Course description
Examines theory and practice of using computational methods in the emerging field of digital humanities. Develops an understanding of key digital humanities concepts such as data representation, digital archives, information visualization, and user interaction through the study of contemporary research in conjunction with working on real-world projects for scholarly, educational, and public needs. Students create prototypes, write design papers, and conduct user studies. Some programming and design experience is helpful but not required. Students taking graduate version complete additional assignments.
Learning Objectives

- Demonstrating, through presentations, discussions, texts, and project work an understanding of core Digital Humanities concepts;
- Engaging with complex humanities ideas, connecting them to computational approaches, and developing critical thinking across media;
- Developing basic design thinking concepts, engaging in collaborative planning, design, and project development processes;
- Learning how to critically analyze humanities content and data, and how to select appropriate computational methods, approaches, and tools in light of different use cases and audiences;
- Leaning how to use a core set of Digital Humanities tools on humanities data.

Format and Requirements

This class will consist of reading discussions, demonstrations of tools and techniques, and hands-on project work. Occasionally, we will hear from guest speakers who work in museums, libraries, and research settings. Students are expected to comment on weekly readings on the class’ Github site (two paragraphs minimum) and actively participate in class discussions on these readings. Rather than a summary of the readings, students are encouraged to focus on agreeing or disagreeing with key themes or assertions that they find provoking and would like to discuss in class, and pose questions that the class can discuss, including the use of examples, e.g. through web links to support their arguments. Occasionally, students will be asked to annotate readings using the tool Annotation Studio (http://app.annotation.studio). Before coming into class, everyone should read and think about the other students’ comments and questions in preparation for the class discussion. Taking turns, students will lead the weekly reading discussions by addressing the questions raised and discuss them in light of the online comments by fellow students.

Small teams will be formed to work on a range of smaller projects in the first half of the semester. The second half of the semester will focus on developing the final small group project which will be selected mid-semester and will have to be completed by the end of the term. The final project will consist of a working digital prototype and a 15-page design paper.

Grades will be based on the following criteria:

- Final project (40%), including design paper and digital prototype
- Short projects (20%)
- Reading comments (25%)
- Class participation (15%)

Attendance and Participation

Class attendance and participation are required. Participation in class discussion is important because it allows you to explore the texts and themes collaboratively, and in the process, discover meanings and issues that you probably would not discover on your own. Participation in class also challenges you to continuously question, refine and articulate your own ideas and interpretations. You are expected to complete assignments before class (post your reading comments, project updates, etc. typically by
10:00 AM on Mondays and Wednesdays, exceptions will be announced). Active participation is required and the effect on your grade will be determined by how often you engage in class discussion and how carefully you have read and thought about the assigned readings. Unexcused absences and habitual tardiness will affect your grade. Please email me in advance if you need to miss class due to illness or family emergency. There will be no final exam in the class.

Avoid plagiarizing. Plagiarism is the use of another’s intellectual work without acknowledgment. Full acknowledgment for all information obtained from sources outside the classroom must be clearly stated in all written work submitted. All ideas, arguments, and direct phrasings taken from someone else’s work must be identified and properly footnoted. Use quotation marks to identify all sources of wording that are not yours. Identify sources of ideas with appropriate footnoting. Plagiarism receives an F in the subject, the instructor is required to forward the case to the Committee on Discipline. See http://cmsw.mit.edu/writing-and-communication-center/avoiding-plagiarism/ for more information.

The WCC at MIT (Writing and Communication Center) offers free one-on-one professional advice from communication experts with advanced degrees and publishing experience. The WCC can help you further develop your oral communication skills and learn about all types of academic, creative, and professional writing. The WCC helps you think your way more deeply into your topic, no matter what department or discipline you are in. You can learn more about the WCC consultations at http://cmsw.mit.edu/writing-and-communication-center and register with the online scheduler to make appointments through https://mit.mywconline.com. Please note that the WCC hours are offered Monday-Friday, 9:00 a.m.-6:00 p.m., and fill up fast.
Class schedule (preliminary)
(Note: This is a preliminary syllabus; fine-tuning and changes in schedule or readings may occur. You will be notified if major changes need to be made.)

