ENGL290: Introduction to Digital Studies

Instructor: Jeffrey Moro

Course time and location: MWF 12 PM to 12:50 PM; HBK1112

Office hours: W 2 PM to 3 PM and by appointment; Tawes 2222

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Online syllabus: https://jeffreymoro.com/teaching/umd/engl290/

Description

"Digital studies" names a range of interdisciplinary approaches to the critical and creative study of digital media. This course is your introduction to this diverse and rapidly shifting field. Our overall goal is to develop a critical vocabulary for the analysis of digital objects and cultures, from computer code, to video games, to social media, to electronic waste, and more. We'll engage digital media from historical, aesthetic, technical, and political perspectives, with a particular eye toward how digital technologies increasingly shape most every aspect of contemporary life. To do so, we apply many of the traditional analytical tools of the humanities and social sciences, particularly literary and media studies, as well as creative and technical practices of tinkering, making, and design. If the various interests and approaches under the rubric of "digital studies" have a shared method, it's that *doing things* is key to *knowing things*.

This is a wide-ranging class designed to provide many different points of entry into digital studies. To this end, I've organized this course around thirteen keywords: digital, code, infrastructure, network, memory, physical, interface, speculation, manufacture, play, glitch, labor, and waste. Each week we'll dive into a specific keyword, all the while staying sensitive to the connections we can map across them.

This is not a "learn to code" class; you don't need to know anything about computer science. When we do get our hands dirty, it will be in the service of experimentation and critical play. Your assignments will reflect this experimental approach as well. You'll do "traditional" academic writing, but also create objects, craft artist's statements, give presentations, and participate in regular "labs," during which you'll work hands-on with digital media technologies.

Aims

By the end of the semester, it's my hope that you will:

- Develop a vocabulary for analyzing the technical and cultural mechanisms of digital media, and situate these mechanisms within broader projects of power, politics, and cultural production.
- Engage interdisciplinary modes of thinking suitable to a digital studies program, including formal analysis, aesthetic critique, site-specific research, and critical design.
- Develop facility with a range of digital tools, both as means for doing research and as objects of critique in their own right.

• Understand the collaborative processes that underpin digital studies scholarship and apply these findings to the development of potential projects of your own.

Materials

The vast majority of class readings are freely available on the internet or posted as PDFs to the course ELMS site. There are three books that you should plan to purchase from the quality bookseller of your choice:

- Ingrid Burrington, *Networks of New York: An Illustrated Field Guide to Urban Internet Infrastructure*. ISBN: 978-1-61219-542-1.
- Tim Maughan, *Infinite Detail: A Novel.* ISBN: 978-0374175412.
- J.R. Carpenter, *The Gathering Cloud.* ISBN: 978-1-910010-15-0. [NB: I recommend buying directly from the UK publisher for a substantially lower rate than, say, Amazon.]

You should also have a working laptop running one of the following operating systems.

- Windows 10
- macOS 10.12 "Sierra" or any higher version
- Ubuntu 16.04 or higher (most major Linux distributions are acceptable)

Note that relying solely a tablet or Chromebook will make some in-class labs challenging. If you don't have a laptop available, I recommend <u>checking one out from McKeldin Library</u>. If none of these options suffice, please come speak with me before rushing out to buy an expensive laptop.

Here is also an incomplete list of the programs that you should plan to install over the course of this class. Note that you *should not pay for any of these programs*. Many do have options to pay but also have free demo modes that will suffice for our class. Not all are available for all platforms. I'll flag in class the ones that are most imperative for you to download.

- <u>Firefox</u> or <u>Google Chrome</u> (all platforms)
- Microsoft Word (Windows/macOS) or <u>LibreOffice</u> (Linux). Word is available for free through the <u>Terpware</u> portal.
- Atom (all platforms). (Any text editor is acceptable if you already use one regularly.)
- If on Windows, the Windows Subsystem for Linux
- Little Snitch (macOS only)
- Nestopia (all platforms)
- Cura (all platforms)
- Vinesauce ROM Corrupter (Windows)
- Twine (all platforms)
- Sign up for Twitter.

Should you choose to 3D print for the Object Lesson assignment, you may have to budget \$10 to \$15 for associated equipment costs.

