



Course Information	<p><b>Advanced Interaction</b></p> <p>Mondays and Wednesdays 11:00am – 2:00pm in ART 1.209</p> <p>Course website: <a href="https://utexas.instructure.com/courses/1255252">https://utexas.instructure.com/courses/1255252</a></p>
Instructor	<p>Sam Lavigne, Assistant Professor, Department of Design</p> <p>Email: <a href="mailto:samlavigne@utexas.edu">samlavigne@utexas.edu</a></p> <p>Office hours: Mondays 2pm – 3pm or by appointment in ART 1.205</p>
Catalog Description	<p>Studio course. Projects focusing on contemporary design practice, featuring approaches and subfields not represented elsewhere in the curriculum.</p>
Course Overview	<p>In this studio course students will learn how to make interactive art and design projects using open source arts toolkits. Specifically, we will focus on p5.js, a JavaScript based creative coding library. We will learn fundamental programming concepts and explore computation as an artistic and creative medium. Beyond the basics, the course will also cover special topics such as voice recognition, generative design, real-time communication, machine learning, data, and others based on student interest. Students will also gain an understanding of the history of the field of computational art and interaction design.</p>
Objectives	<p>Student will:</p> <ol style="list-style-type: none"><li>1) Gain experience and knowledge of fundamental programming concepts in JavaScript.</li><li>2) Apply coding concepts and computational thinking within design and art practices.</li><li>3) Gain critical perspective and familiarity with the field of interactive creative coding.</li><li>4) Develop personal learning strategies, project planning and problem-solving skills.</li></ol>
Course materials	<p>All required course materials will be posted to Canvas.</p>
UT Electronic Mail Notification Policy	<p>Electronic mail (e-mail) is a mechanism for official University and instructor communication to students. Students are expected to check e-mail on a frequent and regular basis in order to stay current with University- and course-related communications, recognizing that certain communications may be time-critical. It is recommended that e-mail be checked daily, but at a minimum, twice per week.</p> <p>It is the responsibility of every student to keep the University and instructor informed of changes in his or her official e-mail address (do so at <a href="https://utdirect.utexas.edu/utdirect/bio/address_change.WBX">https://utdirect.utexas.edu/utdirect/bio/address_change.WBX</a>). Consequently, e-mail returned to the University with "User Unknown" is not an acceptable excuse for missed communication. Similarly, undeliverable messages returned because of a full inbox or use of a spam filter will be considered delivered without further action required of the University or instructor. (see <a href="http://www.utexas.edu/cio/policies/university-electronic-mail-student-notification-policy">http://www.utexas.edu/cio/policies/university-electronic-mail-student-notification-policy</a>)</p>
Attendance	<p>You are allowed three absences for illness or personal reasons; however, you will likely miss points for in-class assignments or activities as a result, and these generally cannot be made up. However, if a serious medical or personal crisis (hospitalization, death in the family, etc.) impacts your attendance, please inform me as soon as possible. In addition, see the exception below for religious holy days.</p> <p>Arriving more than ten minutes late at the beginning of class or after a break, leaving class without permission, and leaving class prior to dismissal for the day all count as being tardy. Three tardies equals an absence. Four absences will lower your course grade by one letter grade. Additional absences may result in failure of the course.</p>
Religious Holidays	<p>Section 51.911 of the Texas Education Code states that a student shall be excused from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence. University policy requires students to notify each of their instructors at least fourteen days prior to the date they will be absent from</p>

scheduled classes to observe a religious holy day.  
(from [http://www.utexas.edu/provost/policies/religious\\_holidays/1555\\_001.pdf](http://www.utexas.edu/provost/policies/religious_holidays/1555_001.pdf))

Classroom  
Etiquette

Please observe the following rules during class as a courtesy to fellow students and the instructor.

- 1) *Be on time at the beginning of class and after each break.* If you must come in late at the beginning of class, please enter the room and seat yourself as quietly and unobtrusively as possible. And please don't hold up the entire class by failing to return promptly at the end of an announced break, since often the second part of the class period is when we will engage in group activities.
- 2) *Turn off your cell phone's notification sounds upon entering the classroom.* If you forget to do so, and your phone rings, chirps, or vibrates loudly during class, turn it off immediately and discreetly. I reserve the right to penalize repeat offenders by subtracting points from their day's assignment.
- 3) *Don't distract other students.* Everyone benefits from a classroom free of distracting sights, sounds, and smells. If you would like to update your Facebook page, talk to your friends, listen to loud music, polish your nails, doodle with Sharpies, etc., please do so outside the classroom during breaks.
- 4) *Consider bringing earphones and/or earplugs to class for work sessions.* If you like to listen to music while you work, you are welcome to do so, so long as no one else can hear it. And if you are easily distracted by noise/conversation, please bring earplugs to wear so that the conversation from desk critiques will not bother you.

