Fall 2017 DH Courses

July 19, 2017

Upcoming Courses

Looking for classes to take this fall? Check out a few exciting DH-related courses below!

If you are teaching a course connected to DH and would like it included, please email the DHLab [1].

Introduction to Computing and Programming
CPSC 100 01 (10692)
Benedict Brown
Natalie Melo

Introduction to the intellectual enterprises of computer science and to the art of programming. Students learn how to think algorithmically and solve problems efficiently. Topics include abstraction, algorithms, data structures, encapsulation, resource management, security, software engineering, and web development. Languages include C, Python, SQL, and JavaScript, plus CSS and HTML. Problem sets inspired by real-world domains of biology, cryptography, finance, forensics, and gaming. See CS50's website, https://cs50.yale.edu [2], for additional information.

No previous programming experience required. Open to students of all levels and majors.

Intro to Digital Humanities
AMST 231 01 (13934) /WGSS231
Laura Wexler and Angel Nieves

This course will explore the application of computational methods such as text analysis, mapping, and network analysis to traditional and new forms of inquiry in the humanities. We will consider what methods are best for which forms of inquiry, how to apply those methods, and how new questions arise in the process. The limitations and challenges as well as the promises of digital humanities will be examined. DH Fellow jub Sankofa will assist with this course.

The Long Civil Rights Movement
AFAM 125 01 (10287) /HIST136/AMST125
Crystal Feimster
Political, social, and artistic aspects of the U.S. civil rights movement from the 1920s through the 1980s explored in the context of other organized efforts for social change. Focus on relations between the African American freedom movement and debates about gender, labor, sexuality, and foreign policy. Changing representations of social movements in twentieth-century American culture; the politics of historical analysis. **DH Fellow Amanda Joyce Hall will assist with this course.**

**Literature and Philosophy from Locke to Kant**  
ENGL 729 01 (12519)  
Jonathan Kramnick

This is a class on epistemology, aesthetics, and literary form. We read major works in empiricism and moral philosophy alongside poetry and fiction in several genres. We ask, for example, how do poetry, fiction, and the visual arts recruit and account for perceptual experience or consider material and natural objects? What happens when the empirical psychology of consciousness or the categories of the sublime, beautiful, and picturesque take narrative or poetic form? What sort of ethical models follow from formal or generic decisions? We focus throughout on how these topics have been discussed across the history of literary studies, and we pay close attention to current debates in the field, including those prompted by new formalisms and materialisms, critical race studies, cognitive literary studies, and the digital humanities. Authors include Locke, Behn, Defoe, Pope, Addison, Hume, Burke, Sterne, Smith, Kant, and Wordsworth.

**Documentary Film Workshop**  
FILM 735 01 (12393) /FILM455/AMST832/EVST463/AMST463  
Charles Musser

This workshop in audiovisual scholarship explores ways to present research through the moving image. Students work within a Public Humanities framework to make a documentary that draws on their disciplinary fields of study. Designed to fulfill requirements for the M.A. with a concentration in Public Humanities. **DH Fellow Masha Shpolberg will assist with this course.**

**Computational Tools for Data Science**  
CPSC 262 01 (12345) /S&DS562/AMTH262/S&DS262  
Sahand Negahban

An introduction to computational tools for data science. The analysis of data using regression, classification, clustering, principal component analysis, independent component analysis, dictionary learning, topic modeling, dimension reduction, and network analysis. Optimization by gradient methods and alternating minimization. The application of high performance computing and streaming algorithms to the analysis of large data sets.  
Prerequisites: linear algebra, multivariable calculus, programming.

Prerequisites: after or concurrently with MATH 222, 225, or 231; after or concurrently with MATH 120, 230, or ENAS 151; after or concurrently with CPSC 100, 112, or ENAS 130.

**Programming Musical Applications**  
CPSC 134 01 (10693) /MUSI372  
Scott Petersen

Topics in computer music, including musical representations for computing, automated music analysis and composition, interactive systems, and virtual instrument design. Use of domain-specific programming languages and libraries to explore how the principles of computer science can be applied to music to create new interfaces, instruments, and tools.

Recommended preparation: the ability to read music or play an instrument.

**Quantitative Linguistics using Corpora**  
LING 634 01 (11500) /LING234  
Staff
Introduction to the basics of corpus linguistics. Students learn to compile and process corpora and conduct statistical tests to better understand linguistic patterns and are provided with the background and tools necessary to pursue further research in this area. Digital humanities students from other departments are welcome.

Prerequisite: one entry-level linguistics course (e.g., phonetics, phonology, syntax, and psycholinguistics) or permission of the instructor.

**Quantitative Linguistics using Corpora**

LING 234 01 (11499) /LING634

Staff

Introduction to the basics of corpus linguistics. Students will be able to compile and process text corpora and conduct statistical tests to better understand linguistic patterns and will be provided with the background and tools necessary to pursue further research in this area. Digital humanities students from other departments are welcome.

Prerequisite: entry level linguistics course (e.g. phonetics, phonology, syntax, and psycholinguistics), or with permission of the instructor.

**External link:** [http://web.library.yale.edu/dhlab/fall18courses](http://web.library.yale.edu/dhlab/fall18courses) [3]