Assignments

Here's the overall breakdown:

• Participation: 10%

• Lab report #1: 10% [due before 3/15/18]

• Lab report #2: 10% [due before 4/26/18]

• Short Essay: 20% [due either on 3/8/2018 or 4/19/18; your choice]

• Object Lesson: 20% [same deadline scheme as the Short Essay]

• Lightning Talk: 5% [delivered the week of 5/6/18]

• Final Portfolio: 25% [due 5/13/18]

A Note on Deadlines and Submission Protocols

As we're all coming to this class with different interests, backgrounds, and facilities; and as everyone's semester follows different rhythms of business and calm; and as I want you to take ownership over the work for this class, I have designed the assignments with flexible deadlines so that you can decide which assignments you want to tackle and when.

You will complete **two** Lab Reports throughout the semester, described below. You should turn the first Lab Report in anytime before Friday 15 March (i.e., before Spring Break), and the second anytime before Friday 26 April.

The two main assignments of the course are a Short Essay and an Object Lesson, also described below. You have the option of choosing which one you'd like to do first in the semester, to be due on Friday 8 March, and which you'd like to do second, to be due on Friday 19 April. **You will complete both assignments**—you won't do two Object Lessons and no Short Essay, for instance—but you choose the order.

Assignments are due at 11:59 PM the listed days. I'll reduce the grade one plus/minus grade level each day that it's turned in late (A becomes an A-; B- becomes a C+; and so forth). I won't accept assignments turned in more than a week late. If you have an extenuating circumstance that's making it difficult for you to reach a deadline, please write me, ideally well in advance, so we can discuss alternatives.

You should submit assignments through ELMS in a .docx file format. I will not accept: Apple Pages files, PDFs, or links to Google Docs. I'm stringent about file formats because I use track changes to give you comments, and Microsoft Word doesn't play nice with all other formats and programs. For assignments that are non-textual or cannot be mediated digitally (i.e., parts of the Object Lesson assignment), contact me about alternate methods for submission.

Finally, please use MLA formatting for all assignments. The <u>Purdue OWL</u> is a great resource if you need to brush up on this citation format.

Participation

The litmus test for participation is simple: do you come to class prepared and engaged? And when you contribute to the class in any medium, be it speech or text, do you do so in the spirit of collegiality, respect, and mutual betterment?

Note that "class participation" doesn't mean always raising your hand at opportune moments. Indeed, dominating a class conversation can be the precise opposite of effective and respectful participation. As such, I take a wide view of "participation" to include the thoughtfulness of your contributions to the class as a whole.

Attendance is crucial to your ability to participate in the class. Not only do we all need to be present in order to learn together, many if not all of the crucial concepts build off each other, meaning that missed classes compound on each other. Attending lab days are particularly crucial given their importance to your Lab Report assignments. If you have a particularly nasty commute that causes you to be regularly late for class, please talk to me ASAP so we can work something out.

Lab Reports

(with thanks to and modifications from <u>Jim Brown</u>)

Twice a semester you will submit a Lab Report drawn from your hands-on experience in one of our in-class labs. You will augment your in-class work with further outside exploration in the skill/tool/topic of your choice; for example, if you're writing a Lab Report about our experience in the BookLab in Tawes Hall, you should return to the BookLab to learn more about it and the skills we explored there. Or if you're writing a Report about video game emulation, you should continue to tinker with and explore different emulation platforms.

Each Lab Report has three parts:

- 1. *Initial Questions*. [No word limit.] List the initial questions you have about the tool you're investigating. What are you most interested in? What do you want to learn? You should also ask how the tool fits into the broader conversations we're having in the class, either as a means of doing research or as an object of study in itself.
- 2. Lab Narrative. [300 word maximum.] Give yourself a task with the tool, with the aim of answering your questions above. You should approach this task with the demeanor of an extremely sincere toddler. How does the tool work? What can you do with it, even if only in an hour or so of playing around? What did you try to do? What worked? What didn't? What strategies did you use to investigate this tool or object?
- 3. *Conclusions*. [300 word maximum.] Describe a potential project that would use this tool, either as a means to research or an object of study. You don't have to actually complete the project, just describe it as specifically as possible. It should connect back to the play you describe in the Lab Narrative section.

Short Essay

Write a short essay (c. 1500 words) that puts one critical perspective we've discussed in class in conversation with a critical or creative source either within or beyond the class.

I want this assignment to be maximally flexible to your interests, while also giving you a chance to practice the kinds of critical writing about digital media that we'll read throughout the semester. You might apply infrastructural or media archaeological study to a particular technical object; you might do a critical reading of a web series, video game, Twitter bot, or other kind of born-digital source; you might close read computationally generated poetry—the choice is yours. The key is that you are practicing critical analysis through the medium of academic writing.

