

DIG 6836: Design and Development of Texts and Technology

Section 0M01, Course # 81553, 3 credit hours

Fall 2020, Mondays, 6:00-7:15, via Zoom

Professor: Dr. Rudy McDaniel (“Rudy”)

Phone: 407-823-0728

*Email: rudy@ucf.edu

Office: VAB-117

Office Hours: Mondays 3:00-5:00 (in Zoom)
and virtually or face-to-face by appointment

Course Links

Recurring Zoom link: <https://ucf.zoom.us/j/92966442212?pwd=SGpOM2xUK3pkc2FFbkY0MDVld2k2Zz09>
(The above link is our normal, recurring session for Monday night classes up until our final exam period. These sessions will run from 6:00 to 7:15pm each Monday, except for UCF holidays. You will click on this link on a weekly basis up until our final exam to join our virtual classroom Zoom sessions.)

Webcourses page: <https://webcourses.ucf.edu/courses/1359397>

(The above link is our normal Webcourses shell which should be checked throughout each week for updates.)

Final exam Zoom link: <https://ucf.zoom.us/j/94719834583?pwd=a1VTKzFzVWFxYzg5VzNZY0FjUXE3QT09>

(The above link is only used for our final exam meeting. You’ll only click it once, at the end of the semester.)

Course Overview

Fundamental to a comprehensive understanding of new media theory and practice is knowledge about the underpinnings (code layer) of digital computing and interactive design. This course will introduce you to some digital design and development techniques to be used in the interdisciplinary scholarship of Texts and Technology. Specifically, you will learn how to use three different programming/scripting languages to build interactive projects useful to your own research interests (and to the broader domains of digital media and the digital humanities). As you work toward these goals, you will learn and apply foundational techniques in computation such as iteration, conditional logic, randomness, and repetition. You will learn how to use data structures to organize your thinking and implement programmatic methods for analysis and critique.

The bulk of your “writing” in this course will be done in digital form through interactive projects. The three main languages we will use in this course are JavaScript, Python, and Processing. You will also maintain a Developer’s Journal (DJ) that includes some online, reflective writing prompts throughout the semester. For your digital work, you will design three interactive projects this semester – one in each language. By the end of the course, you should have the knowledge to a) plan and design a workflow for an interactive digital project, 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 our course website in Webcourses (above) to extend our inquiry online, share work with others, and track our work. This website will contain copies of our major assignments, example code and tutorials, and links to student projects. The discussion boards will be deployed on our official Canvas web site (see link above at top of syllabus). Please bookmark this site as you will be using it throughout the semester.

Students will also maintain personal web sites on the T&T server to showcase their assignments throughout the semester. Accounts will be provided to students by UCF-IT within the first few weeks of the course.

V-Model Course (With Zoom)

Because of the continued remote instruction requirement due to the COVID-19 pandemic, this course will use Zoom for some synchronous (“real time”) class meetings. Meeting dates and times will be scheduled through Webcourses@UCF and should appear on your calendar.

Please take the time to familiarize yourself with Zoom by visiting the [UCF Zoom Guides](https://cdl.ucf.edu/support/webcourses/zoom/) at <https://cdl.ucf.edu/support/webcourses/zoom/>. You may choose to use Zoom on your mobile device (phone or tablet).

Things to Know About Zoom:

- You must sign into Zoom sessions using your UCF NID and password.
- The Zoom sessions are recorded.
- Improper classroom behavior is not tolerated within Zoom sessions and may result in a referral to the Office of Student Conduct.
- You can contact [Webcourses@UCF Support](mailto:Webcourses@UCF) at <https://cdl.ucf.edu/support/webcourses/> if you have any technical issues accessing Zoom.

You will notice that our course is only scheduled to meet for one hour and fifteen minutes each week. This is not very much time! Our synchronous class meeting time is purposefully shortened to provide you extra time each week to work through the programming tutorials and practice exercises at your own pace. You should schedule your time appropriately so that you have plenty of time to work through the programming materials and DJ postings.

Children and Zoom Sessions

Parents deserve access to education. At all times, I strive to be inclusive to parents, and now, in our virtual learning space, with many children learning from home or schools facing sudden closures, we can expect children to be present in class from time to time.

1. All breastfeeding babies are welcome in our synchronous sessions as often as is necessary to support the breastfeeding relationship. I never want students to feel like they have to choose between feeding their baby or continuing their education.
2. Children may be visible onscreen during class sessions, either in your lap or playing in the background. Alternatively, you may turn your camera off if more privacy is required.
3. Parents or caregivers who anticipate having a child(ren) with them during class sessions are encouraged to wear a headset to help minimize background noise. You may mute your microphone and communicate through the “chat” feature at any point necessary.
4. Stepping away momentarily for childcare reasons is completely understandable and expected. Simply mute and/or turn off your camera as necessary and rejoin us when you are able.
5. I ask that all students work with me to create a welcoming environment that is respectful of all forms of diversity, including diversity in parenting status.
6. I hope that you will feel comfortable disclosing your student-parent status to me. This is the first step in my being able to accommodate any special needs that arise. While I maintain the same high expectations for all student in my classes regardless of parenting status, I am happy to problem solve with you in a way that makes you feel supported as you strive for school-parenting balance.