Exams	There are no exams in this class, however there will be a few (easy/not scary) quizzes throughout semester, as well as some homework exercises.
Grading	<p>Exercises &amp; Quizzes: 10%</p> <p>Project 1: 10%</p> <p>Project 2: 15%</p> <p>Project 3: 15%</p> <p>Project 4: 15%</p> <p>Project 5: 15%</p> <p>Final Project: 20%</p> <p>A 90 and up</p> <p>B 80 to 89</p> <p>C 70 to 79</p> <p>D 60 to 69</p> <p>F below 60</p>
Academic Integrity	<p>The University's Honor Code states that “As a student of The University of Texas at Austin, I shall abide by the core values of the University and uphold academic integrity.” You are expected to maintain absolute integrity and a high standard of individual honor in scholastic work undertaken at the University. At a minimum, you should complete any assignments, exams, and other scholastic endeavors with the utmost honesty, which requires you to:</p> <ul style="list-style-type: none"> <li>• acknowledge the contributions of other sources to your scholastic efforts;</li> <li>• complete your assignments independently unless expressly authorized to seek or obtain assistance in preparing them;</li> <li>• follow instructions for assignments and exams, and observe the standards of your academic discipline; and</li> <li>• avoid engaging in any form of academic dishonesty on behalf of yourself or another student.</li> </ul>
Academic Dishonesty	<p>In promoting a high standard of academic integrity, the University broadly defines academic dishonesty as including <i>any act designed to give an unfair or undeserved academic advantage</i>, such as:</p> <ul style="list-style-type: none"> <li>• Cheating</li> <li>• Plagiarism</li> <li>• Unauthorized Collaboration / Collusion</li> <li>• Falsifying Academic Records</li> <li>• Misrepresenting Facts (e.g., providing false information to postpone an exam, obtain an extended deadline for an assignment, or even gain an unearned financial benefit)</li> <li>• Multiple submissions (submitting essentially the same written assignment for two courses without authorization to do so)</li> <li>• Any other acts (or attempted acts) that violate the basic standard of academic integrity</li> </ul> <p>Students who violate University rules on academic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University.</p>
Plagiarism	<p>“Plagiarism” includes, but is not limited to, the appropriation of, buying, receiving as a gift, or obtaining by any means material that is attributable in whole or in part to another source, including words, ideas, illustrations, structure, computer code, and other expression or media, and presenting that material as one’s own academic work being offered for credit or in conjunction with a program course requirement (from Sec. 11-402, <a href="http://catalog.utexas.edu/general-information/appendices/appendix-c/student-discipline-and-conduct/">http://catalog.utexas.edu/general-information/appendices/appendix-c/student-discipline-and-conduct/</a>).</p>
Services for Students with Disabilities (SSD)	<p>The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. For more information, contact Services for Students with Disabilities (512-471-6259, <a href="mailto:ssd@austin.utexas.edu">ssd@austin.utexas.edu</a>, <a href="http://ddce.utexas.edu/disability/">http://ddce.utexas.edu/disability/</a>, or videophone 512-471-6644). Please provide documentation of your needs during the first week of class, if possible, so that I can make the necessary accommodations promptly.</p>

Overview of  
Schedule

Please be aware that on occasion the order and timing of the course schedule may need to be altered to accommodate UT closures, instructor illness, student needs/interests, and design program workshop opportunities and lectures. Any significant alterations to the schedule will be announced via Canvas.  
More schedule details will be found on Canvas.

### **MW class meeting dates, Fall 2019**

W 28 Aug – Introductions, course overview, in class exercise

M 2 Sep – No class

W 4 Sep – Getting started with p5.js, drawing / **Project 1 brief: The Face**

M 9 Sep – **Project 1 due** / Animation, variables / **Project 2 brief: The Animated Face**

W 11 Sep – Lecture / Studio

M 16 Sep – **Project 2 due** / Conditionals & loops

W 18 Sep – **Project 3 brief: The Clock** / Lecture / Studio

M 23 Sep – Functions, objects

W 25 Sep – Studio

M 30 Sep – **Project 3 due** / Arrays

W 2 Oct – **Project 4 brief: Drawing Machines** / Lecture / Studio

M 7 Oct – HTML recap

W 9 Oct -- Studio

M 14 Oct – **Project 4 due** / Working with video & cameras

W 16 Oct – **Project 5 brief: The Body as Interface** / Facial recognition

M 21 Oct – No class

W 23 Oct – Body tracking, special topics: machine learning

M 28 Oct – Special topics: inter-process communication, data, apis

W 30 Oct – Studio

M 4 Nov – **Project 5 due** / Special topics: Real-time communication

W 6 Nov – **Final project brief** / Studio

M 11 Nov – Special topics: physical interfaces and/or geolocation

W 13 Nov – **Final project pitches & feedback**

M 18 Nov – Special topics: Image processing & p5.Riso.js

W 20 Nov -- Studio

M 25 Nov – Special topics: automation, web scraping, bots

W 27 Nov – No class

M 2 Dec – Special topics: tbd / Studio

W 4 Dec – Studio

M 9 Dec – Last day: **Final project presentations**