You should be in touch with me a few weeks before you plan to submit the paper to discuss your approach and sources.

Object Lesson

Create an object that does some kind of critical work in digital studies, and write a short (c. 500 words) artist's statement to accompany the object.

One of the major themes in this course is that *doing* and *making* are forms of knowledge production. To that end, this assignment asks you to get your hands dirty and create some kind of physical or virtual object that performs critical work in digital studies. What might such an object entail? We'll discuss this at length in class, but you might create: a 3D-printed object that analyzes its own material creation; a piece of digital literature; a series of glitched images; data visualizations of your internet usage; or many other things inspired by the objects we analyze in class. I recommend using one of the technologies that we experiment with in class, but I'm open to alternatives for those coming in with different skill levels.

This is as much a creative project as it is a critical one. However, I'm not assessing this assignment on whether you're a good artist or technically facile. Broken prototypes can be just as useful as operating objects. What helps them be useful is the artist's statement that accompanies them: a short written component that discusses what you attempted to do and how successful you were in doing it. We'll discuss more about what makes an effective artist's statement in class.

Just as for the Short Essay, you should be in touch with me a few weeks before you plan to submit your object to discuss your approach and any support you need.

Lightning Talk and Final Portfolio

The "final exam" for this course is a portfolio of three short assignments designed to adapt and expand upon work you've done previous in the class. They are:

1. A lightning talk (five minutes maximum), delivered the penultimate week of class, adapted from either your Short Essay or your Object Lesson. The goal here is to practice presenting your work to an audience of your peers. In your portfolio, you'll include a cleaned-up and revised script of your talk, c. 500 words.

- 2. **A project proposal** (c. 750 words), which should expand upon one of your Lab Reports. Here, you're practicing developing models for future work. Note that your project should be *achievable within the reasonable limits of your subject position*: you shouldn't propose something that requires massive amount of time or capital investment, but rather that you might do with a few months of concentrated work, or across another semester of this class.
- 3. **A self-reflection** (c. 500 words), wherein you return to your initial letter of interest that you wrote to me in the second week of class. We'll talk about effective tactics for writing self-reflections in class.

Various Policies Suitable to the Printed Version

Unless otherwise stated, this course operates according to all University of Maryland Course Related policies as detailed here: https://www.ugst.umd.edu/courserelatedpolicies.html. It is your responsibility to familiarize yourself with these policies and to ask me if you have a question about any of them or how they apply to this course.

Diversity

UMD English considers the diversity of its students, faculty, and staff to be critical to its educational mission and expects every member of the community to contribute to an inclusive and respectful culture in the classroom, work environment, and at campus events. It is my intent that students from diverse backgrounds, perspectives, and learning needs be well served by this course and that the diversity students bring to class be viewed as a resource and strength. Dimensions of diversity include intersections of sex, race, age, national origin, ethnicity, gender identity or expression, sexual orientation, intellectual and physical ability, primary language, faith and non-faith perspectives, income, political affiliation, marital or family status, education, and any other legally protected class. I endeavor to present materials and activities that foster a positive learning environment based on open communication, mutual respect, and non-discrimination. Please let me know of ways to improve the effectiveness of the course for you personally or other students or student groups.

Academic Integrity

The University is one of a small number of universities with a student-administered Code of Academic Integrity and an Honor Pledge. The Code prohibits students from cheating on exams, plagiarizing papers, submitting the same paper for credit in two courses without authorization, buying papers, submitting fraudulent documents, and forging signatures. All students in this class are expected to abide by the terms of this code at all times and are assumed to be operating under its strictures. More information is available here: http://www.shc.umd.edu/SHC/Default.aspx.

Religious Observances

In accordance with university policy, you will not be penalized for participation in religious observances during this class. Please contact me as early as possible to let me know of intended absences or necessary accommodations.

Disabilities

Similarly, I'm legally obligated (and happy to provide) any necessary accommodations to students with documented disabilities. Please speak with me at the beginning of the semester if you need any accommodations, and make sure as well to register with the university's counseling services as necessary: https://www.counseling.umd.edu/ads/.

ELMS

This course is listed on ELMS, although we will not use the vast majority of its features. Instead, I will use ELMS primarily as a clearinghouse for class readings, to make class announcements, and to receive assignments. Please make sure you have a current email address on record and that you are able to receive ELMS messages.

Office Hours and Email Policies

I keep regular office hours at the time and location listed at the outset of this syllabus. I am happy to make appointments outside these listed office hours. If you'd like to meet with me, please send me an email at least twenty-four hours in advance; I will not be able to make appointments same-day. I will respond to all emails during working hours and within forty-eight hours of receipt. Please don't write to follow up before then; however, if you haven't received an email from me within two days, send me a ping to remind me.

