable spelling & grammar mistakes	Minimal spelling &/or grammar mistakes	No spelling &/or grammar mistakes

Team members will complete surveys and rate their team members and themselves on a scale from 1-4 for each category. All students achieving over an average of 3.5 will receive all 30 points. Grades below a 3.5 average rating will be determined based on the percentage out of 3.5. Note: This team member evaluation was developed based on a cooperative learning framework.

Criteria	1	2	3	4	
Team Member Evaluation					
Participation	Rarely (Never	Sometimes	Frequently	Usually (over	
and	or once in a	(less than half	(more often	90% of the time)	
communication	great while)	of the time)	than not)		
Preparation	Rarely (Never	Sometimes	Frequently	Usually (over	
	or once in a	(less than half	(more often	90% of the time)	
	great while)	of the time)	than not)	, i	
Team player	Rarely (Never	Sometimes	Frequently	Usually (over	
(cooperation)	or once in a	(less than half	(more often	90% of the time)	
	great while)	of the time)	than not)		
Helps group	Rarely (Never	Sometimes	Frequently	Usually (over	
excel	or once in a	(less than half	(more often	90% of the time)	
	great while)	of the time)	than not)		

Assignment Summary

Assignment	Due Date	Points Available	Points Earned
Perusall Responses	See course sch. (10 pts each)	120	
Attendance/PlayPosit Participation	Weekly	50	
Big Data Footprint	Sept. 18	50	
Big Data in a Discipline	Oct. 30	50	
Homework	See course sch.	50	
Big Data Scavenger Hunt	Dec. 2	30	
Group Research Project		150	
Presentations	Nov. 20	45	
Final Project	Dec. 9	75	
Team participation	Dec. 9	30	
TOTAL POINTS AVAILABLE		500	

Course Grading:

Α	468 – 500 points	С	382 – 368 points
A-	467 – 448 points	C-	367 – 348 points
B+	447 – 433 points	D+	347 – 333 points
В	432 – 418 points	D	332 – 318 points
B-	417 – 398 points	D-	317 – 298 points
C+	397 – 383 points	E	297 and below

Annotated Weekly Schedule:

Week 1

Introduction: Why you love to hate social media?

This week will provide an introduction to the course, semester topics, and big data in social science. The semester will begin with analyzing how big data is utilized through social media and challenge students to consider how big data is collected and utilized in social media. We'll overview an introduction to social sciences and methods for exploring the social sciences. Students will be able to describe the social sciences. Readings:

• Colander, D., & Hunt, E. (2019). Introduction to social science and its methods. In *Social science: An introduction to the study of society* (17th edition, pp. 1-27). Routledge.

Week 2

This week we'll discuss how big data is different than other types of data. The SDGs will be introduced and a brief introduction to uses of data for development will be discussed. Students will be able to distinguish big data from other types of data. Students will be able to identify social science concepts and big data in their lives and perceptions of the world. Students will be able to provide examples of usages of big data in development. *Readings:*

- Introduction (pp. 1-36) of Cheney-Lippold, J. (2017). We are data: Algorithms and the making of our digital selves. New York University Press.
- Davenport, T. H., Barth, P., & Bean, R. (2012). How 'big data' is different. MITSloan Management Review, 54(1), p. 22-24.
- United Nations. Big data for sustainable development. https://www.un.org/en/global-issues/big-data-for-sustainable-development
- United Nations Global Pulse. (2013). Big data for development: A primer. p. 1-8. https://beamexchange.org/uploads/filer_public/7e/27/7e279cf5-ad75-4fe7-86a9-4ff331cb4bb6/bigdata_development_primer.pdf

Week 3

This week we'll explore digital footprints and how the internet rules our lives. Students will be able to provide an overview of their digital footprints and different ways the internet tracks information. This week's lab will include a discussion around data ethics and IRB to begin discussing their research projects.

Readings:

- Chapter 6, All the World's a Lab (pp. 207-242) of Stephens-Davidowitz, S. (2017). Everybody lies: Big data, new data, and what the internet can tell us about who we really are. HarperCollins.
- What is your digital footprint? University of Aberdeen. 1 p. https://www.abdn.ac.uk/toolkit/documents/uploads/infosec-campaign-digifootprint.pdf
- Developing a good digital footprint. (2020). The open university. p. 1-4 https://www.open.ac.uk/libraryservices/beingdigital/accessible/accessible-pdf-62-developing-a-good-digital-footprint.pdf
- Bureau of Justice Assistance. (2016). Understanding digital footprints: Steps to protect personal information. p. 1-9. https://bja.ojp.gov/sites/g/files/xyckuh186/files/media/document/Understanding_Digital_F ootprints-09-2016.pdf

Week 4

This week we'll discuss control related to big data related to who has control over existing data and what control you have over your own data. We will also discuss the value in data and how these are similar and contradictory. Students will be able to identify how generalizations are made with data and what positives and negatives are associated with these generalizations. In the lab, an overview of research and how to pose research questions will be discussed. *Reading:*

 Chapter 6, Value (pp. 98-122) and Chapter 9, Control (pp. 171-184) of Mayer-Schonberger, V., & Cukier, K. (2014). Big data: A revolution that will transform how we live, work, and think. HaprberCollins Publishers.

