

ENGL 64.05: Cultural Analytics

Dartmouth College

'19F

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Office Location & Hours: Room 216, 37 Dewey Field Road, Thurs. 1:30 - 3:30 p.m.

COURSE DESCRIPTION:

Cultural Analytics is an introductory course and assumes no prior knowledge of literary studies, critical approaches, statistics, or data analysis. This course provides an overview of emergent quantitative methods and theories used by humanists to study data in text and text as data. As we examine these objects, we'll ask questions about the differences, in terms of methodology and interpretive practices, between the social sciences and the humanities. In developing answers to these questions, we will explore recent quantitative methods alongside traditional methods of humanistic inquiry. The goal of the course is to enable students to evaluate data, methods, and interpretations produced from quantitative research in the humanities and to conduct their own research.

REQUIRED TEXTS:

James E. Dobson, *Critical Digital Humanities: The Search for a Methodology*, Univ. of Illinois Press, 2019.
ISBN: 978-0-252-08404-1

ASSIGNMENTS AND ASSESSMENTS

1. Participation (5%)
2. Homework (10%)
3. Major Assignment #1 (40%)
 - (a) Midterm major project that involves the reproduction of one of the products of digital humanities research covered in course readings. Project may use slightly different archive, if not available, but makes every attempt to reproduce results using similar methods. (50%)
 - (b) Critical paper describing methods used with a critique of the original project. (50%)
4. Major Assignment #2 (45%)
 - (a) Final project (individual or small group) that takes original inquiry question and applies statistical methods to a textual archive. (40%)
 - (b) Critical paper describing methods used and positioning argument in a critical conversation within cultural analytics/digital humanities. Must contain a critique of methods and data. (40%)
 - (c) Presentation of Research in a Poster Session: public display of the visually formatted methods and results of original research. (20%)

LEARNING OUTCOMES

By the end of the term, students will be able to

1. Understand the ways in which data are collected, framed, and presented.
2. Critique the use of data and computational methods in humanities research.
3. Apply basic concepts from statistical and probability theory to humanities data and questions.
4. Design and develop questions used to collect evidence and interpret these questions and data.
5. Analyze, visualize, and present humanities data using field conventions.
6. Work with others to analyze cultural objects.

COURSE POLICIES:

Attendance, Participation, and Tardiness: I expect you to come to class ON TIME with any due assignments completed, prepared to participate. You will be allowed 3 absences for illnesses and emergencies. Your final grade, however, will be dropped a third of a letter grade (e.g., B to B-) for each absence after three. Please inform me in advance of special circumstances such as religious holidays, for which there will be no penalties. If you are the victim of an emergency or serious illness, please remain in contact with me by e-mail. Finally, please keep your phone and non-course related computer use to a minimum during class.

Academic Honor Principle: Dartmouth's Academic Honor Principle applies to all the work you submit for this course. Please refresh your memory by reading it over at least once again during the first week of term. Make sure you understand which assignments allow collaborative group work.

Office Hours and E-Mail: Please meet with me during my posted office hours or by appointment to discuss your work or any aspect of the course. As Canvas email might not be the most reliable method of communication, please use my Dartmouth email address. I will attempt to respond to all email in a timely fashion, although it may take up to twenty-four hours for me to respond.

Disabilities: Students with disabilities who may need disability-related academic adjustments and services for this course are encouraged to see me privately as early in the term as possible. Students requiring disability-related academic adjustments and services must consult the Student Accessibility Services office (205 Collis Student Center, 646-9900, Student.Accessibility.Services@Dartmouth.edu). Once SAS has authorized services, students must show the originally signed SAS Services and Consent Form and/or a letter on SAS letterhead to one or both of us. As a first step, if students have questions about whether they qualify to receive academic adjustments and services, they should contact the SAS office. All inquiries and discussions will remain confidential.

Mental Health and Wellness: The academic environment at Dartmouth is challenging, our terms are intensive, and classes are not the only demanding part of your life. There are a number of resources available to you on campus to support your wellness, including your undergraduate dean (<http://www.dartmouth.edu/upperde/>), Counseling and Human Development (<http://www.dartmouth.edu/chd/>), and the Student Wellness Center (<http://www.dartmouth.edu/healthed/>). I encourage you to use these resources to take care of yourself throughout the term, and to come speak to me if you experience any difficulties

DAILY SCHEDULE OF ASSIGNMENTS

The schedule may be subject to revision throughout the course of the term. Any changes will be announced in class and through Canvas/Email.

