BRINGING COMPUTER SCIENCE PEDAGOGY TO DIGITAL HUMANITIES EDUCATION

PROF. DEENA ENGEL

DEPARTMENT OF COMPUTER SCIENCE

COURANT INSTITUTE OF MATHEMATICAL SCIENCES

NEW YORK UNIVERSITY

Computer Science & Technology Education

- Formerly seen as a branch of Mathematics Education.
- The Pedagogy of Computer Science has evolved into a field of its own.

Some examples of resources from computer science pedagogy studies

The “**flipped**” (or “**inverted**”) classroom model to optimize classroom teaching time and students’ independent learning.

PBL – Project-Based Learning model to render the many hours of coursework needed as relevant as possible to the students’ primary field(s) of interest.

Inclusion: There are rich resources available on teaching non-majors and non-engineers.

There are guides and studies on seeking **cultural and racial diversity** and minimizing **gender bias**.

Resources Available for Digital Humanities Education: ACM

ACM: Association for Computing Machinery

Digital Library: http://dl.acm.org/

Resources Available for Digital Humanities Education: SIGCSE

SIGCSE: Special Interest Group in Computer Science Education

http://sigcse.org/sigcse/

SIGCSE Annual Conference in March

https://sigcse2017.sigcse.org/

Resources Available for Digital Humanities Education: CSTA

CSTEACHERS.ORG
COMPUTER SCIENCE TEACHERS ASSOCIATION

Computer Science Teachers Association

https://www.csteachers.org/

Sample Diversity Study cited from CSTA:

http://home.cc.gatech.edu/ice-gt/556

Digital Humanities at NYU: Graduate Students in the Humanities

Program in Digital Humanities and Social Science

http://dhss.nyu.edu

The Advanced Certificate in Digital Humanities:

Begins: Fall, 2017 Semester

http://dhss.hosting.nyu.edu/advanced-certificate/

M.S. Degree in Digital Humanities and Social Science:

http://dhss.hosting.nyu.edu/ms-in-dh-and-ss/

Begins: Fall, 2018 Semester

Digital Humanities at NYU: Graduate Students in the Humanities

Required courses in the Computer Science Department towards the Advanced Certificate in Digital Humanities:

CSCI-GA.1120 Introduction to Programming

CSCI-GA.1121 Working with Data

CSCI-GA.1122 Web Development

Plus two Humanities or Digital Humanities electives from the Graduate School of Arts and Science Bulletin.

Digital Humanities at NYU: Graduate Students in the Humanities

***M.S. Degree in Digital Humanities & Social Science* required courses:**

CSCI-GA.1120 Introduction to Programming

CSCI-GA.1121 Working with Data

CSCI-GA.1122 Web Development

CSCI-GA.1123 Programming Applications

DHSS-GA.1100 Statistics: Understanding and Using Data

DHSS-GA 2000 Capstone Project Seminar

Plus three electives from the Graduate School of Arts and Science Bulletin.

Digital Humanities at NYU: Undergraduate Students in CS

CSCI-UA.380-1 Computing in the Humanities and the Arts

Pre-requisites:

- At least one semester of a high-level programming language (Python, Java, or C++) and
- At least one semester of web development (HTML5, CSS3, and jQuery).

Taught by Computer Science faculty. Guest Lectures by Humanities faculty.

All assignments are project-based.

http://cs.nyu.edu/courses/fall14/CSCI-UA.0380-002/HC_syllabus_fa14.php

Questions? Please email:

Prof Deena Engel

Department of Computer Science

Courant Institute of Mathematical Sciences

New York University

deena.engel@nyu.edu