If You Are Having Trouble in This Class, Please Come Talk to Me

Much of these boilerplate policies boils down to one principle: I want you to succeed in this class, and I want to make sure you have access to the tools and resources you need to do so. In the past few years, instructors have become more aware of the "hidden curriculum" of college—who feels comfortable asking for an extension, whose voice in the classroom gets coded as "useful participation" or "disruption," or who feels uncomfortable letting their professor know that they have to choose between books and food. It's my hope that you'll find this class rigorous and challenging; it's also my hope that you'll reach out to me when you're struggling.

Schedule

Each week follows the same rough model: we'll introduce a concept on the first day with a creative or critical reading/object, then do a Lab that illustrates those concepts, and then come back together at the week's end to situate that Lab work within a broader critical backdrop.

All readings not directly linked are available on ELMS, with the exception of the three books for purchase.

Week 1: Digital

Mon 28 Jan

• Introduction to the class.

Wed 30 Ian

• Read: The syllabus

Fri 1 Feb

- *Read*: N. Katherine Hayles, "Print is Flat, Code is Deep: The Importance of Media-Specific Analysis"
- Browse: Kate Crawford and Vladen Joler, <u>"Anatomy of an AI System"</u>

Week 2: Code

Mon 4 Feb

• Read: Paul Ford, "What is Code?"

Wed 6 Feb

- *Lab*: Basic Coding and Procedurally Generated Poetry
- *Read*: Nick Montfort, Chapter 1 in *Exploratory Programming for the Arts and Humanities*. [Chapters 2 and 5 will also inform some of our work in class; the chapters are quite short, so feel free to skim.]

Fri 8 Feb

- *Read*: Selections from Nick Montfort, #! (pronounced "Shebang"); Montfort (and many others), "Taroko Gorge" and its remixes
- *Deadline*: Email me your letter of interest.

Week 3: Infrastructure

Mon 11 Feb

• Read: Ingrid Burrington, Networks of New York

Wed 13 Feb

- *Lab*: Infrastructure Scavenger Hunt
- Read: Ingrid Burrington, Networks of New York

Fri 15 Feb

- Browse: Nicole Starosielski et al., Surfacing
- *OPTIONAL*: Susan Leigh Star, "The Ethnography of Infrastructure"

Week 4: Network

Mon 18 Feb

• Read: Tung-Hui Hu, "The Shape of the Network" from A Prehistory of the Cloud

Wed 20 Feb

- Lab: Making Your Own Twitter Bot with Cheap Bots Done Quick
- *Read*: Mark Sample, <u>"A protest bot is a bot so specific you can't mistake it for bullshit"</u>; Selected Twitter bots:
 - O Darius Kazemi, @SortingBot + read his how-to notes
 - O Allison Parrish, <a>@the ephemerides + read her <a>notes
 - o Everest Pipkin, @Abolish_ICE_Now

Fri 22 Feb

 Read: Helga Tawil-Souri, "Cellular Borders: Dis/Connecting Phone Calls in Israel-Palestine" in Signal Traffic: Critical Studies of Media Infrastructures, edited by Lisa Parks and Nicole Starosielski

Week 5: *Memory*

Mon 25 Feb

• Read: Vannevar Bush, "As We May Think"

Wed 27 Feb

- Read: Warren Sack, "Memory" in Software Studies
- *Browse*: "One Terabyte of Kilobyte Age," a curation project by Olia Lialina and Dragan Espenschied, with accompanying Tumblr site

Fri 1 March

- *Lab*: Emulation and Preservation
- Browse: NESDev Wiki; Internet Archive's Wayback Machine; FEMICOM

Week 6: Physical

Mon 4 March

• Read: Matthew Kirschenbaum, Selections from "Every Contact Leaves a Trace," Mechanisms: New Media and the Forensic Imagination

Wed 6 March

- Lab: Media Archaeology in the Maryland Institute for Technology in the Humanities
- Read: Jussi Parikka and Garnet Hertz, "Zombie Media"

Fri 8 March

- Read: Mierle Laderman Ukeles, "Manifesto for Maintenance Art"; Shannon Mattern, "Maintenance and Care"
- *Deadline*: Short Essay or Object Lesson due.

Week 7: Interface

Mon 11 March

• *Read*: Florian Cramer and Matthew Fuller, "Interface" in *Software Studies*; John Hermann, "Internet, Why So Blue?"

