




[newtFire {dh}](https://newtfire.org/courses/textEncoding/)

Maintained by: Elisa E. Beshero-Bondar (eeb4 at psu.edu)  **Last modified:** Monday, 24-Aug-2020 09:43:35 UTC. [Powered by firebellies](#).

Text Encoding

Course Policies

Fall 2020: Classes meet M W F 12:20 - 1:10pm over Zoom and in Kochel 77. Zoom attendance is required for all students. The classroom is optional, but even in the classroom you will be connecting to Zoom to team up with your classmates. We may need to divide into groups to rotate attendance in the physical classroom. Group assignments will be made in [Canvas](#). For in-class meetings, we must all wear masks and maintain a safe social distance. Remember: *Your mask protects me, my mask protects you*.

Schedule: Fall 2020

DIGIT 110: Lionpath class number: 27538. This course fulfills a core Digital Humanities requirement for the DIGIT major at Penn State Erie, The Behrend College.

Instructor

[Dr. Elisa Beshero-Bondar](#) ("Dr. B"), Professor of Digital Humanities and Program Chair of DIGIT.

- E-mail: eeb4 at psu.edu
- Office Hours by Zoom: Tuesdays 11am - 1pm, Thursdays 1pm - 3pm, and by appointment.

Text Encoding: Course Description

This course teaches you the art and science of archiving documents digitally using text encoding and markup. You will learn about the history and contexts of markup technologies, with their heritage in hand-written editorial markup. And you will learn about the ways in which markup can form communities of practice with shared interests in conservation, curation, and transmutation of texts. We will talk about documents, data, the materials they are prepared on, as well as metadata and data. We will explore some complicated questions about what a text really is, and what kinds of things it can become. We will be adventurous in exploring these questions, and we will also be practicing with markup and what we can build with it.

Text encoding, otherwise known as markup technology, sits on the border of humanities and computer science. Markup is writerly and editorial, and the technologies we use to process it, guide it, pull patterns from it are computational, meant to be an accessible entry point to programming. You will learn some programming associated with textual studies in this course. Our guiding principle in developing assignments and working with you is that the best way for you to learn and succeed is through regular practice as you hone your skills. Our goal is not to make you expert programmers (as I am far from that myself). Instead, I want you to learn how to apply coding technologies for your own purposes, how to track down answers to questions, how to ask for help, and how to find answers to questions by searching and experimenting. In designing a digital project, you will gain skills in thinking algorithmically (step-by-step) through problems to find good solutions.

Learning to Code: Our Context

You do not need any background at all with computer programming or web development to succeed in this course. We teach practical programming as a foundational skill (like reading, writing, and arithmetic) that all students should experience regardless of major or background. We also teach it in the writerly context of clear communication and documentation, which helps to build communities and connect projects over long periods of time.

Learning Objectives:

- Work with Texts as Artifacts—As Physical and Virtual Objects:
 - Generate "digital surrogates": digitally represent facsimiles of rare manuscripts and other kinds of documents, and make their content digitally searchable.
 - Reflect and write on the issues and problems with digital representation, as well as the capacity of the digital medium to enhance or add dimensions to a physical text.
 - Learn and practice coding in eXtensible Markup Language (XML) and related coding technologies: to "mark up", process, and extract information about the structure, physical condition, and cultural contexts of textual artifacts.
- Gain experience with information retrieval, distant reading, and autotagging techniques:
 - Write code to apply searching and data extraction methods through multiple kinds of pattern-matching algorithms, including forms of regular expression matching. Take conventional boolean searches and library database searches to new levels.
 - Apply "mining" and "drilling" methods to interact with texts and visualizations differently than we could do "manually" or with unassisted eyes and brains.
 - Learn how to "autotag" enormous texts or collections of texts, for practical results: to code the structure of enormous texts from a distance, in order to navigate them and make them accessible through distant reading.
 - Reflect on the dimensions of textual materials that can be represented and analyzed with markup.
- Gain Project Design and Editing Experience:
 - Gain digital editing experience by building or contributing to a digital research project
 - Gain experience with collaborating and sharing code using a version control system (GitHub) in a team repository
 - Transform XML code into publishable web formats, to build or contribute to a project website.

- Design navigation elements, and build visual aids and models (such as timelines and tree diagrams) from texts: to generate charts and images from extracted data
- Gain experience with extracting and visualizing data pulled from text encoding. Create visualizations such as maps or charts to explore it.
- Last but not least: Discover that you read and write with "new eyes," with greater precision and agility, thanks to your adventures with text encoding!

