GD210

GD First Year Studio Spring 2019

MWF 1:30-4:15
Location: Leazar 304
Units:6
Instructor: Derek Ham: daham@ncsu.edu
TAs: Matt Lemmond : mdlemmon@ncsu.edu
Office hours: F 9:30-1:00   Brooks 113 (or) Brooks 124B

In the First Year studio, students explore the design process and designed systems. In doing so, they learn about the structure of forms, the shaping of visual language and the use of expression as a means to these ends. The studio involves a series of assignments and critiques in which students are encouraged to think deductively and intuitively, and to investigate the potential of a range of materials. The teaching team (Instructor and TAs) lead the critiques – offered both during the process and at the end of each project – but critical dialogue between peers is also important in helping to make the work reach its full potential.

Course Description
The relationship between "Play" and "Creativity" is strikingly intertwined. According to Irving Singer, in his book *Modes of Creativity* (2011), it is impossible not to be creative once in a state of play. The question then, is how do we harness play to access creativity as designers? This course takes a look at design being a byproduct of computational systems. Computational thinking and the ludic mind are both essential in the design process. *Play, Forms of Play, and Play Making* are all investigated through hands on inquiry and design. The course is broken up into three major modules: *Computational Systems, Spatial Systems, and Blended Systems.* Each module builds on the next and will cover theoretical positions on the theme through in class exercises and focused design projects. A backdrop to each of these modules is this ongoing inquiry into the relationship between "*Design"* and *Computational Thinking.* Students will learn as much about "thinking" as they will form and design systems.

Course Goals & Objectives
A major goal of this course is to motivate students to develop their own learning interests and help establish a learner-centered environment. This studio will consider the interconnection between the student's own experiences, culture and learning abilities, with the subject and matter discussed in the studio. Collaborative learning is central to the studio's learning philosophy. The activities and structure of the design curriculum will lean towards interdisciplinary inquiry and a promotion of lateral connectivity across multiple subjects. Students will be exposed to Shape Grammars, Computational Design Approaches, Learning Theories, and New Technologies.   As a result, students should be encouraged to think beyond their own levels of comfort to be stretched into new domains of thought and innovation.

In addition, the studio's overall philosophy is that all students should leave their Foundation year with:
- An understanding that design requires rigorous intellectual inquiry
- An understanding of the importance of critical analysis within parameters as relates to design
- An awareness and understanding of the historical, theoretical, and social contexts of various disciplines of design
- An understanding of formal design terms and concepts, and the complexity of debate inherent in their application
- A development of a work methodology of sustained focus and energy
- A greater understanding of how creative sensibilities relate to their creative processes
- An understanding of how their sensibilities and creative processes relates to their specific design discipline

This course is as much about learning a design process as it is about learning strategies of fabrication and making. As such, students will be engaged in learning concepts through new methods and technology.

Course Organization/ Method of Instruction

Class meetings will be broken into several different methods of instruction. Wednesday courses will be dedicated to instruction and workshops centered on digital design tools taught by the TA. Students are expected to have their laptop with the appropriate software loaded before class.

- Lecture/Discussions: students will be presented with information through formal presentations that transition into rich discussions and/or activities to support concept learning
- Studio Work/Desk Critiques: student independent work time that is supported with instructor one-on-one feedback and review
- Pin Ups/Presentations: students will be asked to take present their work verbally and visually so that they can take a step back and be reflective about their design process and final product
- Tech tutorials:

Course Requirements

Each of the five modules for the studio will last 2-3 weeks. The culmination of the studio modules will be a final project in the form of a FYI portfolio. Students will be required to document their process of all of their projects through a sketchbook.

Website: TBD

The following is a brief list of the Modules with the proposed project deliverables. Dates for these modules can be seen on the course studio outline:

Module 1: Computational Design Systems	Project: Shape Grammar Design
Module 2: Spatial Design Systems	Project: Poster Design
Module 3: Animated Design Systems	Project: Motion Graphic Design
Module 4: Interactive Design Systems	Project: Interactive Webpage Design
Final Portfolio Design	

Evaluation and Grading Policy and Criteria

Each module will represent 25% of the overall grade. The break down for each of these modules can be broken down into the following three categories.

Participation	20%
Assignments	70%
Final Portfolio	10%

Participation will be weighed on students attending the studio time promptly and actively engaging in the class for the full duration. Active engagement is inclusive of: being prepared to discuss any course readings, working in studio on any assignments, showing a positive attitude to setbacks, showing a willingness to help and learn from others. While each module will have a main project attached to it, subsequent in and out of class assignments will be given to scaffold the learning experience. Students are encouraged to collaborate and work in studio as a fully cooperative learner. Holding back ideas from others is highly discouraged.

Course Policies and Expectations

This course works as a design studio. Students are expected to actively engage in class throughout the semester, and come to class ready to discuss projects and readings. Short assignments constitute a critical part of the processes of developing the ideas of the course, and are essential to the iterative nature of the design process.

