Programming for Humanists at TAMU

Course Description – Fall 2017
Encoding and Analyzing Digital Editions (TEI, TEI Schemas, XSLT, Python and Gephi)

Participants should be familiar with TEI: for those who wish to take the course but have not learned TEI, three 1.5 hour videos introducing TEI are available on our website, composed by Laura Estill and Laura Mandell. During the semester, participants will learn:

- how to structure a digital edition for maximum usability, accessibility, and display;
- how to encode entities in TEI for network analysis and linked open data;
- how to customize a TEI Schema;
- how to use XSLT to transform TEI documents into text files, other xml files, HTML with css;
- how to use XSLT and Python for analyzing data and extracting entities for NetworkX and Gephi;
- how to use Gephi.

By the end of the semester, participants will have a complete sample digital edition, viewable online, with textual network analysis for the edition completed. Faculty include: Laura Mandell (TEI, XSLT, NetworkX, Gephi), Gia Alexander (Accessibility), Daniel Schwartz (TEI Schema Customization), Rebecca Kempe (HTML and css), Bryan Tarpley (Python, NetworkX), Kathy Torabi (Gephi). oXygen licenses will be provided for participants in the class.

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Meeting dates and/or topics may be subject to change. Changes, if necessary, will be emailed to registrants and updated on the syllabus.

Week	Date	Topic	Teacher
1	9/1	Introduction: Why TEI? oXygen set up; digital edition structure	Mandell
		Accessibility	Alexander
		TEI & xslt PowerPoint Presentation	
		Accessibility PowerPoint Presentation	
2	9/8	TEI Encoding: Review, Entities	Mandell
		Readings and Preparations - Class 2	
		Readings and Resources Zip Folder	
		PowerPoint Presentation-Class2	

3	9/15	TEI Schema Customization	Schwartz
		Class 3 Exercises	
		PowerPoint Presentation-Class 3	
4	9/22	Introduction to XSLT XSLT: transforming TEI to text files	Mandell
		Introductory Video for XSLT	
		Chapter 2 of *XSLT for Humanists*: optional reading (I will go over it in class); download the Bibliog Folder and "XSLT Elements"	
5	9/29	XSLT: transforming TEI to TEI and XML	Mandell
		Digital Edition Zip Folder	
		How to Run an XSLT	
6	10/6	XSLT: transforming TEI to HTML with css	Mandell
		Parameters available in TEI XSLTs (built in to oXygen)	
7	10/13	Designing the look of your edition: HTML and css	Kempe
8	10/20	Python: Introduction	Tarpley
9	10/27	Python:	Tarpley
10	11/3	Python:	Tarpley
11	11/10	Python: NetworkX	Tarpley
12	11/17	NetworkX: Shakespeare's characters XSLT: transforming TEI entities to csv files for Gephi	Mandell
		THANKSGIVING BREAK	
13	12/1	Gephi: Data formats	Torabi
14	12/8	Gephi: Visualization	Torabi