DIG 6836: Design and Development of Texts and Technology

Section 0001, Course # 00000, 3 credit hours
Fall 2013, Monday 6:00-7:15p (mixed mode), Location TBD

Professor: Rudy McDaniel
Phone: 407-823-0218
*Email: rudy@ucf.edu

Office: CAH Dean’s Office 190R
Office Hours: Mondays 5:30-7:30 and by appointment

Overview

This course will introduce you to some of the digital design and development techniques to be used in the interdisciplinary scholarship of Texts and Technology. Although we will discuss various approaches to T&T, we will focus on the impact of “new media” on our concepts and practices of literacy/electracy, including pedagogical, artistic, workplace, and leisure-based communicative practices. We will also engage with Ramsay’s concept of algorithmic analysis as a research tool for the humanities and identify ways to extend, challenge, or reconfigure his ideas to engage with projects and practices outside of text analysis.

In addition to engaging with theoretical content from a variety of scholars working in T&T-related fields, we will also learn applied programming skills this semester that will aid in our understanding and application of digital theories and methodologies. Specifically, we will learn how to build interactive projects using digital media design, scripting, and development languages. Fundamental to a deep understanding of new media theory and practice is knowledge about the underpinnings of digital computing (especially Web-based technologies). As such, we will be learning and applying foundational techniques in computation such as iteration, conditional logic, randomness, and algorithm design. We will also study how to apply programming techniques for functions such as text parsing, data analysis, repetition, and interactive design. These skills will further aid you as you consider applied digital components for your dissertation or other scholarly projects.

The bulk of your “writing” in this course will be done in digital form through interactive projects. You will write a traditional project proposal for your final project, but for most of your assignments, you will develop your own scholarly digital projects using programming techniques learned in the course. By the end of the course, you will have the knowledge to a) plan and design a workflow for an interactive digital project using functional or object-oriented programming techniques and databases, b) select the appropriate data structures, functions, and/or objects to employ in your project, c) determine the best technical and rhetorical means by which to deploy your project to an audience, and d) document and assess your project within a scholarly context.

We will use a course website to extend our inquiry online, share work with others, and keep track of our collective work. This website will contain copies of our major assignments, example code and tutorials, and links to student projects.

Bi-weekly programming quizzes and our discussion boards will be deployed on our official Canvas web site (URL TBD). Webcourses is additionally available from the “Online Course Tools” of your MyUCF panel. Students are encouraged to make use of the “Questions for the Instructor” forum thread for any questions about assignments or course materials. They can also use the “General Student Discussion” forum thread to interact with classmates. For general help with Webcourses or logging into your account, see http://learn.ucf.edu/.

Course Objectives

- Learn about the diverse work in T&T, both theoretical and applied, and form a working definition of this scholarly area and the practices it can inform.
- Engage in scholarly conversation about the course texts and concepts they take up, in the process improving interpretation, writing, design, and argumentation skills.
• Understand and apply media programming techniques to develop scholarly textual and interactive projects for the World Wide Web and your scholarly portfolios.
• Solve problems using interactive media tools and resources.
• Explore ideas and juxtapositions of critical theory and technology for use in your thesis, your publications, or future project coursework.
• Use new media to better understand and teach the ways these media rearticulate communication forms and processes.

Required Texts
The following books (available at the UCF Bookstore) are required. See the schedule for the dates on which these readings are due.

• Bartscherer, Thomas and Roderick Coover (Eds.). *Switching Codes: Thinking Through Digital Technology in the Humanities and the Arts*
• Hayles, N. Katherine. *How we Think: Digital Media and Contemporary Technogenesis*
• Jenkins, Henry. *Convergence Culture: Where Old and New Media Collide*
• Norman, Donald A. *The Design of Future Things*
• O’Gorman, Marcel. *E-Crit: Digital Media, Critical Theory, and the Humanities*
• Ramsay, Stephen. *Reading Machines*

Recommended Text
It is recommended that those students without much/any programming experience pick up a beginner’s guide to programming. Recommendations can be provided by the instructor. If you already have experience with another programming language or feel comfortable with web scripting and databases, then an additional book is probably not necessary. As a class, we may also read additional selections (available as .pdf files on our WebCourses site). Technical tutorials may also be assigned at certain points throughout the semester.

Assignments and Grading

<table>
<thead>
<tr>
<th>Major Assignments</th>
<th>Percentage of Overall Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Roundtable Presentation</td>
<td>20%</td>
</tr>
<tr>
<td>2) Bi-Weekly Programming Quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>3) Digital Project 1</td>
<td>10%</td>
</tr>
<tr>
<td>4) Digital Project 2</td>
<td>15%</td>
</tr>
<tr>
<td>5) Final Project Proposal</td>
<td>10%</td>
</tr>
<tr>
<td>6) Final Digital Project</td>
<td>20%</td>
</tr>
<tr>
<td>7) Class Participation</td>
<td>15%</td>
</tr>
</tbody>
</table>

Technology Policy
Outside class, students are required to have access to word processing software and a Mac or PC computer with access to the Internet. During class, students may find use in working with technology to take notes, experiment (during appropriate class discussions), show examples, etc. It is expected that these technologies will not be used during class for purposes outside the scope of discussion, including instant messaging classmates, texting, e-mail, Facebooking, video games (outside of their use as examples to support particular arguments). Please feel free to use any device that makes your participation in class discussions easier. Please do not leave your cell phones on audible ring, and barring emergencies, do not take or make phone calls during class. In other words, be courteous to your instructor and your peers.
Other Course Policies

