

## **HIST/SOC/STS2604: “Introduction to Data in Social Context” | Fall 2020 | Online Dr. Emma Stamm | [stamm@vt.edu](mailto:stamm@vt.edu)**

### ***About the course***

In 1975, the world saw the release of the first personal computer. Soon after came the World Wide Web (1989) and the first consumer smartphone (2007). As of 2020, digital technologies generate over 2.5 quintillion bytes of data every day. As data proliferate, they present novel possibilities for human life, but also introduce several hazards.

“Introduction to Data in Social Context,” or “DiSC,” explores the genesis and structural effects of data from an interdisciplinary perspective. Joining frameworks from History, Sociology, and S.T.S., we consider the practical and theoretical implications of data in society. This course orients students to contemporary humanistic research on digital technology, with a focus on data assemblages as instruments of knowledge.

### ***Required materials***

- “*Raw Data*” is an *Oxymoron*, edited by Lisa Gitelman. ISBN-13: 978-0262518284. Digital versions are acceptable.

### ***Good to know***

- If you're not sure about something, please check here. You're always welcome to email me, but many of your logistical questions will be addressed in the following pages.
- Aside from “*Raw Data*” is an *Oxymoron*, all materials are free and available as downloadable files and/or web links. See Files > Weekly Reading Assignments on Canvas.
- The course is asynchronous, meaning that there are no required real-time meetings.
- There will be optional class-wide meetings throughout the semester. “Optional” means that I will not count attendance, and that all of the information conveyed during these sessions will be provided elsewhere.
- You are required to meet with me individually by Zoom or phone call on two separate occasions.
- All assignments are due by midnight in your time zone. I’m on Eastern Time.
- There is a shortened version of the syllabus on Canvas. This document lists only what you have to turn in and when it’s due, along with dates of scheduled quizzes. It’s under Files > Syllabus.

### ***How I give lectures***

I make audio “podcasts” of my lectures and upload them to Canvas as mp3s. They’ll be posted to Files > Weekly Podcasts. I will post each week’s lecture by Monday, starting on August 24. The lectures cover all of the readings assigned for that week. They also give updates and reminders.

### ***What You'll Do for DiSC as Expressed in your Final Grade***

Here's the breakdown by percentage. Please note that each percentage point corresponds to one point on your final grade on a scale of 1-100. So if an assignment is worth 5 points, that's 5% of your final grade. Again, everything is due by midnight.

#### **Grade Component 1: The very first assignment | Friday August 28 | Pass/fail**

The first assignment is due Friday, August 28. There are two parts:

- 1) Fill out the data questionnaire, which I will send as a link on August 24. It should only take 20 minutes.
- 2) Make an introductory post to Canvas. Under the "Discussions" tab, you will see a thread called "Introduce yourselves!" — that's where you post it. Please write no fewer than one substantial paragraph (minimum five sentences). You can tell us anything you want about yourself. I recommend including your year, major, academic/professional interests, and hobbies. If you go by a name that's different from the one listed on Canvas, let us know. You might also mention where you're from and what else you're doing this semester. This is also the place to share your preferred pronoun, if you so choose.

The first assignment is pass/fail. For every day it's late, you will lose a quarter point on your final grade.

#### **Grade Component 2: Discussion posts (minimum 225 words) | Due on multiple dates | 8 points each; 40 points total**

Five times throughout the semester, you will make a discussion post to Canvas. These posts are always due on a Sunday, but you are welcome to do them earlier in the week. In these posts, you will respond to at least one of the materials (texts, video, etc.) assigned at any point after the last discussion post. For example, the second discussion post (due September 20) can respond to anything from Weeks 3 and 4, i.e. September 7-September 20.

Please demonstrate originality. These posts should do more than summarize the reading and viewing assignments. Also, note that these are not made as file uploads. You will either type your post directly into Canvas or copy-paste it from somewhere else.