Other Digital Resources We Will Use

Webcourses is additionally available from the “Online Course Tools” of your MyUCF panel. Students are encouraged to make use of the “Ask A Question” 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/>.

We will also be using video tutorials throughout the course from Lynda/LinkedIn Learning and from YouTube. The web site for this resource can be found here: <https://digitallearning.ucf.edu/lynda/>. Please register an account using your UCF credentials and ensure you can login and access this content.

Additional Statements Regarding COVID-19

University-Wide Face Covering Policy for Common Spaces and Face-to-Face Classes

To protect members of our community, everyone is required to wear a facial covering inside all common spaces including classrooms (<https://policies.ucf.edu/documents/PolicyEmergencyCOVIDReturnPolicy.pdf>). Students who choose not to wear facial coverings will be asked to leave the classroom by the instructor. If they refuse to leave the classroom or put on a facial covering, they may be considered disruptive (please see the [Golden Rule](#) for student behavior expectations). Faculty have the right to cancel class if the safety and well-being of class members are in jeopardy. Students will be responsible for the material that would have been covered in class as provided by the instructor.

Notifications in Case of Changes to Course Modality

Depending on the course of the pandemic during the semester, the university may make changes to the way classes are offered. If that happens, please look for announcements or messages in Webcourses@UCF or Knights email about changes specific to this course.

COVID-19 and Illness Notification

Students who believe they may have a COVID-19 diagnosis should contact UCF Student Health Services (407-823-2509) so proper contact tracing procedures can take place.

Students should not come to campus if they are ill, are experiencing any symptoms of COVID-19, have tested positive for COVID, or if anyone living in their residence has tested positive or is sick with COVID-19 symptoms. CDC guidance for COVID-19 symptoms is located here: (<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>)

Students should contact their instructor(s) as soon as possible if they miss class for any illness reason to discuss reasonable adjustments that might need to be made. When possible, students should contact their instructor(s) before missing class.

In Case of Faculty Illness

If the instructor falls ill during the semester, there may be changes to this course, including having a backup instructor take over the course. Please look for announcements or mail in Webcourses@UCF or Knights email for any alterations to this course.

Course Accessibility and Disability COVID-19 Supplemental Statement

Accommodations may need to be added or adjusted should this course shift from an on-campus to a remote format. Students with disabilities should speak with their instructor and should contact sas@ucf.edu to discuss specific accommodations for this or other courses.

Course Learning Objectives

- Students will understand and apply media programming techniques and algorithmic design to develop scholarly textual and interactive projects for the World Wide Web and their scholarly portfolios.
- Students will learn how to solve problems using interactive programming languages.
- Students will explore ideas and juxtapositions of critical theory and technology for use in their dissertations, future publications, or future project coursework.
- Students will reflect critically on the design and development process through presentations and writing in a developer's journal.

Required Texts

- Sayers, Jentery (Ed.) *Making Things and Drawing Boundaries*. Minneapolis: U of Minnesota Press.

Recommended Text

It is recommended that those students without much/any programming experience pick up a beginner's guide to programming on each of our languages: JavaScript, Python, and Processing. If you already have experience with another programming language or feel comfortable with web scripting, then an additional book is probably not necessary. As a class, we will also read additional selections (available on our Web site) and follow tutorials from YouTube or LinkedIn Learning each week.

Assignments and Grading

<u>Major Assignments</u>	<u>Percentage of Overall Grade</u>
1) Developer Journal Reflection Posts x 4	20%
2) Project 1 (Interactive Poetry in JavaScript)	20%
3) Project 2 (Arts/Humanities Calculator in Python)	25%
4) Project 3 (Interactive Argument in Processing)	25%
5) Class Participation and Online Interaction	10%

Late Work and Backup Policy

Late work will generally not be accepted unless there is a documented medical emergency. Assignments can be submitted early if necessary; be sure to speak with me if you need to take advantage of this. Also, make sure all of your work is consistently backed up by automatic software in case of hard drive or technology failure. I strongly recommend a cloud-based backup service such as OneDrive, Dropbox, or Box.com.

Financial Aid Reporting Policy

All faculty members are required to document students' academic activity at the beginning of each course. In order to document that you began this course, please complete the first developer response activity (DJ#1) no later than Thursday of the first week of class. Failure to do so will result in a delay in the disbursement of your financial aid.

Technology Policy

For this course you will need access to a reliable PC or Macintosh computer capable of running Visual Studio Code. Requirements can be found here: <https://code.visualstudio.com/docs/supporting/requirements>.

You will also need access to word processing software and access to the Internet. During class time, you may use other technology such as smart phones, iPads, or tablet computers 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 for purposes such as instant messaging classmates, texting, e-mailing, accessing social media, or playing 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. When possible, please mute your microphone when you aren't speaking and keep your video turned on to facilitate more

engaging interactions with the class. However, I recognize there are times when it may be necessary to turn off your video to handle personal or household matters.

I will do my best to help you with technology issues related to the course's assignments and programming tutorials, but any technology issues outside the scope of our course (including operating system problems, viruses, or file system errors) will need to be handled by your usual computer support personnel.

