CSCI-UA.380-2 COMPUTING IN THE HUMANITIES AND THE ARTS
Fall, 2014 – New York University
Prof. Deena Engel, Department of Computer Science

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SYLLABUS

Professor Deena Engel
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Email: *deena . AT . cs.nyu.edu*

Class time: Mondays and Wednesdays 12:30PM — 1:45PM CIWW Room 317
Office hours: Tuesdays 9:30 - 11:00 AM; Wednesdays 2:00 - 3:30 PM; and by appointment
T.A. Office hours: Wednesdays 10:30 -12:30 in the West 4th Street Lab; and by email to **f40380t1@cs.nyu.edu**

- *Exam dates*:
  - *Midterm Exam*: Wednesday 10/15/2014
  - *Final Exam:* **Wednesday, December 17, 2014 12:00PM - 1:50 PM CIWW 317**

COURSE MATERIALS

On-Line Textbooks:

Think Python: How to Think Like a Computer Scientist
By Allen B. Downey
Publisher: O'Reilly Media, 2012
Print ISBN: 978-1-4493-3072-9 | ISBN 10: 1-4493-3072-X
Ebook ISBN: 978-1-4493-3071-2 | ISBN 10: 1-4493-3071-1
http://shop.oreilly.com/product/0636920025696.do
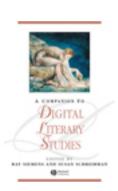Available on-line: **http://www.greenteapress.com/thinkpython/**

A Companion to Digital Humanities
Ed. Susan Schreibman, Ray Siemens, John Unsworth.
Oxford: Blackwell, 2004.
ISBN-10: 1405168064
ISBN-13: 978-1405168069
Available on-line: **http://www.digitalhumanities.org/companion/**

A Companion to Digital Literary Studies
Ed. Susan Schreibman and Ray Siemens
Publisher: Wiley-Blackwell; 1 edition (June 4, 2013)
ISBN-10: 1118492277; ISBN-13: 978-1118492277
Available on-line: **http://www.digitalhumanities.org/companion/DLS/**

XML in a Nutshell
by Elliotte Rusty Harold; W. Scott Means
Publisher: O'Reilly
Pub Date: September 2004
ISBN: 0-596-00764-
http://proquest.safaribooksonline.com/0596007647

Software

All of the software will be available in the ITS multi-media lab at no charge or available as open source. Students who wish to work on their own machines might consider either 30-day trial versions of proprietary software (such as the Adobe products or Oxygen) or purchasing such software through the NYU Computer store or other venue to benefit from academic pricing. In addition, every student will have an account on a Computer Science Department web server for posting assignments and projects.

Pre-requisites

- Computing pre-requisites:
  - CSCI-UA.2 (Introduction to Programming in Python or equivalent)
  - CSCI-UA.4 (Introduction to Web Design or equivalent): This pre-requisite may be waived for Computer Science majors.
  - Please contact the instructor if you have any questions about the computer science pre-requisites.
- There are *no* pre-requisites in the Humanities or in the Arts.

This course counts towards the **CS Minor in Web Programming and Applications**.

Topics

Humanities and Arts Content:

- Digital-born Art and its creation
- Working with maps (GIS)
- Music: Programming with sound
- Digital-born literature and its creation
- Working with literary and historical texts
- Building on-line digital archives from primary source materials

  Notes:

- Throughout the semester, students will be encouraged to explore specific content areas of the Humanities and the Arts that are of interest to them.
- There will be an option for students with a background in music performance and/or music history to work with digitized musical scores if they wish. However, the ability to read a musical score is *NOT* required for this course.

Programming and Technology Content:

- Programming in Python
- Programming in Processing
- Advanced topics in web design & implementation
- Working with Multi-media
- GIS software and related technologies
- Data visualization applications

Guest Speakers

Guest Speakers from related departments at New York University and cultural institutions in New York City will address the role of digital scholarship and exploration in their respective fields.

Course Requirements, Assignments and Grading

There will be approximately six programming projects assigned during the semester. Most of the programming projects will be posted to the students' websites. Grading will rely on 20% for the midterm exam; 20% for the final exam; and the remaining 60% of the grade will be based on the students' projects.