Classes will start promptly at 1:30am and will end by 4:15. If you are unable to make it to class (due to illness, unavoidable travel, etc.) please send me an email in advance to the session. Repetitive tardiness and late attendance to class will result in significant point deductions from participation credits. Students are asked to be respectful to each other at all times, as such disruptive behavior or actions that infringe on the learning process of other students will be addressed with class dismissal. Laptops and phone usage during studio times should be restricted to purposes that align with task being carried out in the studio. All studio participants are required to hold the highest academic integrity at all times.

The studio is a professional work environment. As such, it needs to be clean, organized, and respected as a group space. You are expected to have the necessary materials, equipment, and resources for each class period and to maintain an organized desktop. Wall space in the classroom will be used for group work and critiques.

Reading, Materials, Resources
All selected readings for the course will be provided by the instructor. Students are expected to provide their own supplies for class projects and assignments. Projects will be assigned in advance to allow for purchase arrangements. Students should come to studio with basic writing, sketching, and model making tools. Students are encouraged to have their own **laptops as well as a working license of various Adobe Software (assigned at later dates). Proficiency of the software is not required, as its use will be introduced throughout the semester as it relates to the weekly topic.

Shop Policies
Check with Shop for hours, tools/equipment available to support class projects/assignments, safety requirements and procedures. NOTE: All first years students must complete a shop safety-training session and be on record as having done so by the end of fall semester.

Diversity/Civility Statement
Gender, race, ethnicity, sexual orientation, and country of origin have no bearing on one's ability to excel as a designer. WE ARE ALL EQUAL. As such, any behavior that seeks to marginalize others or place superiority to a particular demographic will not be tolerated. Alternatively, students are encouraged to share their unique points of view and the cultures that support them. This educational environment is first and foremost a place of inclusion that welcomes and supports unique identities and perspectives about the world around them.

Disabilities
Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with Disability Services for Students at 1900 Student Health Center, Campus Box 7509, 515-7653. For more information on NC State's policy on working with students with disabilities, please see the Academic Accommodations for Students with Disabilities Regulation (REG02.20.1). You also need to familiarize yourself with the Code of Student Conduct Policy POL11.35.1 which I am now required to make you aware of: "I have neither given no received unauthorized aid on this test or assignment," in which I may ask you to sign on each test or assignment

SPRING D1 Schedule

Course Intro and Overview

01/08   Course Intro

- Syllabus Review
- Teaching & Learning Philosophy
    - Ken Robinson: Changing Education
    - Group Learning: Coexisting Groups vs Collaborative Groups
    - Grade Acquisition vs Deep Learning
- Semester Goals and Objective Setting

Module 1: "Everything's A Computational System"

01/07   What is Computational Thinking: A Primer
- Lecture on Thinking and Design (+ Games)

01/09   Digital Design Tool 1: Adobe Illustrator

01/11   Creating Visual Computational Systems
- Shape Grammars: A Primer
Exercise 1: Using transparency film, create a unique shape with three identical copies to play with. Bring them to the next class to play with.

01/14   Visual Grammars and Aesthetics

- Students will use their shape pieces to explore various designs based on simple rules. Students must create their rule sets (recipes) that are used to catalogue their designs.
- In class students go through the process of swapping their designs and playing with each other's compositions
- In class discussion on Aesthetics: *Why do some designs work and others don't?*

01/16   Digital Design Tool 1: Adobe Illustrator

01/18   Visual Grammars and Semiotics

- Students will use their shape designs and discuss semiotics and meaning
- Students will be given a "mood bank" where they must match designs (or create new ones) that fit specific words.
- Group discussions to discuss outcomes

==**Assignment 1: Students create a poster communicating their shape grammar system**==

01/23   Digital Design Tool 2: Photoshop

01/25   Studio Work Day + Desk Crits

01/28   **Final Critique of Shape Grammar System**

January	Monday	Wednesday	Friday	*PROJECT*
wk 1	7	9	11	
	What is Computational Thinking: A Primer	Illustrator		P1. Shape Grammars
wk 2	14	16	18	
		Illustrator		P1. Shape Grammars
wk 3	21	23	25	
	MLK Holiday	Photo Shop		P1. Shape Grammars
wk 4	28	30	1-Feb	
		Photo Shop		P2. Poster Design
February	*Monday*	*Wednesday*	*Friday*	
wk5	4	6	8	
		After Effects		P2. Poster Design
wk 6	11	13	15	
		After Effects		P2. Poster Design
wk7	18	20	22	
		After Effects		P3. Motion Graphic
wk 8	25	27	1-Mar	
		Unity 3D		P3. Motion Graphic
March	*Monday*	*Wednesday*	*Friday*	
wk 9	4	6	8	
		Unity 3D		P3. Motion Graphic
BREAK///	11	13	15	
wk 10	18	20	22	
		Unity 3D		P3.2 AR Triggered Poster
wk 11	25	27	29	
		Dreamweaver		P4. Web/ Interaction Design
April	*Monday*	*Wednesday*	*Friday*	
wk 12	1	3	5	
		Dreamweaver		P4. Web/ Interaction Design
wk 13	8	10	11	
		InDesign		Final:. Portfolio Design
wk 14	15	17	19	
		InDesign	*NO CLASS*	Final:. Portfolio Design
wk 15	22	24	26	
			LAST DAY OF CLASS	