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, I can schedule alternative times to meet in person, virtually, or via phone.
- 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/Webcourses.
- In order for the class to be a success, you must be well prepared for and actively engaged in all class meetings.
- 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. If there are circumstances in your life which will require you to miss more than one class this term, please contact me so that we can discuss them.
- 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 (of computer code or written text) will have dire consequences (e.g., failing the course and being reported to Student Conduct for an ethical and student conduct violation). Any code that is reused/extended/modified or libraries that are used in projects should be fully referenced and documented as such. In other words, credit must be given where due.
- Students with customized learning needs will be accommodated in this course if registered through the university with Student Accessibility Services (SAS).

*Tentative Schedule (Always check Webcourses for any changes or updates to syllabus or deadlines).
In addition, programming tutorial videos will be assigned each week – check Webcourses for specifics.
Excepting the first DJ, each additional DJ will be due Friday at 11:55pm on the week it is assigned.*

Week	Date	Topics and Activities	Readings and Assignments Due By Next Meeting
1	Aug 24	Welcome and Introduction to the Course; Review of Syllabus; Student Introductions	<input type="checkbox"/> Read: Sayers: Introduction: I Don't Know All the Circuitry. <input type="checkbox"/> Watch JavaScript I: Learn JavaScript in 1 Hour (https://www.youtube.com/watch?v=W6NZfCQ5Sik) <input type="checkbox"/> DJ Post #1: Introduction and Technology Autobiography (Due by 11:55pm on Thursday, Aug 27th)
2	Aug 31	JavaScript I	<input type="checkbox"/> Read: Kirschenbaum (Hello Worlds via Webcourses) <input type="checkbox"/> Read: Sayers pp. 21-56 <input type="checkbox"/> Check Webcourses for programming tutorial. <input type="checkbox"/> Work on Project #1

3	Sept. 7 (Labor Day)	No face-to-face meeting – See Webcourses JavaScript II	<input type="checkbox"/> Read: Design Practices “Nothing about Us without Us” via https://design-justice.pubpub.org/pub/cfohnud7/release/1 <input type="checkbox"/> Read: Sayers pp. 57-94 <input type="checkbox"/> Check Webcourses for programming tutorials.
4	Sept. 14	JavaScript III	<input type="checkbox"/> Read: Sayers pp. 95-129 <input type="checkbox"/> Check Webcourses for programming tutorials.
5	Sept. 21	JavaScript IV	<input type="checkbox"/> Read: Sayers pp. 130-145 <input type="checkbox"/> Check Webcourses for programming tutorials. <input type="checkbox"/> Project 1 due next week
6	Sept. 28	Project 1 Due by Class Time Project 1 Demonstrations in Class (Group A)	<input type="checkbox"/> Read: Sayers pp. 149-176 <input type="checkbox"/> DJ Post #2: Project 1 Reflection (due by 11:55pm on Friday, October 2nd).
7	Oct. 5	Project 1 Demonstrations in Class (Group B)	<input type="checkbox"/> Read: Sayers pp. 177-205 <input type="checkbox"/> Check Webcourses for programming tutorials.
8	Oct. 12	Python I	<input type="checkbox"/> Read: Sayers pp. 206-218 <input type="checkbox"/> Check Webcourses for programming tutorials.
9	Oct. 19	Python II	<input type="checkbox"/> Read: Sayers pp. 221-248 <input type="checkbox"/> Check Webcourses for programming tutorials.
10	Oct. 26	Python III	<input type="checkbox"/> Read: Sayers pp. 249-270 <input type="checkbox"/> Check Webcourses for programming tutorials. <input type="checkbox"/> Project 2 due next week
11	Nov. 2	Project 2 Due by Class Time Project 2 Demonstrations in Class (Group A)	<input type="checkbox"/> Read: Sayers pp. 271-287 <input type="checkbox"/> Check Webcourses for programming tutorials. <input type="checkbox"/> DJ Post #3: Project 2 Reflection (due by 11:55pm on Friday, November 6th).
12	Nov. 9	Project 2 Demonstrations in Class (Group B)	<input type="checkbox"/> Read: Sayers pp. 288-300 <input type="checkbox"/> Check Webcourses for programming tutorials. <input type="checkbox"/> Work on final project

13	Nov. 16	Processing I	<input type="checkbox"/> Read: Sayers pp. 301-316 <input type="checkbox"/> Check Webcourses for programming tutorials.
14	Nov. 23	Processing II	<input type="checkbox"/> Read: Sayers pp. 319-341 <input type="checkbox"/> Check Webcourses for programming tutorials.
15	Nov. 30	Processing III	<input type="checkbox"/> DJ Post #4: Final Course Reflection (due by 11:55pm on Friday, December 4th). <input type="checkbox"/> Project 3 Due Next Class
16	Dec. 7	Project 3 Due by Class Time Project Presentations in Class (both groups) (Note: Final exam time is from 7-9:50pm on Dec. 7 th . The Zoom link for this meeting only is noted at top of syllabus.)	Congratulations on completing the course! Have a great Winter Break.