Week 5

This week, we will dive into privacy and ethical considerations related to big data. Students will be able to debate privacy and policy standards for big data usage. Students will be able to reflect and discuss ethical standards for big data usage in this manner. In the lab, students will utilize analytical tools developed by Google to examine trends and marketing information relevant to previous topics and potential fields of study. Additionally, they will learn about data harvesting and mining.

Readings:

- Chapter 5. Privacy (pp. 201-247) of Cheney-Lippold, J. (2017). We are data: Algorithms and the making of our digital selves. New York University Press.
- United Nations Development Group. (2017). Data privacy, ethics and protection: Guidance note on big data for achievement of the 2030 agenda. p. 1-19. https://unsdg.un.org/sites/default/files/UNDG BigData final web.pdf

Week 6

This week, we'll move into the usage of big data on world scale issues. We'll begin by discussing how big data can save the world and reviewing how big data is being utilized in the 2030 agenda for sustainable development. Students will be able to identify opportunities for using big data to track progress and develop initiatives for the SDGs. In lab, we will explore how social media can be used to collect big data and answer questions to research questions for their group projects. Additionally, we will explore the United Nations SDG Global Database: https://unstats.un.org/sdgs/dataportal/

Readings:

- UN Environment Programme. Can big data help protect the planet? https://www.unep.org/news-and-stories/story/can-big-data-help-protect-planet
- UN Environment Programme. Work on big data gets a big boost. https://un-spbf.org/big-data/work-on-big-data-gets-a-big-boost/
- Maaroof, A. (n.d.). Big data and the 2030 agenda for sustainable development. p. 1-53. https://www.unescap.org/sites/default/files/Final%20Draft_%20stock-taking%20report_For%20Comment_301115.pdf

Week 7

This week we will review the principles of factfulness in interpreting information. We'll spend some time exploring the gapminder website and information available. Students will be able to apply the 10 principles of factfulness when examining data and information. In lab week 7 and 8, students will be split into two groups. We additionally will discuss data visualization and the usefulness and importance of sound data visualization.

- Chapter 7, Data visualization (pp. 134-179) of Bergstrom, C. T., & West, J. D. (2021).
 Calling bullshit: The art of skepticism in a data-driven world. Random House.
- Rosling, H., Rosling, O., & Rönnlund, A. R. (2018). Factfulness: Ten reasons we're wrong about the world - and why things are better than you think. Flatiron Books. Chapter 11 (pp. 206-217)
- The Worldview Upgrader. (n.d.). Common misconceptions about UN Goals. https://upgrader.gapminder.org/

Week 8

This week, we'll dive further into how big data is being utilized to track progress and inform change projects for the Sustainable Development Goals (SDGs). Students will be able to identify ways big data is being used for SDGs and opportunities. In lab, students will work in their project groups to analyze the results to their questions and interpret the findings. *Reading:*

- TRENDS. (2021). Big data and the sustainable development goals: Innovations and partnerships to support national monitoring and reporting. p. 1-54.
 https://www.sdsntrends.org/research/big-data-and-the-sustainable-development-goals-innovations-and-partnerships-to-support-national-monitoring?locale=en
- United Nations Global Pulse. (2016). A guide to data innovation for development: From idea to proof of concept. p. 1-42. https://www.unglobalpulse.org/wp-content/uploads/2016/12/A-guide-to-data-innovation-for-development-UNGP-UNDP.pdf

Week 9

This week, we'll be discussing challenges and opportunities for using big data in development work. Students will be able to recognize and explain different forms of big data utilized in development and insights that can be gained from their usage. *Reading:*

 UN Global Pulse. (2012). Big data for development: Challenges and opportunities. p. 1-47 https://www.unglobalpulse.org/wp-content/uploads/2012/05/BigDataforDevelopment-UNGlobalPulseMay2012.pdf

Week 10

This week, we'll examine the gaps in big data. These include both the challenges of invisibility and inequality based on what we know and need to find out from data and who does and does not have information. Students will be able to discuss opportunities for minimizing and filling the gaps. In lab, students will learn how to write an introduction and literature review and work with their groups to lay the foundation for their poster research projects. *Reading:*

 United nations Secretary-General's Independent Expert Advisory Group on Data Revolution for Sustainable Development (IEAG). (2014). A world that counts: Mobilising the data revolution for sustainable development. p. 1-32 https://www.undatarevolution.org/wp-content/uploads/2014/11/A-World-That-Counts.pdf

Week 11

This week we'll discuss big data in humanitarian work related to the SDGs and Global Pulse. Students will be able to discuss opportunities, barriers, and ethical issues surrounding big data in this work. In lab, students will work to analyze their data to answer their established research questions.

Reading:

 United Nations Global Pulse. (2016). Big data for development and humanitarian action: Towards responsible governance. p. 1-16. https://www.unglobalpulse.org/document/big-data-for-development-and-humanitarian-action-towards-responsible-governance/

Week 12

This week we will explore both mobile data and data related to gender equality. Students will be able to identify positive usages of mobile data for the social good. Students will be able to determine summarize how big data has been utilized to examine progress on gender equality. In lab, students will work with their project groups to draw conclusions and make recommendations of their interpreted data.