#### **Grade Component 3: Quizzes | September 24 and November 11 | 5 points each; 10 points total**

Quizzes comprise five multiple choice or true/false questions. In other words, each quiz has five questions, and each question is worth one point. They are timed at twenty minutes unless you receive SSD accommodations. More information will be provided in advance.

#### **Grade Component 4:**

**Choose your midterm assignment: Exam (Option A) or paper (Option B) | Due October 15 | 15 points**

##### **If you choose Option A:**

You will take an exam on Canvas. This exam will be similar to our quizzes, but will be longer, comprising fifteen questions and timed at sixty minutes. As with the quizzes, it's open-reading, open-Internet, open-everything, but you can't get help from another person. More information will be provided in a timely fashion.

##### **If you choose Option B:**

You will submit a 1,000 word paper. This paper may be theoretical or empirical in its approach, but must articulate and defend a well-defined thesis on the social impact of digital technology. More information will be provided in a timely fashion.

**Grade Component 5: Collaborative project: coding scheme | Due November 20 | 10 points**

For Grade Component 5, you'll work in assigned groups to produce a qualitative coding scheme for the dataset we generated from our class questionnaire. More information will be provided in a timely fashion.

**Grade Component 6:**

**Choose your final assignment: Project proposal (Option A) or paper (Option B) | Abstracts due to me and your peer-review partner by email November 16 (2.5 points) | Responses due to me and your peer-review partner by email November 30 (2.5 points) | Final submission due on Canvas December 10 | 25 points total**

**If you choose Option A:**

You will develop a proposal for an empirical research project addressing the social impact of digital technology. This proposal will include a research question, survey of the existing literature, methodology section, statement on research ethics, statement on project significance, and bibliography. If applicable, you may also include new media, such as images, video, or sound. Minimum 2,000 words.

**If you choose Option B:**

You will submit a 2,000 word paper. This paper may be theoretical or empirical in its approach, and must articulate and defend a well-defined thesis on the social impact of digital technology.

***Housekeeping***

**Late Work**

Legitimate reasons for submitting assignments late include documented illness, university-sanctioned travel (including athletic events if you are a player, not a spectator), and emergencies. Please inform me of these situations as soon as possible. In the case of athletic events, you must let me know more than twenty-four hours in advance.

Otherwise, turn in your work on time. For each day that a discussion post is late, you will lose two percentage points, so that you get no credit by the fourth day it is late. For Grade Components 4 (Option B) and 6, you will be penalized by one letter grade per day late. You may only make up quizzes in the case of an emergency. Other late assignments will be addressed on a case-by-case basis. In the case of an emergency leading to late work, it's critical to get in touch with me as soon as you can.

**Disability**

I am committed to creating a classroom that is accessible for all people. Please notify me if you require accommodations for a disability, including alternative document formats and extra time on quizzes/exams. Virginia Tech's Services for Students with Disabilities website can be found at [ssd.vt.edu](http://ssd.vt.edu). They may be reached via email at [ssd@vt.edu](mailto:ssd@vt.edu).

**Names, Gender Identity, and Pronouns**

If you would like to go by a name that's not on the official roster, let me know.

Feel free to correct me if I mispronounce your name during a meeting. I won't be offended!

You are welcome to share your gender identity and pronouns with me privately by email or publicly on your introduction post. I use she/her pronouns.

### **Academic Honesty**

Dishonesty and plagiarism will not be tolerated. Note that plagiarism often happens inadvertently. Please observe what is written in the Undergraduate Honor Code:

“Each member of the university community agrees to honor the following: As a Hokie, I will conduct myself with honor and integrity at all times. I will not lie, cheat, or steal, nor will I accept the actions of those who do.”

Students enrolled in this course are responsible for abiding by the above. A student who has doubts about how the Honor Code applies to any assignment is responsible for obtaining specific guidance from me before submitting the assignment for evaluation. Ignorance of the rules does not exclude any member of the University community from the requirements and expectations of the Honor Code.