Optional Textbook and Other Class Resources

- Michael Kay, *XSLT 2.0 and XPath 2.0: Programmer's Reference*, 4th edition (Wiley Publishing, 2008) ISBN-13: 978-0-470-19274-0 This book is optional, and I have not requested it at the bookstore. I have two copies and it is available in the Penn State Library as an e-book. This is really **the** authoritative word on XSLT and XPath, written by a designer of the official W3C specifications of XSLT 2.0 that we're using. We are learning from this book ourselves and consult it frequently! We're not requiring that you buy it, but we recommend it to have a powerful reference at your fingertips and for learning more on your own. There's a kindle edition available but poorly designed for searching, so we (actually) prefer the hardcover print edition. If you're going to purchase it, be sure you pick up the latest edition (from 2008), and not the earlier versions.

Other resources: Project Guidelines and Past Student Projects

- [Guidelines for Projects Developed in This Course](#)
- [Student Course Projects](#)

Explanatory Guides and Exercises: Complete List

Class Web Resources:

- [Course Home Website: https://newtfire.org/courses/textEncoding/](https://newtfire.org/courses/textEncoding/) Home of our syllabus and schedule.
- [textEncoding-Hub: https://github.com/newtfire/textEncoding-Hub](https://github.com/newtfire/textEncoding-Hub) Class GitHub Repository and Issues Board
- [Canvas: http://canvas.psu.edu](http://canvas.psu.edu) To submit homework assignments and exams and read private course announcements
- [File Conventions for Canvas Assignments](#)

Grading:

Homework Exercises (30%):

To keep up with this class, you must work on exercises regularly. Each day will involve some small assignment, to prepare you for the next of class, and to help you to build your course project. **90% Rule:** If students do not submit at least 90% of the regular homework assignments, the grade for the homework portion is based on the percentage of homework they completed. Students should therefore aim to submit at least 90% of the regular homework assignments, and complete at least 90% of the work in each component of the course.

About homework assignments: Coding and project review exercises in this course are about your active learning, and not—as in other courses—a way of testing whether you have already learned something we covered in class or in an assigned reading. You may often need to look up how to do something that you don't already know how to do. Often, there will be multiple ways of accomplishing the task and we are not simply looking for you to do things perfectly in just one way. We are instead looking for a record of your learning process as you take on a challenge. Documenting problems is key to learning, and sometimes just writing out what you are trying to do helps lead you to a solution! There may be times when you don't get the result you want in the homework, and that is to be expected! In those cases you can still get full credit for the assignment if you've made a serious attempt and if you submit, along with your code, a description of what else you tried, what results you expected, what results you got, and what you think went wrong. Getting stuck is part of the learning process. You will see me get stuck sometimes, and I will need *your eyes* to help me fix something! As long as you've described your understanding of the problem and your attempts to resolve it on your own, you will do well: documentation of how you get stuck is key. One of our goals is to form a supportive coding community in this class, so we are comfortable with *unsticking* each other,

I will read and evaluate all student homework, and will post assessments on Canvas. Coding assignments are assessed as "**check plus**", "**check**", and "**check minus**", or "**redo**". Don't think of these as grades, since, if you resubmit a "redo" to correct a serious problem, you will receive full credit for the assignment. My comments on homework are feedback for learning purposes. If you have not engaged with the assignment adequately (whether that means solving the tasks or discussing the coding obstacles you encountered and how you dealt with them), we will ask you to meet with us to review the issues and then complete a followup (redo) task in order to receive credit. For assignments with posted solutions, I will invite you to review the posted solution on GitHub and comment on it (we will show you how to do this) to address something you learned from the solution or did in a different way. For some assignments where we review posted solutions and line-comments together in person or in class, we will write back to you with individual comments only if your specific submission raises an issue that we don't address elsewhere. If we don't return your assignment, that means that we have nothing to add to our posted solution, but should you have any specific questions after you've read our posted solution, please ask the instructors. And we will go over assignments together to get the class unstuck on things in our regular class meetings.

Issue posts: Throughout the course, we'll assign discussion posts on [our class GitHub site](#) in which you will respond to online readings or evaluate web resources. Your posting should do more than summarize the article or site (which you could just do by skimming or reading the first paragraph), but should demonstrate a thoughtful reflection on specific ideas and issues. When evaluating a web resource, don't simply praise or condemn it without going into details about why a key component is effective or poorly designed. Good posts demonstrate care and reflection, and you may choose to respond to the overarching ideas of a piece, or to selected details of specific interest. These posts are scored as "check plus", "check", and "check minus".

