

SCHEDULE		
AUG	30	Syllabus, Q & A, <b>Project 1 kickoff</b>
SEP	1	Work session - Discovery & Interpretation
	6	No Class
	8	Remote– Benchmarking Presentation
	13	Concept Presentation
	15	p5 Workshop
	20	Work session - Prototype & Experimentation
	22	p5 Speech Workshop
	27	Work session - Prototype & Experimentation
	29	Interim Presentation
OCT	4	Work session - Further Development
	6	Work session - Further Development
	11	Work session - Further Development
	13	<b>Final Presentation / Project 2 kickoff</b>
	18	Workshop - Data Literacy
	20	Benchmarking Presentation
	25	Workshop - NYTimes APIs
	27	Concept Presentation
NOV	1	Work session - Prototype & Experimentation
	3	Work session - Prototype & Experimentation
	8	Work session - Prototype & Experimentation
	10	Interim Presentation
	15	Work session - Further Development
	17	Work session - Further Development
	22	Work session - Further Development
	24	No Class
	29	<b>Final Presentation</b>
DEC	1	<b>Show</b>

The projects and schedules are subject to change based on the needs of the class.

In this course, we will explore computation in the context of communication and interaction design and use it as a primary medium to consider the relationships between form, content, and context for designing systems. Specifically, we will use computation as a process and material to perceive and create patterns to build generative systems. Instead of using standard software, we will take a computational approach to develop our own by writing algorithms.

There will be two group projects to explore the following concepts: 1) Intelligent Agent/UI and 2) Data-driven Web Experience. There is no prerequisite for this course, but a basic understanding of typography, grid, and visual system is expected. Besides, it will be assumed that you already have prior experience with programming or will spend time outside of class to independently learn and understand the basics (links to online tutorial videos will be provided).

M / W 9:30 - 11:00

FALL 2021

**Objectives** for this course are stated as follows: One; this course will expose students to computational design and computational thinking with an emphasis on form and formation. Two; this course will focus on basic procedural literacy and skills for computational design that can be integrated with graphic design/ visual communication.

**Don't tell me, show me** is the motto of this course. You will use your sketching, visualizing, and prototyping skills to present ideas in a coherent and compelling way. Be overly prepared to show your ideas with clarity to receive the feedback and guidance. Where verbal explanations often fail, visual/ physical demonstrations can succeed.

#### Themes & Topics

- Abstraction
- Algorithmic Design
- Automation
- Creative Coding
- Conditional Design
- Computational Design
- Computational Thinking
- Generative System
- Modularity
- Pattern
- Randomness
- Rules
- Variability

**Etiquette** for this course is based on the acceptance that this is a cooperative learning environment. A professional and supportive atmosphere must be maintained at all times. Class meetings will incorporate project review, work-in-session, discussions and independent or group activities. Students will be exposed to a variety of themes through structured units of study that include both exercises and projects. Part of the studio experience requires you to develop strong note-taking skills and being an active participant. We will describe expectations, requirements and project criteria for each assignment on the whiteboard and will not always provide project assignment sheets. Through this activity you will become a more critical listener and more effective translator of visual information.

**Attendance** is the obligation of each student and an absolute requirement. Multiple absences will affect student performance. If you are ten minutes late you will be marked as absent. Three absences may cause your final grade to drop a letter. Six absences may earn you a failing grade for the course. It is the responsibility of all absent students to come prepared for the next class session. Please schedule doctor's appointments, interviews, etc. for times other than class sessions.

**Grading** standards and expectations for this course are extremely high; thereby reflecting the standards of the School of Design and professional practice. Grades will be determined by the quality and quantity of your process work, quality/resolution or refinement of your the project, and your engagement. Presentations, class participation, attendance, and professional demeanor will also be factored as part of your engagement. Late assignments will be accepted with 1 letter grade drop per day late.

**Plagiarism** is regarded by the university and the School of Design as a serious academic offense. Depending on the content and context of the offense, and at the recommendation of the course instructor, the penalty shall be either failure of the assignment or failure of the courses. There's more information online at <https://www.cmu.edu/policies/student-and-student-life/academic-integrity.html>. Here's the gist of what it says: Plagiarism includes but is not limited to, failure to indicate the source with quotation marks or footnotes where appropriate if any of the following are reproduced in the work submitted by a student: 1. a phrase, written or musical; 2. a graphic element; 3. a proof; 4. specific language; 5. an idea derived from the work, published or unpublished, of another person.

**Office hours** are scheduled by appointment only. My office is located in MM 204A. Please email to set up a meeting.

#### Accommodations for Students with Disabilities:

If you have a disability and have an accommodations letter from the Disability Resources office, I encourage you to discuss your accommodations and needs with me as early in the semester as possible. I will work with you to ensure that accommodations are provided as appropriate. If you suspect that you may have a disability and would benefit from accommodations but are not yet registered with the Office of Disability Resources, I encourage you to contact them at: [access@andrew.cmu.edu](mailto:access@andrew.cmu.edu).

**Take care of yourself** this semester. Do your best to maintain a healthy lifestyle by eating well, exercising, avoiding drugs and alcohol, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress. All of us benefit from support during times of struggle. You are not alone. There are many helpful resources available on campus and an important part of the college experience is learning how to ask for help. Asking for support sooner rather than later is often helpful. If you or anyone you know experiences any academic stress, difficult life events, or feelings like anxiety or depression, we strongly encourage you to seek support. Counseling and Psychological Services (CaPS) is here to help: call 412-268-2922 and visit their website at <http://www.cmu.edu/counseling/>. Consider reaching out to a friend, faculty or family member you trust for help getting connected to the support that can help.

If you or someone you know is feeling suicidal or in danger of self-harm, call someone immediately, day or night:

CaPS: 412-268-2922

Resolve Crisis Network: 888-796-8226

If the situation is life threatening, call the police:

CMU Police: 412-268-2323

Emergency Service: 911