

GRADUATE SYLLABUS

| | | | |
|--|------------------------|---|-----------------------|
| MDP | | ● ArtCenter | |
| Creative Technology 2 | | GMDP-616-01 | 01 3 |
| Zoom/950-131(Studio 4) | | 1:00pm – 4:00pm | Thursdays SP22 |
| Instructional Delivery Method | | Hybrid | |
| INSTRUCTOR | Name | Maxim Safiouline | |
| | ArtCenter Email | Maxim.Safiouline@artcenter.edu | |
| | Availability | By Appointment | |
| DEPARTMENT | Coordinator Contact | Kevin Wingate, kevin.wingate@artcenter.edu Paloma Young, Paloma.Young@Artcenter.edu | |
| | Administration Contact | Kevin Wingate, kevin.wingate@artcenter.edu | |
| COURSE DESCRIPTION | | | |
| <p>This course provides a foundation in design-focused creative technology methods, strategies and applications. Students learn to effectively use technology for a range of prototyping approaches, from "wizard-of-oz" demos to high-fidelity functional experience prototypes. Topics include tangible interaction, networks, digital fabrication, sensors, actuators, programming, simulation, and electronics on a range of platforms, from microcontrollers to embedded computers to 3D authoring environments (e.g. Arduino, Raspberry Pi, Unity). Languages covered include Python, Javascript and C#. The course is designed to challenge both tech novices and experienced technologists alike.</p> | | | |
| PROGRAM LEARNING OUTCOMES | | | |
| <ul style="list-style-type: none"> • Design - Define new design opportunities/territories through research and engagement with diverse social, cultural and technological contexts. Demonstrate an advanced ability to design and communicate across a range of media and modalities. Create work that engages a range of theoretical and applied domains. ☐ Practice - Construct a personal process and employ methodologies that support critical reflection, self-learning, agility, and taking informed risks. Assemble a body of work that interrogates specific interests and domains through design. Productively frame and argue for one's design endeavors in the context of present and future critique. | | | |
| COURSE LEARNING OUTCOMES | | | |
| <ul style="list-style-type: none"> • Self-learn new technologies and how they apply to design, and share with colleagues • Apply advanced methods and strategies for prototyping with technology • Collaborate effectively on the development of technology-oriented projects | | | |

| | |
|---|--------------|
| COURSE INTRODUCTION | |
| <p>The course is structured around 2 main topics, each broken up into projects. The first half of the semester serves as an introduction to Creative Technology with the focus on programming graphical and interactive experiences. The second half centers on physical computing, its tools, methods and applications</p> | |
| ANTICIPATED SCHEDULE (List themes, topics, projects and major graded events, not all weekly activities) | |
| 1. Project 1: World Wide web and the Internet Publishing | Weeks 1 – 3 |
| 2. Project 2: The Digital Dream Space | Weeks 4 - 6 |
| 3. Review week, no class | Week 7 |
| 4. Project 3: The Mediated Extension of Self | Weeks 8 - 10 |
| 5. Project 4: Building for Play | Weeks 11 -13 |

| | |
|---|---------|
| 6. Review week, no class | Week 14 |
| GRADING | |
| (Clear explanation of how grades will be derived, their percentages, and how they will be calculated into the final grade along with participation, etc. Make sure all grade percentages listed in this section sum to 100%. Include policy for late assignments and collaboration if applicable. Further details including specific criteria can be referenced in a Project or Course Grading Rubric.) | |

| | | | | |
|---|---|---------------------------------------|------------------|------------|
| COST INFORMATION | | | | |
| REQUIRED MATERIALS: | Prototyping board, sensors, accessories | ESTIMATED COST OF MATERIALS: | \$ 100.00 | |
| INSTRUCTION/HOMEWORK | | | | |
| IN-PERSON AND ONLINE IN-CLASS ACTIVITIES (all that apply during the term) | y | Synchronous Lecture/Discussion | WEEKLY HOMEWORK: | 2- 4 hours |
| | y | Synchronous Instruction/Demonstration | | |
| | n | Asynchronous Lecture/Demonstration | | |
| | y | Critique/1:1 | | |
| | y | Studio time | | |
| | y | Lab | | |