Participation: In Class and on GitHub (15%):

Coding and programming in real life is a social activity, and professionals in the real world aren't "know-it-all" experts who work alone, but rather are tuned into discussion boards and regularly ask and answer questions to stay sharp and to learn from their community. In this class, we want you to work together and talk to each other and your instructors as your community resource, so we have built this into our course participation grade as a formal expectation. **Beginning by week two, we'll expect each student to post at least once per week on [our course GitHub repo](#)**, and we strongly encourage you to do more than this minimum. Earn an "A" in participation by asking questions, making suggestions, and sharing helpful resources you've found. Help each other out by trying to answer questions on GitHub (and read the instructor posts too as we wade in to help). Your instructors will likely be dominating the class time as we model concepts and methods, so the GitHub Issues board gives the students a good space to form into a coding community to help each other and reflect together. Also, if you have a question about an assignment, **always think of our GitHub Issues board as your first resource** to check for helpful hints and to post your questions, because others may have the same question and answers are best shared! Of course you may e-mail us, but we really prefer you go the discussion board first, and doing so is, after all, worth course credit as your participation grade.

Tests (25%):

As scheduled throughout the course there will be a few (three or four) tests on the concepts and various kinds of markup technologies we are learning in the course, and we will drop the lowest grade. All will be take-home or taken online in between classes. They are open-book, open notes, but they must be completed individually and are designed to demonstrate that you have learned from the class material, coding assignments, and posted solutions. Tests may resemble homework assignments, but unlike homework exercises, these are given letter grades. These are given grades because they are evaluative and involve demonstrating what you have learned after we have finished a coding unit.

Projects (30%):

Throughout the semester you will be working on small projects that may turn into larger ones. You will share and document your markup, as well as experiment with processing markup to process and investigate data. These will be scheduled and paced throughout the term to give you experience with exploring research questions and investigating questions. Think of these as lab analysis work using markup.

Grading Scale:

Grades for the course are calculated and posted on Canvas, and follow this standard scale: A: 93-100%, A-: 90-92%, B+: 87-89%, B: 83-86%, B-: 80-82%, C+: 77-79%, C: 70-76%, D: 60-69%, F: 59% and below. In taking the course on a S / NC (pass-fail) basis, students must earn a C to receive Satisfactory credit.

Course Policies:

Each day we are covering material that builds on earlier material and assignments, so your success depends upon regular attendance and completing each assignment on time.

Due dates and why we need them:

Your daily homework for this course is time-sensitive! Coding assignments, response papers, and other homework exercises must be uploaded to Canvas (or GitHub or our web server as specified), by the due date and time indicated on the class schedule. Homework assignments will be posted online to our class website and linked from our schedule, so students who miss class are nevertheless expected to consult the schedule and submit assignments on time. Because we post and share answers to homework exercises after submission deadlines, we will usually not accept late homework submissions.

Exam Policy:

All exams will be take-home, to do on your own time, with submissions due in Canvas or by web submission. Because I will be posting answers and sharing them in class, I do not allow people to write exams after the solutions are posted. However, I will drop your lowest exam score for the class, so that you may miss one exam without penalty.

Attendance and Classroom Courtesy:

I am not calculating your attendance, but I will expect your active presence and interaction with me and your classmates this semester, as we need to rely on each other to learn and develop projects.

Our class is fast paced and requires that we all be making the best use we can of our in-person class sessions. Arriving late and leaving early (physically or remotely!) disrupts the important collective mental activity of class. So does in-class texting and checking your cell phone. Whether you are joining over Zoom or in the physical classroom, I ask that you put mobile devices in Do Not Disturb mode. While class is in progress, talking disruptively, leaving the classroom, texting or using a cell phone or computer, reading a newspaper, or other distracting behavior will be actively discouraged.

Covid and Attendance

When present on campus together this semester, whether in the classroom or elsewhere, *always* wear a mask and wear it appropriately (over your mouth and nose). We are being provided with some personal protective equipment (PPE) in the form of plastic face shields to be worn *in addition to masks* if we need to look at each other's computer screens. It is a good idea to bring hand sanitizer with you to campus and sponge off your work area in class. I will ask you to put on your mask if I see you without one, or to fix your mask if you are not wearing it correctly. Non-compliance by any of us means we have to leave the classroom immediately for our own safety, and I have to report anyone not masking or distancing as a violation of the Student Code of Conduct. Remember, *My mask protects you; your mask protects me*.

