

# INF 1006: Information Workshop

## Architectures of the Book

Time: Tuesdays, 9:00 am – 12:00 pm  
Location: Bissell 417  
Instructor: Dr Alan Galey, Faculty of Information  
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Response time: usually end of next business day, Monday-Friday  
Office: Bissell 646  
Office hours: Tuesdays, 1:00-3:00, or by appointment  
Course website: portal.utoronto.ca (login required)



"A Book" as depicted in Johann Amos Comenius,  
*Orbis Sensualium Pictus* (London, 1777)

## Overview

This workshop will introduce students to the complexities of representing print and manuscript books digitally. We will explore aspects of textuality from throughout the history of the book which present challenges for digital representation: possible subtopics include paratexts, mise-en-page, variant texts, marginalia, and the relation between text and image. Combining the study of book history, bibliography, text encoding, and visualization, we will focus on eXtensible Markup Language (XML) encoding not simply as the application of a technical skill or technology to a problem, but rather as an intellectual exercise that makes a virtue of the constraints of digital representation. We will examine digitization projects in the humanities and related fields, but our goal will be to explore the more complex process of modelling: a reciprocal process in which our design of manipulable digital representations prompts us to think in new ways about books and digital technologies alike.

Students will gain experience with XML and related technologies, strategies for design and visualization, history and theory of textuality, the study of rare books, critical assessment of digital technologies, debates over standardization, and collaborative project skills. Prior expertise in any of these areas is welcome but not required. The context for the workshop will be the real-world project Architectures of the Book, part of the Implementing New Knowledge Environments project, funded by SSHRC's Major Collaborative Research Initiatives program.

Note that the add/drop dates for INF 1005/6 are not the same as for most iSchool courses. The add dates for 1005 and 1006 (respectively) are January 16 and March 12, and the drop dates are January 27 and March 23.

## Course texts

You do not have to purchase any textbooks for this course. The majority of our readings will come from sources available online, or from photocopies will be available in the INF 2331 ("Future of the Book") course binder available at the circulation desk of the Inforum. Just ask for the "Future of the Book binder." It's ordered alphabetically by author; feel free to browse the other articles inside, since they're closely connected to our workshop topic.

## Software

You do not have to purchase any software for the course, either. All of the course software will either be freeware (and open-source whenever possible) or provided by the iSchool and installed on the classroom computers. You will be using the following software for your project:

- the Firefox web browser ([mozilla.com](http://mozilla.com))
- oXygen, an XML editor that works well with TEI and has tools for XSLT, XPath, and validation against DTDs and schemas ([oxygenxml.com](http://oxygenxml.com))
- a CSS-/Javascript-/XML-aware text editor such as BBEdit, Emacs, EditPlus, SubEthaEdit, etc. (these are essentially the same as Windows Notepad or OSX's TextEdit, but with extra bells and whistles to help with coding)
- an image editor that supports simple reformatting, resizing, cropping, and other functions; Gimp (<http://www.gimp.org/>) is a good freeware image editor that works reliably across platforms

## Evaluation

30% Assignment 1: ArchBook entry & encoding challenge proposal

50% Assignment 2: ArchBook entry & encoding challenge final versions

20% Class presentation of final project

Assignments must be submitted electronically via Blackboard by the given time on the due date.

Late papers and assignments will be penalized 5 percentage points per day (weekends count as 2 days). Keeping to deadlines is an important part of professional and scholarly practice, especially in collaborative projects. Extensions will only be granted in advance of the deadline, and only in the event of illness or a similar documentable reason. All written assignments must follow the latest edition of the *Chicago Manual of Style* guidelines, using the notes + bibliography method (not author-date). All written assignments must be submitted in double-spaced 12 pt Times New Roman.

## Technical expectations

The only prerequisites for this course are the core MI program courses, and students are not required or expected to have any prior experience with programming or XML encoding. By the end of the workshop you will have experience with XML and related technologies, but this is not primarily a course on XML, and we will not be delving into that topic beyond an introductory level. However, having a technical aspect allows us to study various related concepts (described above in the overview) not just through lectures, discussion, and readings, but also by keeping an ongoing project on the workbench, so to speak, where we can test, develop, and play with the practical techniques we'll be studying each week in class. In short, I do not expect students to enter the class with any coding background, but by the end of the workshop everyone will have learned how to use markup and visualization tools as "tools to think with" (as the expression goes), especially for thinking about the design and uses of books, past and future.

## Assignment overview

You could think of this course as one large assignment which you'll deliver in three stages over a period of six weeks: a proposal (assignment 1); a complete draft (assignment 2); and a class presentation at the end. You'll work on this assignment in a team of 3 or 4 people. (The class is too large to permit groups of 1 or 2; I reserve the right to assign students to groups.) The overall assignment takes the form of a draft entry for the Architectures of the Book (ArchBook) project, plus an experiment in XML encoding of some of the materials that your ArchBook entry discusses. The purpose of the assignment is to introduce you to the theoretical and technical foundations of XML, and to the complexities of representing the bibliographical and textual complexity we find in books and related artifacts. More details about the assignment requirements, as well as examples, will be provided throughout the course.