WEEKLY PLAN

| WEEKLY PLAN OF ACTIVITY | | | |
|--------------------------------|-----------|---|---|
| Course Name: | | Instructor: | |
| Term: | | Meeting Location and Time: | |
| Week | Topic | Class Activities | Assignments |
| Week 1 | Project 1 | Structure of the modern Web from the beginning: TCP/IP, DNS, HTTP, other protocols. Basic Web publishing toolset. Text markup and information architecture with HTML. Version control, Git, GitHub. Web Publishing with GitHub pages. | Create a Webpage that would create visual texture or illustration using only text formatted with HTML. Look at Carl Andre's poems or ASCII art for ideas. Publish in your Github repo. |
| Week 2 | Project 1 | Stylesheets, visual structures on the Web, layout strategies, responsive design. | Create a page that has the same content, but completely changes the way it's presented depending on the device you use to view it. Colors, layout, typography, composition - all needs to exist in at least three versions, but on the same page. |
| Week 3 | Project 1 | JavaScript: DOM manipulation, events and timers, interactive content on the Web. | Build a dynamic interactive Web-based experience |
| Week 4 | Project 2 | Intro to ThreeJS, space, lights, cameras, orientation. | Create the first draft of your dream world: draft the layout, the objects and the narrative possibilities. |
| Week 5 | Project 2 | Building and importing objects. Animation. | Build out the first iteration of your virtual world. |

| | | | |
|---------|-----------|---|--|
| | | | |
| Week 6 | Project 2 | Troubleshooting workshop. Show and tell. | Finish, polish, publish. |
| Week 7 | REVIEW | No class | No class |
| Week 8 | Project 4 | Body sensors, building a data-collection device. | Collect data regularly and as often as possible. Store it in the raw format in the cloud (AdafruitIO). |
| Week 9 | Project 5 | Selecting and organizing data into useful information. Presentation strategies. | Continue collecting data and work on building a presentation. |
| Week 10 | Project 5 | Workshop: finish and present | Compile and submit the documentation. |
| Week 11 | Project 6 | Game mechanics in code. Goals, rewards, obstacles, penalties. Game physics. | Your proposal for your game: diagrams, flowcharts. |
| Week 12 | Project 6 | Controller: sensors, layout, ergonomics, gameplay. | Build your controller. Document the playtesting process. |
| Week 13 | Project 6 | Troubleshooting workshop. Show and tell. | Compile and submit the documentation. |
| Week 14 | REVIEW | No class | No class. |

POLICIES AND EXPECTATIONS

ATTENDANCE POLICY

To complete a course successfully, students must attend all class sessions (unless they are engaged in research or location assignments that have been authorized in advance by the class instructor of the missed class). At the discretion of the instructor, three or more absences may result in a grade of 'N' being entered. Students who miss a class due to illness should discuss the absence with the instructor at the next class meeting. Students who are ill for a week or longer should inform their Department Chair's office of their absence. Updates and current information for all policies listed in the Student Handbook can be found [here](#).

DISABILITY STATEMENT AND ACCOMMODATIONS

ArtCenter complies with the Americans with Disabilities Act, Section 504 of the Rehabilitation Act, and state and local requirements regarding students and applicants with disabilities. Under these laws, no otherwise qualified individual with a disability shall be denied access to, or participation in the services, programs and activities of the College. The Center for the Student Experience has more information on Disability Services, policy and Resources for students. Please see the full Disability Statement in the [Student Handbook](#) for more information.

Students who require disability-related accommodations (academic adjustments and/or auxiliary aids) are encouraged to contact the CSE immediately upon acceptance, after being diagnosed with a disability, and each semester that they are enrolled. For questions regarding student disability support, required documents and the student disability policy, please see the [Student Disability Services](#) page or email CSE@artcenter.edu.

Updates and current information for the Disability Statement and other policies listed in the Student Handbook can be found [here](#).

EXPECTATIONS FOR CONDUCT

ArtCenter is committed to maintaining a civil and safe learning environment, free from bias, coercion, and harassment for all. The classroom is a shared environment where all parties are accountable for behavior and contributions to a productive and supportive atmosphere. We understand that our members represent a rich variety of backgrounds and perspectives and are committed to providing a set of conditions for learning that respects diversity. While working together to build this community we ask all members to:

- Be open to the views of others
- Honor the uniqueness of colleagues
- Communicate in a respectful manner
- Recognize differences in learning, language, approach and ability
- Appreciate the opportunity that we have to learn from each other in this community
- Respect the work and materials of others

All students are expected to abide by the ArtCenter Code of Conduct. All Faculty members, as Employees, are expected to abide by the Employee Standards of Conduct. The full statements of these policies can be found in the Student and Employee Handbooks. To report an incident, please see [here](#) for updates and current policy and procedures for Grievance and Complaints (procedures as listed in the Student Handbook), [Faculty Handbook](#), and [Employee Handbook](#). If you have any concerns or would like to discuss an incident, please contact your Instructor, your Department Chair, the [Center for the Student Experience](#), or the [Office of the Provost](#).