Please do not attend our physical class if you are not feeling healthy! This is not the semester to suffer through a fever or chills heroically to attend class in person. Stay home, report symptoms, get tested. This applies to me as your professor as well as to you!

If you need to miss classes for health reasons, make arrangements with me and your peers to catch up. We will always be meeting on line (via chat and GitHub asynchronously and via Zoom for class meetings) and we will find ways to keep you looped in.

Our Covid Mixed Mode: I am planning for the class to be meeting in mixed ways, with some of you attending in Zoom and some of you in the classroom. I hope we can maintain class meetings so we see each other in person once per week before Thanksgiving, but we are ready to be fully remote when needed. I am preparing much course material to be recorded and watched and read on your own time. In-class meetings are paired with synchronized Zoom sessions so you all, wherever you are, can talk to me live. Think of the in-class sessions as live conversations where we share screens and discuss homework, tests, and projects.

Finally, if I feel as if we are risking our health with in-class meetings, I will simply move us all to Zoom to protect our group. Our health comes first!

Student (and Faculty) Health and Wellness Services

If any of us, you students or me, are feeling sick, with COVID or flu-like, or other serious ailments this semester, please contact Behrend Student Health & Wellness Services at **814-898-6217**. None of us can be sure what will happen with the COVID pandemic, and we are taking on a great risk this semester. Reporting in when you do not feel well is not shameful; it is responsible and important to protect yourself and our community.

Also, this semester may be more stressful than usual with so much uncertainty! Many students at Penn State face personal challenges or have psychological needs that may interfere with their academic progress, social development, or emotional wellbeing. Seek help! The university offers a variety of confidential services to help you through difficult times, including individual and group counseling, crisis intervention, consultations, online chats, and mental health screenings. These services are provided by staff who welcome all students and embrace a philosophy respectful of clients' cultural and religious backgrounds, and sensitive to differences in race, ability, gender identity and sexual orientation. Counseling and Psychological services are available through the Personal Counseling Office in Reed Union Bldg. Rm 1: **814-898-6504**.

Equity

Penn State takes great pride to foster a diverse and inclusive environment for students, faculty, and staff. Acts of intolerance, discrimination, or harassment due to age, ancestry, color, disability, gender, gender identity, national origin, race, religious belief, sexual orientation, or veteran status are not tolerated and can be reported through Educational Equity via the Report Bias webpage (<http://equity.psu.edu/reportbias/>).

E-mail:

Each student is issued a University email address (username@psu.edu) upon admission. This email address may be used by the University for official communication with students. Students are expected to read email sent to this account on a regular basis. Failure to read and

react to University communications in a timely manner does not absolve the student from knowing and complying with the content of the communications. The University provides an email forwarding service that allows students to read their email via other service providers (e.g., Hotmail, AOL, Yahoo). Students who choose to forward their email from their psu.edu address to another address do so at their own risk. If email is lost as a result of forwarding, it does not absolve the student from responding to official communications sent to their University email address. To forward email sent to your University account, go to <http://accounts.psu.edu>, log into your account, click on Edit Forwarding Addresses, and follow the instructions on the page. Be sure to log out of your account when you have finished.

Academic Integrity

Penn State Erie, The Behrend College, puts a very high value on academic integrity, and violations are not tolerated. Academic integrity is the pursuit of scholarly activity in an open, honest and responsible manner. Academic integrity is a basic guiding principle for all academic activity at The Pennsylvania State University, and all members of the University community are expected to act in accordance with this principle. Consistent with this expectation, the University's Code of Conduct states that all students should act with personal integrity; respect other students' dignity, rights and property; and help create and maintain an environment in which all can succeed through the fruits of their efforts. Academic integrity includes a commitment by all members of the University community not to engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty violate the fundamental ethical principles of the University community and compromise the worth of work completed by others." (Senate Policy 49-20 and G-9 Procedures. Any violation of academic integrity will receive academic and possibly disciplinary sanctions, including the possible awarding of an XF grade which is recorded on the transcript and states that failure of the course was due to an act of academic dishonesty. All acts of academic dishonesty are recorded so repeat offenders can be sanctioned accordingly. More information on academic integrity can be found at: <http://psbehrend.psu.edu/intranet/faculty-resources/academic-integrity/academic-integrity>.

