Interdisciplinary Studies 2401: Gateway to the Digital Humanities  
Fall 2013

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Class Meetings:  
Mondays & Wednesdays 11:30-12:55 in Beam Classroom, VAC  
Labs Monday 2:30-3:55 in Searles 128 (CS Lab)

Office Hours:  
Thursdays, 1:00-2:00 in Searles 221 (and by appointment)

Course Description

Nearly every day, we read news articles about how big data and computational methods such as mapping and network analysis are changing financial markets, political campaigning, and higher education. Similarly, these transformations are happening in the study of the humanities, offering new ways to think about literature, art, history, and other humanities subjects. In this course, we will explore the possibilities, limitations, and implications of using computation to study the humanities. What sorts of questions can be asked and answered using computational methods? How do these methods complement and sometimes challenge traditional methodologies in the humanities? What are the primary tools and methods currently being used in the digital humanities? The first half of the course will provide an overview of methods, tools and projects in the Digital Humanities; the second half of the course will be devoted to building and using such tools in our own digital humanities projects, based on student interests and expertise. Students will leave the course with both some substantive experience in computational methods, and a critical lens for understanding and evaluating what computers can (and cannot) bring to the study of history and culture.

Assignments and Grading

This class is a project-based, collaborative learning experience (and experiment). In the first part of the semester, there will be regular class readings for which you are responsible, and a number of short assignments, including short papers and lab projects. This will prepare you for the capstone of the course: independent student-designed projects. The second part of the semester will be devoted to developing and implementing these projects, a process that will include multiple steps and many opportunities for feedback, including practice proposals, workshops and a process for you to set criteria for and then evaluate your own project’s success.

Short assignments and labs 25%  
Student-designed projects 50%  
Class participation and engagement 25%
Collaboration

We plan on having a relaxed collaboration policy for this course. However, you should always be clear on what part of the work you hand in is your own, what parts come from other sources, and what parts are collaborative. As a rule of thumb, in computer science we distinguish between interacting with another student using any written medium (e.g. pencil and paper, email, looking at their code) and having broad discussions with them. Generally if you are exchanging information through a written medium then it rises to the level of something that you should report when you hand in your assignment. Exceptions would include getting help with a simple syntax error in a program. You will not be penalized for collaboration, it is just important for us to know to get a better sense of what you and your fellow students know. If you take code from other sources (e.g. the internet) you must explicitly acknowledge which aspects of your assignments were taken from those sources and what those sources are. Failure to cite work that you draw from other sources is a violation of Bowdoin’s Academic Honor Code.

All write-ups, reviews, documentation and other written material must be original and may not be derived from other sources.

TENTATIVE CLASS SCHEDULE

I. Introduction: What are the Digital Humanities?

Mon 9/9 The Digital Humanities: Introductions

Mon 9/9 LAB: Introduction to Python and Programming

Wed 9/11 Digitalization, Datafication and the Humanities; or, Is everything “data”? Reading:


Mon 9/16 Computation Reading:


Mon 9/16  **LAB**: Basic Python programming and drawing

II. Approaches to Digital Humanities

A. Image analysis

Wed 9/18  What are digital images? What were images before?  
[Meet at the Bowdoin College Museum of Art]

Reading:

M.J. Guzdial, B. Ericson, *Computing and Programming in Python*,  
Chapter 3.1

Mon 9/23  Processing Images

Reading:

M.J. Guzdial, B. Ericson, *Computing and Programming in Python*,  
Chapters 3.2-3.7, 4

Mon 9/23  **LAB**: Methods and loops

Wed 9/25  Processing Images II

Reading:

M.J. Guzdial, B. Ericson, *Computing and Programming in Python*,  
Chapter 5

D.G. Stork, “Optics and Realism in Renaissance Art,” *Scientific American*  

Mon 9/30  Making Images/Making Art

Project to review:

Closer to Van Eyck <http://closertovaneyck.kikirpa.be/>

Software Studies: Mondrian vs Rothko  

Mon 9/30  **LAB**: Collage Project
B. Spatial Analysis

Wed 10/2  Theorizing Space, Place and Mapping (or, Maps and Meaning)

Reading:


Mapping projects to review online:


Digital Augustan Rome <http://digitalaugustanrome.org/>

Mon 10/7  GIS [Geographic Information Systems]: What can it do?

Reading:


Mon 10/7  **LAB**: Mapping Space (2-D): Geographic Information Systems

Reading:


GIS Projects to review online:

Africa Map <http://worldmap.harvard.edu/africamap/>

Wed 10/9  Reconstructing Space (3-D)

Projects to review:

Amiens Cathedral Project <http://www.learn.columbia.edu/mcahweb/index-frame.html>

What Jane Saw <http://www.whatjanesaw.org/>

Mon 10/14  Fall Break: No Class or Lab
Wed 10/16  Virtual Realities

Projects to review:

_Assassin's Creed II_ (Renaissance Italy)

Cao Fei, _RMB City_ (Videos on view at Bowdoin College Museum of Art
( _The Birth of RMB City; Live in RMB City_)

**C. Text analysis**

Mon 10/21  Computers and Texts

Reading:


<http://dhdebates.gc.cuny.edu/debates/text/17>

Stanley Fish, “Mind Your P’s and B’s: The Digital Humanities and Interpretation,” Opinionator, New York Times Online, 23 January 2012

Mon 10/21  **LAB**: Romeo and Juliet; Voyant and Juxta

Weds 10/23  Digital Reading

Reading:


Crystal Hall, “Galileo’s Library Revisited” (article under review at _Galilaeana_)

Mon 10/28  Macroanalysis and Macro-Reading

Reading:

Shlomo Argamon and Mark Olsen, “Words, Patterns, and Documents” _Digital Humanities Quarterly_ (2009), Vol. 3 Issue 2
<http://www.digitalhumanities.org/dhq/vol/3/2/000041/000041.html>


Mon 10/28  **LAB: Python and Text Analysis**

Weds 10/30  Topic Modeling

Reading:


**D. Network analysis**

Mon 11/4  Introduction to Networks

Reading:


Project to review:
Mapping the Republic of Letters:
http://www.stanford.edu/group/toolingup/rplviz/
http://republicofletters.stanford.edu/

Mon 11/4  LAB: Network Analysis

III. Doing Digital Humanities

Wed 11/6  Proposal presentations/workshop I
Mon 11/11 Proposal presentations/workshop II
Mon 11/11 LAB
Wed 11/13 Work day
Mon 11/18 Work day
Mon 11/18 LAB
Wed 11/20 Discussion section

Reading:

Joanna Drucker, "Humanistic Theory and Digital Scholarship" Debates in the Digital Humanities <http://dhdebates.gc.cuny.edu/debates/text/34>

Mon 11/25 Work day
Mon 11/25 LAB
Wed 11/27 Thanksgiving break
Mon 12/2 Work day
Mon 12/2 LAB
Wed 12/4 Work day
Mon 12/9 Project presentations
Wed 12/11 Project presentations

Final Exam Date: Final Project Evaluations Due