For additional information about the Honor Code, please visit: <https://www.honorsystem.vt.edu/>

### **Other**

You are encouraged to share feedback with me, by email or in person, throughout the semester. While you'll provide commentary in your SPOT reviews at the end of the semester, your suggestions can make a difference now. Your comments should be well-intentioned and meant to help not only yourself, but your fellow classmates.

We acknowledge the Tutelo/Monacan people, who are the traditional custodians of the land on which Virginia Tech is situated, and recognize their continuing connection to the land, water, and air that Virginia Tech consumes. We pay respect to the Tutelo/Monacan Nations, and to their elders past, present, and emerging.

### ***Weekly Schedule***

Please complete readings in the order listed. Note that I may upload the podcasts before the date listed, but I won't upload them any later.

#### **❖ Introduction**

#### **Week 1 (August 24-August 30): Introduction to Big Data**

*Important Week 1 dates:*

- Week 1 podcast posted by August 24
- First assignment (Grade Component 1) due August 28

*Week 1 reading/viewing assignments:*

- Bernard Marr, “What is Big Data?”
- Lisa Gitelman and Virginia Jackson, Introduction to “*Raw Data*” is an Oxymoron
- Video: Timandra Harkness, “What is Knowledge in the Age of Big Data?” (link also on Canvas)

#### **❖ Unit I: Our Data, Ourselves**

#### **Week 2 (August 31-September 6): Knowledge After the Digital Turn**

*Important Week 2 dates:*

- Week 2 podcast posted by August 31
- First discussion post due by September 6

*Week 2 reading assignments:*

- Chris Anderson, “The End of Theory”
- Nathan Jurgenson, “View from Nowhere”
- Daniel Rosenberg, “Data Before the Fact” (Chapter 1 from “*Raw Data*” is an Oxymoron)
- Rob Kitchin, “Big Data, New Epistemologies, and Paradigm Shifts”

**Week 3 (September 7-September 13): Knowing Our Data, Knowing Ourselves**

*Important Week 3 dates:*

- Week 3 podcast posted by September 7

*Week 3 reading assignments:*

- Kevin R. Brine and Mary Poovey, “From Measuring Desire to Quantifying Expectations” (Chapter 3 from “*Raw Data*” is an Oxymoron)
- John Cheney-Lippold, “Who We Are as Data Might Soon Become More Important Than Who We Are As people”
- John Cheney-Lippold, “Interview with John Cheney-Lippold.”
- Sun-ha Hong, “Data’s Intimacy: Machinic Sensibility and the Quantified Self”

**Week 4 (September 14-September 20): Surveillance and the Self**

*Important Week 4 dates:*

- Week 4 podcast posted by September 14
- Second discussion post due by September 20

*Week 4 reading/viewing assignments:*

- Rita Raley, “Dataveillance and Counterveillance” (Chapter 7 from “*Raw Data*” is an Oxymoron)
- José van Dijck, “Datafication, Dataism, and Dataveillance: Big Data Between Scientific Paradigm and Ideology”
- Shoshana Zuboff, “You Are Now Remotely Controlled”
- Video: Home screen of [www.neworgans.net](http://www.neworgans.net). (I recommend turning on captions).

**Week 5 (September 21-September 27): Surveillance and Online/Offline Communities**

*Important Week 5 dates:*

- Week 5 podcast posted by September 21
- Quiz on September 24

*Week 5 reading/viewing assignments:*

- Simone Brown, “Notes on Surveillance Studies” (Chapter 1 from *Dark Matters: On the Surveillance of Blackness*)
- Virginia Eubanks, “The Digital Poorhouse”

**Week 6 (September 28-October 4): “Authentic” Selfhood in Online Communities**

*Important Week 6 dates:*

- Week 6 podcast posted by September 28
- Third discussion post due October 4

*Week 6 reading assignments:*

- Oliver L. Haimson and Anna Lauren Hoffman, "Constructing and Enforcing ‘Authentic’ Identity Online: Facebook, Real Names, and Non-Normative Identities"