Source Citation and Plagiarism: One goal of our course is to reflect on how best to cite sources in digital contexts. We will consider how and why such citations differ from documenting printed texts. We will also consider the ease and frequency with which digital texts and graphics are plagiarized on the worldwide web, and discuss how the omission of source citations detracts from the authority of a digital information resource. We expect you to practice mindful source citation, and plagiarism on your part will have very serious consequences.

Representing the voice of another individual as your own voice constitutes plagiarism, however generous that person may be in "helping" you with an assignment. Turning in an assignment generated collectively under the name of a single individual is considered plagiarism. **When instructed to collaborate on a project, project collaborators share collective authorship and should identify themselves directly as a team.** To avoid plagiarism, cite your sources whenever you quote, paraphrase, or summarize material, or use digital images from any outside source (including websites, articles, books, course readings, Courseweb or GitHub postings, or someone else's notes). When using the "copy" and "paste" features as you read and research, be sure that you are carefully marking that these passages are unprocessed from their source, so that you know to process it later. Forgetting to do so not only produces sloppy work but (whether you intended it or not) results in a false representation. As long as you make a good faith and clear effort to cite your sources, you will not be faulted for plagiarism, but your work will be penalized if citations are inaccurate, unclear, or lack important information.

That said, the coding and digital development we do encourages collaboration, and for that reason we adopt our colleague David Birnbaum's [Collaboration policy](#), since his course is very similar to ours. This policy specifies that students identify collaborators in a comment on submitted assignments and take care on projects that all students contribute equally (and no student is contributing excessively more than what everyone else has done). When joining a group homework session, always work on the assignment by yourself first so you can be an equal participant, and write up the assignment *by yourself, after* the session is over so you take care not to copy from the other students. While we want you to consult with each other, you are responsible for doing all your writing and coding by yourself, using your own words.

Disability Services:

Penn State welcomes students with disabilities into the University's educational programs. Every Penn State campus has an office for students with disabilities. Student Disability Resources (SDR) website provides contact information for every Penn State campus (<http://equity.psu.edu/sdr/disability-coordinator>). For further information, please visit Student Disability Resources website (<http://equity.psu.edu/sdr/>). In order to receive consideration for reasonable accommodations, you must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: See documentation guidelines (<http://equity.psu.edu/sdr/guidelines>). If the documentation supports your request for reasonable accommodations, your campus disability services office will provide you with an accommodation letter. Please share this letter with your instructors and discuss the accommodations with them as early as possible. You must follow this process for every semester that you request accommodations. Penn State Behrend's Disability Services Coordinator is Stacey Walbridge (slw44@psu.edu)

Inspiration

We gratefully acknowledge [David Birnbaum's Digital Humanities course](#) at the University of Pittsburgh as our starting point and supporting resource for much of our development. Other inspirational resources include:

- [The Programming Historian \(full collection of tutorials\)](#)

Projects that inspire us:


- [Obdurodon](#): where we learned what we can teach, and where we're still learning.
- [Venice Time Machine](#): very ambitious, enormous project team of faculty and students to study and model a thousand years of Venice, digitizing "kilometers of archives."
- [Map of Early Modern London](#)
- [Lord Byron and His Times](#): The very thoughtful stylistic design of this important project reproduces the style of nineteenth-century print and layout. The content makes many rare materials about Lord Byron's social network searchable and connected to the web of linked open data.
- [The Shelley-Godwin Archive](#): digitizes the manuscripts of Percy and Mary Shelley, and Mary Shelley's parents, William Godwin and Mary Wollstonecraft—manuscripts often written in multiple hands. Provides an important study of the Frankenstein notebooks

to demonstrate how much of a role Percy Shelley played in the writing of Frankenstein. The archive provides a good model of the use of TEI for manuscript encoding and of complex and multiple visualizations of manuscript texts.

- [TokenX: a text visualization, analysis, and play tool](#)
 - [A Tour Through the Visualization Zoo](#)
 - [Clay Shirky on Love, Internet Style](#) (9 minutes of Youtube inspiration: on what lasts, and why community matters in our digital worlds.)
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DIGIT 110: Text Encoding

Fall 2020 Syllabus (Schedule) Classes meet M W F 12:20 - 1:10pm over Zoom and in Kochel 77. Zoom attendance is required for all students. The classroom is optional, but even in the classroom you will be connecting to Zoom to team up with your classmates. We may need to divide into groups to rotate attendance in the physical classroom. Group assignments will be made in [Canvas](#). For in-class meetings, we must all wear masks and maintain a safe social distance. Remember: *Your mask protects me, my mask protects you.*

Read the [Course Description](#)

This contains a detailed explanation of course policies and the basis for grades.