In essence, the course project involves identifying and researching a textual feature in which the material form of a book (or similar document) interacts with its information architecture in ways that could be instructive for digital interface design. For this workshop's purposes, an interesting example is one that

1. presents a challenge for digital representation; and
2. prompts us to think in creative ways about books and reading practices in digital form.

The textual feature might be an interesting example of typography, marginalia (printed or manuscript), mise-en-page, tables, charts, volvelles (moving parts in books), maps, indexes, title pages, error-control mechanisms, paratexts, or text-image relationships. Keep in mind that the feature need not be part of the book's original design; it could be an example of readerly marginalia, or other post-production interventions in the form and content of the book. See the "For Authors" section of the ArchBook website (linked from Blackboard) for a list of topics that are currently being worked on, and topics that are currently unclaimed.

All members of the group will receive the same grade on all assignments. All group members must be involved at all stages, including the final presentation.

## Assignment 1: ArchBook entry & encoding challenge proposal

6-8 pages, plus references and images

Due Thursday, Jan. 26 (INF 1005) / Thursday, March 22 (INF 1006) by 5:00 pm

For the first stage of your project, you will identify a particular textual feature and make a case for its suitability as the subject of an ArchBook entry. Specifically, this involves: making a case for its relevance to the design of digital reading interfaces; finding examples of this feature from different historical periods and forms of the book; and making a case for **one** of these examples as your choice for an XML encoding challenge, and for your strategies for representing the salient features of that example. There are three requirements for your encoding challenge example: 1) it must come from a book (or other object) that you have seen physically, not just an online image; 2) you must be able to provide a digital image of it with assignment 1 and 2; and 3) although your final ArchBook entry can (and should) include examples from a wide range of historical periods, your example for the encoding challenge must come from a **pre-modern** book. That simply means a book made prior to about 1800, when we generally date the beginning of the machine-press era. The reasons for the pre-modern requirement will be explained in class. However, I am open to discussing examples from after 1800 that satisfy the "pre-modern" rationale in other ways. (Interested groups must discuss this option with me prior to submitting assignment 1.) Finally, your proposal must draw on secondary sources.

For this assignment, you will be graded on the level of detail and persuasiveness of your proposal, and the accuracy of its research and writing.

## Assignment 2: ArchBook entry & encoding challenge

4,000-5,000 words including references, not including XML code  
Monday, February 13 (INF 1005) / Thursday, April 5 (INF 1006) by 5:00 pm

This stage of your project involves building on what you wrote in your proposal, and the feedback you receive, to write a complete draft of an ArchBook entry. You are free to reuse the text you wrote for your proposal since you are revising and expanding the same document. Your final draft should also draw on secondary sources.

In addition to the complete ArchBook draft, you must also submit a *small* XML-encoded representation of one of the examples of the textual feature you've selected, along with a short (2-page) summary of the choices you made in your encoding, and your rationale for those choices. The encoding report may also discuss what you learned about the material in the process of encoding it.

Finally, your group must submit an executive summary of each of the team members' contributions to the project. This should not exceed one double-spaced page.

For this assignment, you will be graded on the quality of the research and writing reflected in your ArchBook entry, as well as the success of your encoding challenge -- that is, its success as an experiment in encoding challenging materials, not its success as a perfect representation.

### Class presentation of final project

10 minutes, delivered in the final class of the workshop.

In our final class your group will present your project to the class, describing key parts of your research process, such as the search for materials to use, rationale for choosing them, what you learned from secondary sources, and what you learned from the encoding challenge. Presentations should be no more than 10 minutes long, and will be followed by a few minutes for questions from the audience.

Presentations will be graded on the quality of your preparation, your adherence to time limits, your ability to communicate what you know to the group, and the skill with which you facilitate discussion. All group members must be involved in the presentation.

You do not need to submit a written version of your presentation, but you must submit your presentation slides (ideally as a PowerPoint, Keynote, or PDF file, or Prezi link) within 48 hours of your presentation.

### Academic integrity

From Jens-Erik Mai, Faculty of Information: "The essence of academic life revolves around respect not only for the ideas of others, but also their rights to those ideas and their promulgation. It is therefore essential that all of us engaged in the life of the mind take the utmost care that the ideas and expressions of ideas of other people always be appropriately handled, and, where necessary, cited. For writing assignments, when ideas or materials of others are used, they must be cited. [...] In any situation, if you have a question, please feel free to ask. Such attention to ideas and acknowledgement of their sources is central not only to academic life, but life in general. Please acquaint yourself with UofT's Code of Behaviour on Academic Matters: <http://www.utoronto.ca/govcncl/pap/policies/behaveac.pdf>"

## Special needs

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability or health consideration that may require accommodations, please feel free to approach the instructor and/or the Accessibility Services Office at <http://www.studentlife.utoronto.ca/accessibility.htm> as soon as possible. The Accessibility Services staff are available by appointment to assess specific needs, provide referrals, and arrange appropriate accommodations.