- I am always happy to meet with you about the course or your larger T&T program of study. If my office hours are not convenient for you, we can certainly schedule alternative times to meet in person or virtually.
- We will mostly follow the syllabus and schedule, but they are subject to minor changes, about which I will apprise you ASAP during normal class meetings or by email.
- In order for the class to be a success, you must be well prepared for and actively engaged in all class meetings. I will take notes about your level of preparation and participation.
- Because this is a discussion-oriented class, attendance and punctuality are crucial. Beyond affecting your participation grade, missing more than one class will result in your overall course grade being lowered. Missing more than two classes will likely cause you to fail the course.
- All UCF students are responsible for upholding standards of academic integrity as explained by The Golden Rule (http://www.ucf.edu/goldenrule). When it amounts to academic dishonesty, plagiarism can have dire consequences such as failing a paper or the entire course.
- Students with disabilities will be accommodated in this course. Please let me know at the beginning of the term about any such needs, and I will make adjustments and help you locate resources to aid your performance in the course.

Tentative Schedule

Note: Each night’s lecture is divided into three parts. Part one is a theoretical roundtable and class discussion. The next part is an applied lecture on programming. The final part is project presentation time or guided lab time using the computers. We will write sample programs in class during those evenings with guided lab time.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics and Activities</th>
<th>Readings and Assignments Due By Next Meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>August 22</td>
<td>Part I: Welcome and Introduction to the Course; Review of Syllabus; Student Introductions Part II: HTML, CSS, Network Tools Part III: Lab time</td>
<td>☐ Read: Ramsey (first half)  ☐ Complete this HTML tutorial: <a href="http://www.jneuhaus.com/write.html">http://www.jneuhaus.com/write.html</a></td>
</tr>
<tr>
<td>2</td>
<td>August 29</td>
<td>Part I: Model Roundtable: Algorithmic Computing in the Humanities Part II: Introduction to variables, data types, comments, output Part III: Lab time</td>
<td>☐ Read: Ramsay (second half)  ☐ Complete technical tutorial</td>
</tr>
<tr>
<td>3</td>
<td>Sept. 5</td>
<td>Part I: Algorithmic Computing in the Humanities, Part II</td>
<td>☐ Read: Jenkins p. 1-134</td>
</tr>
<tr>
<td>4</td>
<td>Sept. 12</td>
<td>Part I: Roundtable #1 Presentation: Knowledge, community, storytelling Part II: Variables and control structures Part III: Lab time</td>
<td>☐ Read: Jenkins p. 135-194  ☐ Complete Programming Quiz #1</td>
</tr>
<tr>
<td>Week</td>
<td>Date</td>
<td>Session 1</td>
<td>Session 2</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
</tbody>
</table>
| 5    | Sept. 19 | Part I: Roundtable #2 Presentation: Media literacy, politics, and participation  
Part II: Iteration and Loops  
Part III: Lab time  
Read: O’Gorman p. 1-70 | | |
| 6    | Sept. 26 | Part I: Roundtable #3 Presentation: Discourse Networks & New Media  
Part II: GET/POST, input, forms  
Part III: Lab time  
Read: O’Gorman p. 71-116  
Complete Programming Quiz #2  
Digital Project 1 | | |
| 7    | Oct. 3 | Part I: Roundtable #4 Presentation: Nonsense, Play, and Postmodernism  
Part II: Functions, part I  
Part III: Digital Project 1 Presentations NewTextReader  
Read: Switching Codes p. 1-195 | | |
| 8    | Oct. 10 | Part I: Roundtable #5 Presentation: Hypertext, Authorship, Critical Theory  
Part II: Functions, part II  
Part III: Lab time  
Read: Switching Codes p. 199-313  
Complete Programming Quiz #3 | | |
| 9    | Oct. 17 | Part I: Roundtable #6 Presentation: Narrative, Education, Politics  
Part II: Arrays, text parsing, implode/explode  
Part III: Lab time  
Read: Hayles p. 1-170  
Final Project Proposal | | |
Part II: Objects, Part I  
Part III: Lab time  
Read: Hayles p. 171-247  
Complete Programming Quiz #4 | | |
| 11   | Oct. 31 | Part I: Roundtable #8 Presentation: Information Patterns and Transmission  
Part II: Objects, Part II  
Part III: Digital Project 2 Presentations Procedural Argumentation  
Read: Norman (first half)  
Digital Project 2 | | |
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Part I: Roundtable #9 Presentation: Avatar, Interface, and Identity</th>
<th>Part II: Objects, Part III + SimpleXML</th>
<th>Part III: Lab time</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Nov. 7</td>
<td>Part I: Roundtable #10 Presentation: Psychology and Design</td>
<td>Part II: MySQL, Part I</td>
<td>Part III: Lab time</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Nov. 14</td>
<td>Part I: Roundtable #11 Presentation: Regulation and Control</td>
<td>Part II: MySQL, Part II</td>
<td>Part III: Lab time</td>
</tr>
<tr>
<td>14</td>
<td>Nov. 21</td>
<td>Part I: Roundtable #12 Presentation: Intellectual Property and Privacy</td>
<td>Part II: MySQL, Part III</td>
<td>Part III: Lab time</td>
</tr>
<tr>
<td>15</td>
<td>Nov. 28</td>
<td>Part I: Discussion: Free Speech</td>
<td>Part II-III: Final Project Presentations</td>
<td></td>
</tr>
</tbody>
</table>

Future of Texts and Technology

Congratulations on completing the course! Have a great Winter Break.