Reading:

- United Nations Women. (2018). Gender equality and big data: Making gender data visible. p. 1-32 https://www.unglobalpulse.org/wp-content/uploads/2018/03/Gender-equality-and-big-data-en-2018.pdf
- United Nations Global Pulse. (2017). The state of mobile data for social good report. p. 1-48 https://www.unglobalpulse.org/wp-content/uploads/2017/06/Mobile Data for Social Good Report.pdf

Week 13

This week, we will discuss how Artificial Intelligence can be used for good and benefit movement towards the SDGs. Students will be able to identify current usages of AI. Students will be able to debate ethical usages of AI. Reading:

- International Telecommunication Union. (2021). United Nations activities on artificial intelligence (AI). p. 1-7 https://s41721.pcdn.co/wp-content/uploads/2020/12/21-00794_UN-Activities-on-AI-ExecSum.pdf
- Choice of AI for Good video: https://www.youtube.com/channel/UC4e35vN3-tSBZMNLE-wm45A

Week 14

This week student groups will present their group project presentation to the wider class community. In lecture, students will explore work that is being conducted on Sustainable Development Goals and Big Data at UF. They will also be able to communicate ways big data will impact their potential future careers.

https://www.itu.int/dms_pub/itu-s/opb/gen/S-GEN-UNACT-2018-1-PDF-E.pdf

Week 15

In this culminating experience, students will be sent around the UF campus to identify examples of Big Data.

Mod.	Day	Topic	Reading	Assignment Due
1	Lab	Introduction to Big Data & Social Science	See Canvas	
2	On Big Data vs. Data Introduction to SDGs & data		Cheney-Lippold, Introduction See Canvas	Perusall Wk 2
Lab		Big data a lens to see the world		
3	On	How are data and algorithms used in our world today, Digital footprints	Stephens-Davidowitz, Chapter 6	Perusall Wk 3 Homework Due
	Lab	Data Ethics and IRB discussion		
4 Lab	On	Value & Control	Mayer-Schönberger & Cukier, Value & Control	Perusall Wk 4 Homework Due
	Lab	Introduction to research and asking questions		
	On	What does privacy look like now?	Cheney-Lippold, Privacy	Perusall Wk 5
5	Lab	Uses in marketing and Google, data harvesting and mining		Big Data Footprint Due
	On	Can big data save the world?	Readings on canvas	Perusall Wk 6
6	Lab	Choosing a group SDG and writing research questions		Research Question Review
7	On	Factfulness & Data Visualization	Reading on canvas Bergstrom & West	Perusall Wk 7 Homework Due
	Lab	Visualizing and Interpreting Data		
	On	Big Data for SDGs	Reading on canvas	Perusall Wk 8
8	Lab	Writing your introduction and literature review		
9	On	Big Data for Development: Challenges & Opportunities	Reading on canvas	Perusall Wk 9
	Lab	HiperGator Virtual- Work Day		Intro/Lit Review
10	On	Mobilizing the Data Revolution	Websites on canvas	Perusall Wk 10
10	Lab	Using Twitter to answer questions		Homework Due
11	On	Big Data for Development and Humanitarian Action	Reading on canvas	Perusall Wk 11
	Lab	Analyzing big data to answer questions		Big Data in Your Discipline Due
	On	Data, Gender, and Mobile Data	Reading on canvas	Perusall Wk 12
12	Lab	Drawing conclusions and making recommendations		Findings Review
13	On	Big Data & Artificial Intelligence		Perusall Wk 13 Homework Due
	Lab	Work Day		Presentation Review
14	On	SDGs and Big Data at UF and you in your Future Careers		
	Lab	Group Presentations		
15	On	Class Culmination		Big Data Scavenger Hunt

University-Wide Policies and Student Support Services

As part of the updated University of Florida Syllabus Policy, this course syllabus refers students to a central online resource that contains the most current university-wide academic policies and student support services. Using this shared link helps ensure that all students receive accurate, consistent, and up-to-date information.

Students are expected to visit and review the centralized UF Syllabus Policy page at: <u>UF Syllabus Policy Link</u>. Throughout the term, students are strongly encouraged to return to this page regularly to stay updated on important university expectations and explore available resources. The page includes information on topics such as:

Academic Policies

- Attendance requirements and make-up work procedures
- Academic accommodations for students with disabilities
- Grading standards and grade point policies
- Course evaluation instructions and portals
- Student Honor Code and University Honesty Policy
- Guidelines governing the recording and use of class lectures

Academic Resources

- E-learning support and technology assistance
- Career and counseling services (Career Connections Center)
- Library access and help services
- Study skills support and tutoring (Teaching Center)
- Writing support (Writing Studio)
- Complaint procedures and academic grievance resources
- UF Student Success Initiative resources

Campus Health & Wellness

- Physical, mental, and emotional health services
- Safety and support programs
- UF Whole Gator wellness tools