[Jump Down to the Schedule](#)

This link jumps to the closest day to today's date. Review the schedule as we get started to get a sense of how this course will work on a daily basis.

All the Tools You Need As We Begin:

Download and install the following software on your own personal computer(s) on or before the first day of class. These software tools are available in our campus computing labs, too.

1. [<oXygen/>](#). The DIGIT program has purchased a site license for this software, which is installed in Kochel 77 and the Lilley Library computers. The license also permits students enrolled in the course to install the software on their home computers (for course-related use only). When installing this on your own computers, **you will need the license key**, which we have posted on our course Announcements section of [Canvas](#).
2. Zoom: [Make sure your Zoom installation is up-to-date](#), and you are ready to connect. The Zoom link for our regularly scheduled class meetings is posted in Canvas: Look for the Zoom menu option.

3. All students require a good means of secure file transfer (SFTP) for homework assignments and projects (also available in the campus computer labs). There are several good options available. We recommend you download and install on your own computers one (or more) of the following, depending on your platform: (Feel free to experiment with these and others!)
- **Windows users:** one of the following FTP clients—the functionality is similar:
 - [FileZilla](#) (This is our favorite client because it behaves the same way across platforms.)
 - [WinSCP](#) (This is one we used for a long time, since the 1990s, but we now use SSH and Filezilla more frequently.)
 - [SSH Secure Shell Client](#)
 - **Mac users:**
 - [FileZilla](#) (This is our favorite client because it behaves the same way across platforms.)
 - or [Fetch](#) (students may obtain free licenses at <http://fetchsoftworks.com/fetch/free>)
 - **Linux users:** You probably don't need to install anything, but look at how your system handles secure file transfer (SFTP). (FileZilla or other clients designed for Linux environments.)
4. No coding experience? Don't worry! Past students in this course who never saw anything like markup or XML code have designed projects ([like these](#)) and even spoken about them at undergraduate conferences! You will learn to develop your own digital tools and how to manage digital projects as teamwork.

Class Web Resources:

- [newtFire](#): Our project development site, where you will be publishing your projects.
- [textEncoding-Hub: https://github.com/newtfire/textEncoding-Hub](https://github.com/newtfire/textEncoding-Hub) Class GitHub Repository and Issues Board
- [Canvas: http://canvas.psu.edu](http://canvas.psu.edu) To submit homework assignments and exams, read private course announcements, access Zoom class meetings and video recordings.
- [File Conventions for Canvas Homework Assignments](#)
- [Explanatory Guides and Exercises: Complete List](#)

Week 1	Topics	Do before class	Group A	Group B
M 08-24	Welcome! Introduction to the course. Intro to XML and "plain" text in the oXygen XML Editor.	Respond to Dr. B's Poll (see Canvas / Penn State email). Find the Zoom link for class (on Canvas / Penn State email).	Zoom remotely	Kochel 77 + Zoom (audio muted)
W 08-26	XML coding: a poem; correspondence. Elements, attributes, comments, escape characters, and "pretty-printing" in <oXygen/>.	Install oXygen XML Editor and add our license key so we can all use this during our meeting today. Read my Introduction to XML and experiment with the code in the tutorial: Can you tell what makes markup well-formed or not?	Kochel 77 + Zoom (audio muted)	Zoom remotely

F 08-28	Discussion of Pierazzo's examples. Discussion of homework, XML data and metadata. Document sources.	Watch Elena Pierazzo's short video "Why do we encode? Advantages of encoding texts with XML" . Complete XML Exercise 1 (letter/poem)	Zoom remotely	Kochel 77 + Zoom (audio muted)
Week 2	Topics	Do before class	Group A	Group B
M 08-31	Discussion of XML homework. Introduce class GitHub and set up accounts. Introduce Emily Dickinson projects.	XML Exercise 2	Kochel 77 + Zoom (audio muted)	Zoom remotely
W 09-02	XML vs. HTML. Intro to GitHub markdown.	Finish setting up your GitHub account and create a personal repo.	Zoom remotely	Kochel 77 + Zoom (audio muted)
F 09-04	Explore markdown and GitHub Pages; Issue Take-Home Test 1	Set up GitHub Pages on your personal repo	Kochel 77 + Zoom (audio muted)	Zoom remotely
Week 3	Topics	Do before class	Group A	Group B
M 09-07 Labor Day, PSU classes in session anyway!	When XML gets in the way: Overlapping hierarchies problem: exhibited with "Ozymandias"	Respond to Dickinson project analysis discussion on textEncoding-Hub . Complete Take-Home Test 1 .	Zoom remotely	Kochel 77 + Zoom (audio muted)