Week One	Datafication and Critical Approaches to Data
Mon 09/16	Computation and Cultural Analysis Course Introduction
Wed 09/18	The History of Data Daniel Rosenberg, "Data as Word," <i>Historical Studies in the Natural Sciences</i> 48, no. 5 (2018):557–567. Geoffrey C. Bowker and Susan Leigh Star, "Introduction: To Classify Is Human," <i>Sorting Things Out: Classification and Its Consequences</i> . Allen Downey, "Variables, expressions and statements," in <i>Think Python</i> .
Fri 09/20	Problematizing Data Lisa Gitelman and Virginia Jackson, "Introduction," in <i>Raw Data Is an Oxymoron</i> . Laura C. Mandell, "Gendering Digital Literary History: What Counts for Digital Humanities," in <i>A New Companion to Digital Humanities</i> . Allen Downey, "Iterations" and "Strings" in <i>Think Python</i> .
Week Two	Experimental Results, Part I
Mon 09/24	Making Text Data Franco Moretti, "Style, Inc.: Reflections on Seven Thousand Titles (British Novels, 1740-1850)," <i>Critical Inquiry</i> 36, no. 3 (2009): 134 - 158. Allen Downey, "Lists" in <i>Think Python</i> . Jupyter Notebook Lab
Wed 09/25	Stephen Ramsay, "An Algorithmic Criticism" and "Potential Readings," in <i>Reading Machines: Toward an Algorithmic Criticism</i> Allen Downey, "Dictionaries" in <i>Think Python</i> . James E. Dobson, "Protocols, Methods, and Workflows: Digital Ways of Reading," in <i>Critical Digital Humanities: The Search for a Methodology</i>
Fri 09/27	Matthew L. Jockers, "Measures of Lexical Variety" in <i>Text Analysis with R for Students of Literature</i> . Claire Lemercier and Claire Zalc, "Sources and Samples" in <i>Quantitative Methods in the Humanities: An Introduction</i> . HW 1 DUE
Week Three	Measures of Similarity and Probability
Mon 09/30	Patrick Juola and Stephen Ramsay, "Probability and Statistics," in <i>Six Septembers: Mathematics for the Humanist</i> . Optional: Sharon Bertsch McGrayne, in <i>The Theory That Would Not Die</i> .
Wed 10/02	Adrian Mackenzie, "Vectorization and Its Consequences," in <i>Machine Learners</i> Optional: Peter D. Turney and Patrick Pantel, "From Frequency to Meaning: Vector Space Models of Semantics," <i>Journal of Artificial Intelligence</i> 37 (2010): 141-188
Fri 10/04	Matthew L. Jockers, "Influence," in <i>Macroanalysis: Digital Methods and Literary History</i> Andrew Piper, "Fictionality (Sense)," in <i>Enumerations: Data and Literary Study</i> HW 2 DUE

Week Four	Experimental Results, Part II
Mon 10/07	Laura B. McGrath, "Comping White" <i>Los Angeles Review of Books</i> January 21, 2019 Hoyt Long and Richard Jean So, "Literary Pattern Recognition: Modernism between Close Reading and Machine Learning" <i>Critical Inquiry</i> 42, no. 2 (Winter 2016): 235-267.
Wed 10/09	Andrew Piper, "Plot (Lack)," in <i>Enumerations: Data and Literary Study</i> Jack Elliot, "Vocabulary Decay in Category Romance," <i>Digital Scholarship in the Humanities</i> 31, no. 2 (2016): 321-332
Fri 10/11	Jupyter Lab HW 3 DUE
Week Five	Designing Studies
Mon 10/14	Ted Underwood, "Do We Understand the Outlines of Literary History?," in <i>The Curved Horizon of Literary History</i> Video Conference with Ted Underwood Major Assignment #1 DUE
Wed 10/16	danah boyd & Kate Crawford, "Critical Questions for Big Data: Provocations for a Cultural, Technological, and Scholarly Phenomenon," <i>Information, Communication & Society</i> 15, no. 5 (2012): 662-679.
Fri 10/18	Jupyter Lab
Week Six	Topic Models and Other Methods
Mon 10/21	David Blei, "Introduction to Probabilistic Topic Models," <i>Communications of the ACM</i> 55, no. 4 (2012): 77- 84. Matthew Jockers, "Theme," in <i>Macroanalysis</i>
Wed 10/23	Yohei Igarashi, "Statistical Analysis at the Birth of Close Reading," <i>New Literary History</i> 46, no. 3 (2015): 485-504. James E. Dobson, "Can an Algorithm Be Disturbed?" in <i>Critical Digital Humanities</i>
Fri 10/25	Jupyter Lab HW 4 DUE
Week Seven	Sentimental Analysis, Frequency Analysis, Data Smoothing
Mon 10/28	Matthew L. Jockers and Ted Underwood. "Text-Mining the Humanities," in <i>A New Companion to Digital Humanities</i> .
Wed 10/30	Andrew J. Reagan et. al., "The Emotional Arcs of Stories Are Dominated by Six Basic Shapes," <i>EJP Data Science</i> 5, no. 31 (2016). James E. Dobson, "Digital Historicism and the Historicity of Digital Texts," in <i>Critical Digital Humanities</i>
Fri 11/01	Nick Montfort, "Text III," in <i>Exploratory Programming from the Arts and Humanities</i> Jupyter Lab HW 5 DUE

Week Eight	Cultural Critique
Mon 11/04	Cathy O'Neil, "Bomb Parts" and "Ineligible to Serve" in <i>Weapons of Math Destruction</i>
Wed 11/06	Meredith Broussard, "Machine Learning: The DL on ML," in <i>Artificial Unintelligence</i> James E. Dobson, "The Cultural Significance of k-NN," in <i>Critical Digital Humanities: The Search for a Methodology</i>
Fri 11/08	Antoinette Rouvroy, "The End(s) of Critique: Data Behaviourism versus Due Process," in <i>Privacy, Due Process and the Computational Turn: The Philosophy of Law Meets the Philosophy of Technology</i> Benjamin Haber, "The Queer Ontology of Digital Method," <i>WSQ: Women's Studies Quarterly</i> 44, no. 3 (2016): 150–169.
Week Nine	Presentation of Data and Critique
Mon 11/11	Edward Tufte, "Visual and Statistical Thinking: Displays of Evidence for Making Decisions" Lauren Klein and Miriam Posner, "Data as Media," <i>Feminist Media Histories</i> 3, no. 3 (2017): 1-8.
Wed 11/13	Nan Z. Da, "The Computational Case against Computational Literary Studies," <i>Critical Inquiry</i> 45, no. 3 (2019): 601-639. Katherine Bode, "Why You Can't Model Away Bias" <i>Modern Language Quarterly</i> 80, no. 3 (2019)
Fri 11/15	Public Poster Session
Week Ten	Wrapping Up
Mon 11/19	Final Class
Wed 11/27	Major Assignment #2 DUE