POLICY AGAINST HARASSMENT

The College is committed to providing an educational environment that is free of any kind of unlawful harassment. In keeping with this commitment, the College maintains a strict policy prohibiting unlawful harassment by any employee and by any third parties, such as contractors, visitors, students or vendors. Any harassment on the basis of race, color, religious creed, sex, ancestry, national origin, age, physical or mental disability, medical condition, genetic characteristic, marital status, veteran status, sexual orientation, gender identity, transgender identity or any other characteristic protected by federal, state or local law is strictly prohibited. Examples of such conduct that may violate this policy include verbal harassment, physical harassment or visual harassment. Verbal harassment may include, but is not limited to, epithets and derogatory comments or slurs on any of the bases listed above. Physical harassment may include, but is not limited to, assaulting, impeding or blocking movement, or physically interfering with the normal work or movement of another, when directed at that individual on any of the bases listed above. Visual harassment may include, but is not limited to, the display or possession of derogatory posters, cartoons, computer images or drawings on any of the bases listed above. Violation of the Policy Against Harassment may result in disciplinary action, up to and including suspension or dismissal. Updates and current information for all policies listed in the Student Handbook can be found [here](#).

Title IX Student Policy and Procedure

ArtCenter does not discriminate on the basis of sex, gender or sexual orientation in its education programs or activities. ArtCenter complies with Title IX of the Education Amendments of 1972, and certain other federal and state laws, which prohibit discrimination on the basis of sex, gender, or sexual orientation in employment, as well as all education programs and activities operated by the College (both on and off campus), and protect all people regardless of their gender or gender identity from sex discrimination, which includes sexual harassment and sexual violence. For more information, please see the [Notice of Non-Discrimination and Policy Statement](#). Further contact information, policies and procedures, complaint forms, and other resources can be found on the [Title IX Webpage on Inside.ArtCenter.edu](#).

PARTICIPATION IN ONLINE PLATFORMS

For online courses and online course meetings, students will use their personal digital devices to connect to their instructor and peers using the College's Learning Management System DotED. All remote-learning technology will be embedded within DotED. Weekly course sessions normally will be taught live online by instructors according to the date and time scheduled. (Note: online sessions may be recorded by the instructor for student reference. Recordings are accessible only to those students enrolled in the course. Recordings will be destroyed at the conclusion of the course.) Student participation on the video platform is required for asynchronous course delivery; if a student has difficulty with access to an appropriate digital device (which has a reliable camera and microphone), or internet access, students should contact the instructor directly, and also notify the department chair. Students who are in conditions that prohibit synchronous participation during the scheduled class time may access course recordings and their attendance will be noted at that time of course access. Note: students are allowed to attend and participate in classes with their video cameras turned off for some of the class time; instructors and students should clarify expectations regarding use of cameras for the course in light of potential broadband or privacy considerations. Instructors of classes longer than 1 hour should announce formal breaks and permit students to temporarily disengage for their own breaks, as needed.

CONSENT TO BE RECORDED

In proceeding with any online components of this course, I understand and agree that my voice, image, and Works will be live-streamed and recorded, and that the recordings may be accessed by the course instructor, by the teaching assistant (if any), by the students enrolled in the course, and by any ArtCenter employee who may need access for technical purposes. In enrolling in this course and in accessing this course material, I agree to comply with ArtCenter's Intellectual Property Policy, and in this regard, I understand that all faculty-created Works remain the property of the faculty, and that all student-created Works remain the property of the student. I understand, though, that ArtCenter cannot be held responsible for infringement of intellectual property. I also understand that ArtCenter is the owner of the class recording itself, and everyone, including faculty and students, is prohibited from utilizing the recording for any purpose beyond this particular class during this term. Any questions should be directed towards the ArtCenter Help Desk (helpdesk@artcenter.edu).

TECHNOLOGY NEEDS

For this course you'll need: A desktop or laptop computer, OR a tablet with video and audio recording and playback capabilities with an updated Chrome or Firefox browser. A built-in camera and microphone to record yourself for your assignments, OR a mobile phone to send recordings to your computer/tablet to complete assignments.