<table>
<thead>
<tr>
<th>Date</th>
<th>Topics</th>
<th>Readings/Assignments</th>
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<tbody>
<tr>
<td><strong>Week 1</strong></td>
<td><strong>September 7</strong></td>
<td><strong>Introduction to Digital Humanities Part 1:</strong> Sample DH projects</td>
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<td><strong>Assignments:</strong></td>
<td><strong>In-class activity</strong></td>
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<td><strong>See in-class announcement</strong></td>
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<td><strong>Week 2</strong></td>
<td><strong>September 12</strong></td>
<td><strong>Introduction to Digital Humanities Part 2:</strong> From Humanities content to data</td>
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<td><strong>Assignments:</strong></td>
<td><strong>Readings:</strong></td>
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<td>• Read &quot;A Short Guide to the Digital_Humanities (p.121-125) in Digital_Humanities (text on Canvas)</td>
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<td>• Check out three digital facsimiles for imaginary project (see assignment on Canvas)</td>
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<tr>
<td>September 14</td>
<td><strong>From content to data:</strong> Data concepts &amp; humanities data</td>
<td><strong>Assignments:</strong></td>
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<td>• Annotate Vannevar Bush, “As We May Think” in Annotation Studio (<a href="https://app.annotation.studio">https://app.annotation.studio</a>)</td>
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<td>Group project: Imaginary project (see instructions)</td>
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<td><strong>Week 3</strong></td>
<td><strong>September 19</strong></td>
<td><strong>Digital Transformations:</strong> Project Presentation</td>
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<td><strong>Explore the Comédie-Française Registers project (cfregisters.org)</strong></td>
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<td>• Read Digital_Humanities, chapter 1 (pp. 3-26)</td>
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<td><strong>U read:</strong> pp. 3-16; <strong>G: read in addition: pp. 16-26</strong></td>
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<td><strong>Week 4</strong></td>
<td><strong>September 26</strong></td>
<td><strong>Data in the Humanities</strong> Introduction to Final Projects</td>
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<td><strong>Readings:</strong></td>
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<td>• Johanna Drucker: Data as Capta, Los Angeles, 2010 (text on Canvas)</td>
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<td><strong>U Read: HUMANITIES APPROACHES TO GRAPHICAL DISPLAY (5 Pages)</strong></td>
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<td><strong>G Read rest of Drucker text</strong></td>
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<td>Date</td>
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<td>Activities</td>
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<td>September 28</td>
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<td><strong>Data mining of open content I:</strong> Working with APIs</td>
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<td>Final Project Pitches</td>
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<td>Week 5</td>
<td>October 3</td>
<td><strong>Data mining of open content I:</strong> Working with APIs</td>
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<td><strong>Guest Lecture:</strong> David Nuñes, Technical Director, MIT-Museum</td>
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<td>October 5</td>
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<td><strong>Data mining of open content II:</strong> Defining Final Projects, Group formation</td>
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<td>Week 6</td>
<td>October 10</td>
<td><strong>Indigenous Peoples Day</strong> (formerly: Columbus Day)</td>
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<td>October 12</td>
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<td><strong>Data mining of open content III:</strong> Data Scraping</td>
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<td>Final Project Presentations I</td>
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<td>Week 7</td>
<td>October 17</td>
<td><strong>Mapping Time – Data Visualization I:</strong> Representation of time</td>
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<td>Final Project Presentations II (Revisions)</td>
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<td>October 19</td>
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<td><strong>Mapping Time – Data Visualization I:</strong></td>
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<td>Week 8</td>
<td>October 24</td>
<td>Mapping Space – Data Visualization II:</td>
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<td>Mapping Literature and other spatial data</td>
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<tr>
<th>October 26</th>
<th>Mapping Space – Data Visualization II:</th>
<th>Tools:</th>
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<tr>
<td></td>
<td>Mapping Literature and other spatial data</td>
<td>• Carto</td>
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<td>• Google Maps/Earth Pro</td>
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<td>• Mapbox, TileMill, StoryMap, Neatline, Leaflet, etc.</td>
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<tr>
<th>Week 9</th>
<th>October 31</th>
<th>Data Visualization III:</th>
<th>Readings:</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Network Graphs and other visualization techniques</td>
<td>• Dario Rodighiero: <em>Mapping Affinities in Academic Institutions</em>, 2018, frontiers (text on Canvas)</td>
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<td></td>
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<td>Guest Lecture: TBD</td>
<td>• Edward Tuft: <em>Envisioning Information</em>, Chapter: Color and Information, 1990, pp. 81-96 (text on Canvas)</td>
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<td>• G: Johanna Drucker, excerpts from <em>Graphesis. Visual Forms of Knowledge Production</em> (text on Canvas)</td>
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<tr>
<th>November 2</th>
<th>Data Visualization III:</th>
<th>Reading:</th>
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<tr>
<td></td>
<td>Visualization Techniques &amp; Tools</td>
<td>Excerpts from „W.E.B. Du Bois’s Data Portraits - Visualizing Black America (text on Canvas)</td>
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<td>Tools:</td>
<td>Tableau: <a href="https://www.tableau.com/academic/students">https://www.tableau.com/academic/students</a></td>
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<td>Gephy:</td>
<td><a href="https://gephi.org/">https://gephi.org/</a></td>
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<tr>
<th>Week 10</th>
<th>November 7</th>
<th>Text as Data I</th>
<th>Readings:</th>
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<tbody>
<tr>
<td></td>
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<td>• Marti Hearst: <em>Untangling Text Data Mining</em> (1999)</td>
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<td>Assignment: Work with text analysis tools and digital texts (see assignment)</td>
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### November 9
**Text as Data II**