- Shaka McGlotten, “Intimacies in the Multi(player)verse” (Chapter 2 from *Virtual Intimacies: Media, Affect, and Queer Sociality*)
- Rob Horning, “Mass Authentic”

### **Week 7 (October 5-October 11): Selfhood and Social Media**

*Important Week 7 dates:*

- Week 7 podcast posted by October 5

*Week 7 reading assignments:*

- Olivia Munson, “The Genre of You”
- Rob Horning, “Social Media as Masochism”
- Rob Horning, “Significant Flavor”

### ❖ **Unit II: Digital Applications**

### **Week 8 (October 12-October 18): A.I. and Machine Learning**

*Important Week 8 dates:*

- Week 8 podcast posted by October 12
- Midterm assignment due October 15

*Week 8 reading assignments:*

- Pedro Domingos, “A Few Useful Things to Know About Machine Learning;”
- Dan Baum, “There Are Two Kinds of A.I., and the Difference is Important”
- Rodney Brooks, “The Seven Deadly Sins of A.I. Prediction”

### **Week 9 (October 19-October 25): Digital Bias Before and After Automation**

*Important Week 9 dates:*

- Week 9 podcast posted by October 19
- Fourth discussion post due October 25

*Week 9 reading assignments:*

- Ellen Gruber Garvey, “facts and FACTS: Abolitionists’ Database Innovations” (Chapter 5 from “*Raw Data*” is an Oxymoron)
- Safiya Umoja Noble, “Searching for Black Girls”
- Natasha Singer and Cade Metz, “Many Facial-Recognition Systems Are Biased, Says U.S. Study”
- Julia Powles, “The Seductive Diversion of Solving Bias in AI”
- Optional: Amit Katwala, “An Algorithm Determined UK Students Grade; Chaos Ensued”

### **Week 10 (October 26-November 1): Automation and the Future of Work**

*Important Week 10 dates:*

- Week 10 podcast posted by October 26

*Week 10 reading assignments:*

- Olivia Solon, “The rise of ‘Pseudo-AI.’ How Tech Firms Quietly Use Humans to Do Bots’ work”
- Lilly Irani, “Justice For Data Janitors”
- Astra Taylor, “The Automation Charade”

### **Week 11 (November 2-November 8): Workshop on Qualitative and Thematic Coding**

*Important Week 11 dates:*

Week 11 podcast posted by November 2

- Fifth discussion post due November 8

*Week 11 reading/viewing assignments:*

- CESSDA training, “Qualitative coding”
- Video: Daniel Turner, Beginner’s guide to coding qualitative data

### **Week 12 (November 9-November 15): Smart Buildings and Smart Cities**

*Important Week 12 dates:*

- Week 12 podcast posted by November 9
- Quiz on November 11

*Week 12 reading/viewing assignments:*

- Sophie Taysom, “Smart Buildings and Data Risks”
- Jordan Frith, “Big Data, Technical Communication, and Smart Cities”
- Virginia Tech News, “Making Buildings Smarter, Starting with Goodwin Hall”

### **Week 13 (November 16-November 22): Blockchain and “Web 3.0”**

*Important Week 13 dates:*

- Week 13 podcast posted by November 16
- Final paper abstracts due to your peer-review partner by November 16
- Group project due November 20

*Reading assignment:*

- Kevin Doubleday, “Why Blockchain Immutability Matters”
- Marco Iasinti and Karim R. Lakhani, “The Truth About Blockchain”
- Browse through the documentation at [www.ipfs.io](http://www.ipfs.io)

### **❖ Conclusions**

### **Week 14 (November 23-November 29)**

Thanksgiving break; no podcast this week. Note that after this point there will be no more reading and viewing assignments. You are expected to work on your final project.

### **Week 15 and after (November 30-December 12)**

*Important week 15 dates:*

- Week 15 podcast posted by November 30
- Return feedback on final paper abstracts to your peer-review partner November 30
- Final assignment due December 12