Students entering this course/program must have access to the internet for synchronous engagement during scheduled course times. ArtCenter provides access to continual software updates for programs that are supported and required (email, Zoom, etc...). Visit the [IT page](#) on Inside.ArtCenter for software downloads. Please plan to have: Your computer with Zoom downloaded, internet access established, and any other technology ready by the term start date. If you still need help after reviewing the Zoom download directions, please contact helpdesk@artcenter.edu for more assistance. If you have technology needs or concerns, please contact your department.

DOTED COURSE ACCESS AND USE

Students enrolled in this course are able to access the corresponding course site on DotED, which may be used for announcements, course content, information about assignments and projects, weekly discussion forums, review of grades and progress, and other reasons. The DotED course site for each course is listed at the top of the page when logging into [Inside.artcenter.edu](https://inside.artcenter.edu) and DotED can also be accessed under Academics > Online Learning > DotED. Students enrolled in the course can also [access DotED directly \(https://doted.artcenter.edu/\)](https://doted.artcenter.edu/) for current courses.

Click here for [DotED information](#) for students. Specific instructions for 'how to use' the different assignment functions and features to post your work, participate in weekly discussion forums, check progress, etc can be found inside the course site.

HELPDESK AND TECHNICAL SUPPORT

The College's IT Help Desk offers information on its campus portal, Inside ArtCenter, that include documentation, helpful tips, and video tutorials on FAQs. Requests for assistance are handled by phone, email, remote access, and virtual meetings. The Help Desk provides first-level technical support to all constituents including staff, faculty, and students. The Help Desk is staffed to respond to technical inquiries during ArtCenter's business hours, with extended technical teams providing support outside of business hours, such as Computer Labs and Audio Visual for classroom technology support. It operates 8:00 a.m. – 10:00 p.m. PST, Monday through Friday, and 9 a.m. – 4 p.m. PST on Saturdays. To contact the Help Desk, please email Helpdesk@artcenter.edu.

STATEMENT OF ACADEMIC AND CREATIVE INTEGRITY

Academic and creative integrity is essential to personal and educational growth of students, which all members of the ArtCenter community are expected to uphold. This value maintains the standards of excellence of the College and creates a meaningful learning environment. A violation of the Academic and Creative Integrity Policy is defined as misconduct including but not limited to plagiarism, creative dishonesty, multiple submission of the same work, cheating, unauthorized collaboration, misrepresentation of ability, sabotage, falsification of records, and complicity in any of the above. The full Academic Integrity Policy and any updates and current information for other policies listed in the Student Handbook can be found [here](#).

CITATION AND IMAGE ATTRIBUTION

Throughout this course, you may be asked to source images and assets, as well as write a paper. To maintain academic and creative integrity, it is important that you provide citation information referencing other people's artistic and written works when you submit your assignments in DotED. Please check with your professor to see what citation style guide (e.g. APA, Chicago, MLA) you should use. If your professor has no preference, the Library and Writing Center suggest you use MLA. Contact the ArtCenter Library or the Writing Center for resources or support.

GRADE POINT DESCRIPTIONS

Grades are considered FINAL when submitted by the faculty and can only be changed to correct an error in grading or to change an official Incomplete grade to a final grade. Students CANNOT submit or redo work after the end of the term unless an official Incomplete has been approved. The deadline for changing an Incomplete grade is Friday of Week 14 of the term following the term when the course was taken. The deadline for changing an incorrect grade is Friday of Week 6 following the term when the course was taken. Updates and current information for grading and related policies as listed in the Student Handbook can be found [here](#). ArtCenter uses the following grading system:

| | | | | | | | |
|----|-------------|----|-------------|----|----------------------------|---|--------------------------------------|
| A | 4.00 points | C+ | 2.50 points | D- | 0.75 points | N | 0.00 points (Non-attendance Failure) |
| A- | 3.75 points | C | 2.00 points | F | 0.00 points (Fail) | U | 0.00 points (Unsatisfactory) |
| B+ | 3.50 points | C- | 1.75 points | S | 0.00 points (Satisfactory) | P | 0.00 points (Pass) |
| B | 3.00 points | D+ | 1.50 points | I | 0.00 points (Incomplete) | W | 0.00 points (Withdrawal) |
| B- | 2.75 points | D | 1.00 points | M | 0.00 points (Missing) | | |