W 09-09	Discuss markup issues. Look at Shelley-Godwin Archive and <i>Frankenstein</i>	XML Exercise 3: how to encode something hard to model in code	Kochel 77 + Zoom (audio muted)	Zoom remotely
F 09-11	Validity vs. Well-formedness. Introducing the TEI	Shelley-Godwin Archive ms markup exercise: what can you see, how does it fit the code?	Zoom remotely	Kochel 77 + Zoom (audio muted)
Week 4	Topics	Do before class	Group A	Group B
M 09-14	Validity for a project: what is a schema? Writing a Relax NG schema	Read Intro to Relax NG	Kochel 77 + Zoom (audio muted)	Zoom remotely
W 09-16	Writing schemas: technical details and big picture issues. Introducing datatypes. The interesting "tag soup" of "mixed content".	Relax NG Exercise 1: Write a schema to organize XML code you wrote earlier. Change the markup as needed to fit your concept for modeling the data.	Zoom remotely	Kochel 77 + Zoom (audio muted)
F 09-18	Troubleshooting and debuggin Relax NG issues.	Relax NG Exercise 2: Choose a new document (any genre, any language, manageable size for homework, interesting to model): Try writing a schema first, and then coding to fit the schema. (Edit both the XML structure and the Relax NG rules as you go.)	Kochel 77 + Zoom (audio muted)	Zoom remotely
Week 5	Topics	Do before class	Group A	Group B
M 09-21	Deeper dive into the TEI: historic recipe project	Relax NG Exercise 3: a recipe	Zoom remotely	Kochel 77 + Zoom (audio muted)

W 09-23	Workshopping with the TEI (group exercise)	TEI exercise 1 (installment on historic recipe project)	Kochel 77 + Zoom (audio muted)	Zoom remotely
F 09-25	TEI header, prosopography	TEI exercise 2 (installment on historic recipe project)	Zoom remotely	Kochel 77 + Zoom (audio muted)
Week 6	Topics	Do before class	Group A	Group B
M 09-28	TEI workshopping. Review of major concepts about XML and document data modeling. Issue take-home test.	TEI exercise 3 (historic recipe document metadata)	Kochel 77 + Zoom (audio muted)	Zoom remotely
W 09-30	Discussion / comparison of class TEI encoding	reflection post on GitHub	Zoom remotely	Kochel 77 + Zoom (audio muted)
F 10-02	Faster markup! Introducing regular expressions and "autotagging." Introduce hands-on regular expressions and autotagging.	Complete Take-home Test 2	Kochel 77 + Zoom (audio muted)	Zoom remotely
Week 7	Topics	Do before class	Group A	Group B
M 10-05	Autotagging with regex, with a point to query something. (introduce structured long epic poem or play)	Regex Ex 2 (novel)	Zoom remotely	Kochel 77 + Zoom (audio muted)

W 10-07	Workshopping Regex issues. Documenting regexes	Regex Ex 3 (deeply structured document)	Kochel 77 + Zoom (audio muted)	Zoom remotely
F 10-09	Command-line and git intensive: sharing, pushing, and documenting code	Watch my command line bash shell video. Set up git Bash if you have a Windows machine. Install git tools in Mac / Linux as needed	Zoom remotely	Kochel 77 + Zoom (audio muted)
Week 8	Topics	Do before class	Group A	Group B
M 10-12	Discuss project clusters, options. git / GitHub: pull, push, commit code	Start 7 days of Git here. Begin reviewing project cluster documents (to be posted)	Kochel 77 + Zoom (audio muted)	Zoom remotely
W 10-14	GitHub practice. Querying XML with XPath	Read our Introduction to XPath . Continue git practice	Zoom remotely	Kochel 77 + Zoom (audio muted)
F 10-16	Workshopping XPath	XPath Exercise 1	Kochel 77 + Zoom (audio muted)	Zoom remotely
Week 9	Topics	Do before class	Group A	Group B
M 10-19	Workshopping XPath	XPath Exercise 2 (predicates / booleans). Choose a project cluster/form groups	Zoom remotely	Kochel 77 + Zoom (audio muted)