## Assigned readings

Galey, Alan, Jon Bath, Rebecca Niles, Richard Cunningham, and the INKE Team. "Imagining the Architectures of the Book: Textual Scholarship and the Digital Book Arts." [unpublished draft]

Galey, Alan, Richard Cunningham, Brent Nelson, Ray Siemens, Paul Werstine, and the INKE Team. "Beyond Remediation: The Role of Textual Studies in Implementing New Knowledge

Environments." *Digitizing Material Culture, from Antiquity to 1700*. Ed. Brent Nelson and Melissa Terras. Toronto & Tempe, AZ: Iter/Arizona Centre for Medieval and Renaissance Studies. (in press)

Drucker, Johanna. "Modeling Functionality: From Codex to E-book." *SpecLab: Digital Aesthetics and Projects in Speculative Computing*. Chicago: U of Chicago P, 2009. 165-174. [copy in INF 2331 binder in Inforum]

Guédon, Jean-Claude. "Digitizing and the Meaning of Knowledge." *Academic Matters* (October/November 2008): 23-6.

Kirschenbaum, Matthew G. "'So the Colors Cover the Wires': Interface, Aesthetics, and Usability." *A Companion to Digital Humanities*. Ed. Susan Schreibman, Ray Siemens, and John Unsworth. Oxford: Blackwell, 2004. [print copy on reserve in Inforum; digital copy available at <http://www.digitalhumanities.org/companion/>]

Mak, Bonnie. "Introduction" and "Architectures of the Page." *How the Page Matters*. Toronto: U of Toronto P, 2011. 3-21. [copy in INF 2331 binder in Inforum]

Morris, William. "The Ideal Book." *The Ideal Book: Essays and Lectures on the Arts of the Book*. Ed. William Peterson. Berkeley, CA: U of California P, 1982. 67-73. [copy in INF 2331 binder in Inforum]

Renear, Allen H. "Text Encoding." *A Companion to Digital Humanities*. Ed. Susan Schreibman, Ray Siemens, and John Unsworth. Oxford: Blackwell, 2004  
[<http://www.digitalhumanities.org/companion/>]

Stallybrass, Peter. "Books and Scrolls: Navigating the Bible." *Books and Readers in Early Modern England: Material Studies*. Ed. Jennifer Andersen and Elizabeth Sauer. Philadelphia: Pennsylvania UP, 2002. 42-79. [copy in INF 2331 binder in Inforum]

Unsworth, John. "Scholarly Primitives: What Methods Do Humanities Researchers Have in Common, and How Might Our Tools Reflect This?" *Humanities Computing: Formal Methods, Experimental Practice*. King's College, London, 13 May 2000.  
[<http://www3.isrl.illinois.edu/~unsworth/Kings.5-00/primitives.html>]

**INF 1005/6 Winter 2012 schedule**10 Jan. / 6 March Introduction

- Topics
  - course overview
- Readings
  - Galey et al., "Imagining the Architectures of the Book"
  - Galey et al., "Beyond Remediation" [optional]

17 Jan. / 13 March (Re)introduction to XML

- Topics
  - markup theory, XML basics
  - the [Text Encoding Initiative \(TEI\)](#)
  - TEI By Example
- Readings
  - Renear, "Text Encoding" [in Blackwell [Companion to Digital Humanities](#)]
  - [TEI By Example](#) modules:
    - Common Structure and Elements
    - Primary sources

24 Jan. / 20 March XML and digitization

- Class held in Fisher Rare Book Library
- Topics
  - more XML; applications; XML and other technologies
  - digitization and premodern books
- Readings
  - [Unsworth, "Scholarly Primitives"](#)
  - Drucker, "Modeling Functionality"

31 Jan. / 27 March Premodern books and reading

- Topics
  - premodern books as challenges to XML/TEI
  - discontinuous reading
- Readings
  - Morris, "The Ideal Book"
  - Stallybrass, "Books and Scrolls"
  - Guédon, "Digitizing and the Meaning of Knowledge"

7 Feb. / 3 April Books & interfaces

- Topics
  - interface design, print and digital
  - any unfinished business
- Reading
  - Mak, "Introduction" & "Architectures of the Page"
  - Kirschenbaum, "'So the Colors Cover the Wires': Interface, Aesthetics, and Usability" [in Blackwell [Companion to Digital Humanities](#)]

14 Feb. / 10 April Project presentations