**Tools:**
- Stanford Named Entity Recognizer (NER)
- Voyant Tools, AntConc
- JSTOR Lab Tools

### Week 11
**November 14**
**Text as Data III**
Text and Reading
Encoding texts in TEI

**Guest Lecture:** Nick Laicona (TBD)

**Readings:**

### November 16
**Final Projects:**
First presentation of Design Sketches, initial technology implementations

**Readings:**
- Katja Tschimmel: *Design thinking as an effective toolkit for innovation* (2012) (text on Canvas)
- Matt Kirschenbaum, *So the Colors Cover the Wires*: Interface, Aesthetics, and Usability

### Week 12
**November 21**
**Design Thinking Approaches to Project Development**

**Design process:**
Prototyping and wireframing

**Readings:**
- Johanna Drucker, *Performative Materiality and Theoretical Approaches to Interface*, 2013
  - Human-centered Design Toolkit, “Hear,” pp. 29-68

**Assignment:**
- Prepare presentation of digital prototype

### November 23
**Data, Archives, Society**
Archiving Fandom

**Readings:**

### Week 13
**November 28**
**Final Projects:**
Presentation of updated Design Sketches, revised technology implementations

**Assignment:**
Short write-up of project progress, prepare brief in-class presentation
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<tr>
<th>Date</th>
<th>Event</th>
<th>Details</th>
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<tbody>
<tr>
<td>Week 14,</td>
<td>Final Projects:</td>
<td>Assignment: Written summary of project progress, work on Digital Prototype</td>
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<tr>
<td>December 5</td>
<td>Final Projects:</td>
<td>Assignment: Work on Digital Prototype</td>
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<tr>
<td>December 7</td>
<td>Final Projects</td>
<td>Assignment: Draft of final paper</td>
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<tr>
<td>Week 15,</td>
<td>Final project Presentation</td>
<td>Assignment: Final project Presentation and Design Document due</td>
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<td>December 12</td>
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<td>December 14</td>
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