W 10-21	Workshopping XPath	XPath Exercise 3 (functions, functions in predicates)	Kochel 77 + Zoom (audio muted)	Zoom remotely
F 10-23	Workshopping XPath	XPath Exercise 4 (string functions and regex in XPath)	Zoom remotely	Kochel 77 + Zoom (audio muted)
Week 10	Topics	Do before class	Group A	Group B
M 10-26	Revisiting XML and TEI markup decisions, based on what XPath can show. Issue Take-home test 2.	Project cluster document data modeling: identify a research question or questions of interest	Kochel 77 + Zoom (audio muted)	Zoom remotely
W 10-28	How does HTML relate to TEI and XML? HTML and file management	Read introduction to HTML	Zoom remotely	Kochel 77 + Zoom (audio muted)
F 10-30	Workshopping HTML and CSS	Read introduction to CSS. Work on HTML Ex 1 for project clusters	Kochel 77 + Zoom (audio muted)	Zoom remotely
Week 11	Topics	Do before class	Group A	Group B
M 11-02	Create a small website	Complete HTML Ex 2; Complete Take-Home Test 3	Zoom remotely	Kochel 77 + Zoom (audio muted)

W 11-04	Introducing XSLT (eXtensible Stylesheets Language Transformations): XML to XML, TEI to XML, XML to HTML, and more. Namespaces	Read Introduction to XSLT / orientation video	Kochel 77 + Zoom (audio muted)	Zoom remotely
F 11-06	XSLT to change XML into HTML. Useful HTML elements for highlighting, modeling, structuring views	XSLT Exercise 1: An Identity Transformation applied to project cluster files	Zoom remotely	Kochel 77 + Zoom (audio muted)
Week 12	Topics	Do before class	Group A	Group B
M 11-09	XSLT for project clusters: workshopping a list of data. How template matches work	XSLT Exercise 2	Kochel 77 + Zoom (audio muted)	Zoom remotely
W 11-11	XSLT for project clusters: workshopping a reading view	XSLT Exercise 3	Zoom remotely	Kochel 77 + Zoom (audio muted)
F 11-13	XSLT for project clusters: sorting / remixing? XSLT to non-XML formats: TSV (tab-separated values)	XSLT Exercise 4	Kochel 77 + Zoom (audio muted)	Zoom remotely
Week 13	Topics	Do before class	Group A	Group B
M 11-16	SVG? Network Analysis? Mapping? [TBD]. Documenting code in a GitHub repo	Project cluster processing assignment	Zoom remotely	Kochel 77 + Zoom (audio muted)

W 11-18	SVG? Network Analysis? Mapping? [TBD]	Project cluster processing assignment	Kochel 77 + Zoom (audio muted)	Zoom remotely
F 11-20	SVG? Network Analysis? Mapping? [TBD]	Project cluster processing assignment	Zoom remotely	Kochel 77 + Zoom (audio muted)
	Topics	Do before class	Group A	Group B
M 11-23 - F 11-27	Thanksgiving Holiday	Have a peaceful and productive week! See you online.		
Week 14	Topics	Do before class	Group A	Group B
M 11-30	Revisiting the Data Model, spotting errors to clean up. Schema workshop. Introducing Schematron.	Read Introducing Schematron	Fully Remote (Zoom)	Fully Remote (Zoom)
W 12-02	Schema Workshop	Schematron Exercise 1	Fully Remote (Zoom)	Fully Remote (Zoom)
F 12-04	Schema Workshop	Schematron Exercise 2	Fully Remote (Zoom)	Fully Remote (Zoom)
Week 15	Topics	Do before class	Group A	Group B
M 12-07	Presentation vs. Semantics: What do we share? What do we miss?	HTML work with project cluster	Fully Remote (Zoom)	Fully Remote (Zoom)
W 12-09	Documentation and reflection work: writing about what isn't there, assessing what could come next.	Documentation work	Fully Remote (Zoom)	Fully Remote (Zoom)

F 12-11	Last day. Discuss project clusters, what we have learned.	Prepare to share a view of your project cluster work	Fully Remote (Zoom)	Fully Remote (Zoom)
Finals Week: M 12/14 - F 12/18	<i>Due</i>			
H 12-17	Last project cluster work due by 11:59pm Finish developing projects, and send a post to me on GitHub to indicate your team is finished.			