Wed 13 March

- Lab: Virtual/Physical Interfaces in BookLab, Tawes Hall
- Read: Kari Kraus et al., "Bibliocircuitry and the Design of the Alien Everyday"

Fri 15 March

- Read: Selections from David Parisi, Archaeologies of Touch
- *Deadline*: Lab Report #1 due.

Week 8: Spring Break

No meetings. I suggest reading the first half of *Infinite Detail*.

Week 9: Speculation

Mon 25 March

• Read: Tim Maughan, Infinite Detail

Wed 27 March

• Read: Infinite Detail

Fri 29 March

• Read: Infinite Detail

Week 10: Manufacture

Mon 1 April

• Read: Lisa Nakamura, "Indigenous Circuits: Navajo Women and the Racialization of Early Electronic Manufacture"

Wed 3 April

• *Lab*: 3D Printing in the McKeldin Makerspace

Fri 5 April

• *Read*: Shirin Vossoughi et al., "Making Through the Lens of Culture and Power: Toward Transformative Visions for Educational Equity"

Week 11: Play

Mon 8 April

- Play: Nintendo, Super Mario Bros
- Read: Nathan Altice, "Platforming," I AM ERROR

Wed 10 April

- *Lab*: Prototyping with Twine
- Play: Tom McHenry, <u>Horse Master</u>, the Game of Horse Mastery

Fri 12 April

- *Play*: Nintendo, *The Legend of Zelda* [Toy around with it for fifteen minutes or so to get a sense of the lay of its land.]; Patrick LeMieux and Stephanie Boluk, *Triforce*
- Read: Selections from Patrick LeMieux and Stephanie Boluk, Metagaming

Week 12: Glitch

Mon 15 April

- Replay: Nintendo, Super Mario Bros. Attempt to reach Minus World
- Watch: Cory Arcangel and Paper Rad, Super Mario Movie
- Read: Rosa Menkman, "Glitch Studies Manifesto"

Wed 17 April

- Lab: DIY Glitch Art
- Watch: Marisa Parham, "Black Glitch in the Hour of Chaos"

Fri 19 April

- *Watch*: Selected Let's Play and speedrun videos:
 - o Jason Schreier, "Watch Pokémon Red/Blue Get Destroyed In Just 21 Minutes"
 - o SethBling, "SNES Code Injection Flappy Bird in SMW"

- o Rachel Simone Weil's <u>keynote</u> at R-CADE 2017. [It's fairly long so feel free to skim through.]
- *Deadline*: Short Essay or Object Lesson due.

Week 13: Labor

Mon 22 April

• *Read*: Lisa Nakamura, "Don't Hate the Player, Hate the Game: The Racialization of Labor in World of Warcraft" from *Digital Labor*, edited by Trebor Scholz.

Wed 24 April

No formal class; individual meetings with me about your presentation and portfolio.

Fri 26 April

- Read: Sarah Roberts, "Social Media's Silent Filter"
- *Deadline*: Lab Report #2 due.

Week 14: Waste

Mon 29 April

• Read: J.R. Carpenter, The Gathering Cloud

Wed 1 May

• Read: J.R. Carpenter, The Gathering Cloud

Fri 3 May

• Read: J.R. Carpenter, The Gathering Cloud's online edition

Week 15: Presentations

No readings; we'll have a gauntlet of lightning talks instead.

Week 16: Finals

We'll hold the ostensible last day of class, Monday 5/13, for any overflow that we might have from the presentations. Your final portfolios are also due this day. No matter what we choose to use the class for, there will be food.

Acknowledgements

Despite my name being up there as instructor of record, this class would not have been possible without support and input from too many people to name. I am indebted first and foremost to Kyle Bickoff, Setsuko Yokoyama, and Andy Yeh, with whom I developed the initial template of what is now ENGL290 at UMD. Matthew Kirschenbaum and Christina Walter provided valuable guidance through that process. Every teacher inherits the proclivities and activities of those who taught them,

and I am particularly guilty of stealing wholesale from Andrew Johnston, Matthew Kirschenbaum, Kari Kraus, Marisa Parham, and Timothy Van Compernolle.

Thanks as well to those scholars on Twitter, whether those I know or those I don't, who generously share their syllabi and teaching materials, both for content and new approaches to teaching itself. Jim Brown, Alan Liu, Shannon Mattern, Miriam Posner, and Jentery Sayers have been particularly generous in this regard, and our scholarly community benefits immeasurably as a consequence.