

SPRING2019 ART4633C - interactive electronic art

meets: MW 11:00 AM - 13:40 PM bldg/rm: 0082/0264 & 264A

instructor: thomas asmuth

office: 0082 / 0267 - email: [tasmuth /at/ u w f . e d u](mailto:tasmuth@uwf.edu) - phone: (850) 474-2998

course site: <http://newtraditionalists.net/sp19/iea>

Instructor's Office Hours and Contact

Office hours for the current semester are posted on the instructor's office door, on the web page for the course, and in the main office. Consultations are offered first come, first serve or a student may email or an appointment. Preferred contact outside class and office hours is by email. The instructor will normally respond to email during office hours and within 2 days. Response outside these hours, through weekends, or on holidays will be rare.

Required Text

Readings/Media: provided by email or link (make sure your UWF email is active)

Recommended Texts

- arduino programming notebook - Bryan W. Evans (<http://bit.ly/1kkO7m4>)
- Getting Started with Arduino (Make: Projects) (ISBN-10: 0596155514)

Other Required Materials and Tools

- UWF Gmail account & ArgoNet account Students must have an ArgoNet account to log in to the lab computers. Students must also maintain a UWF Gmail account to receive important class materials updates. It is recommended that students check their UWF email at least daily.
- Instructables account. This and other online services needed will be free of charge.
- Removable storage device. You must save your work to a USB 'travel' drive. The recommended minimum is a 1Tb, USB 3.0 example: <https://amzn.to/2Rf70wz>, but if it is possible 2Tb are very competitively priced example: <https://amzn.to/2RgFizD>
- Materials for projects. Some materials may be provided per any Material Fee assessed for the course. The materials provide will vary for each course and the students should consult the instructor for a list of the materials available.
- All students should be prepared to purchase materials above and beyond this fee required to complete the project. The total for the semester will vary depending on the student and artistic choices. From polls of former students, this can range from \$40 - \$200

- **COURSE MATERIALS FROM FEES**

Part of your lab fee provides some common components you will have access to. This is a shared resource for all students; if you only need a large quantity, please order your parts. Please ask the instructor or mentors if you are unsure. Please note: we cannot guarantee that the lab will have the specific parts needed for your design.

Since this semester is an advanced student-heavy class; I have elected to help you get supplies per project. Each student is allotted **\$40 (forty dollars)** from the course fees to purchase supplies for projects. I will be providing a list of vendors for you to shop and we will order through the department. We will discuss that process in class.

ELECTRONICS KIT These are the required tools and start bringing them in the second week. I have made some suggestions, but you can get a good deal if you hunt around. Another tip is to look at home for these tools or ask your family for stuff.

Individual list of Required Tools Needed

- **soldering iron** (25-40 W recommended, adjustable is a bonus) (\$15-20)
- **wire stripper tool for small wire**, this range 20- 30 AWG (\$5-10)
<http://amzn.to/1OESvdY> will suffice.
Preferred: <http://amzn.to/2CLRQ9K>
This is dope: <https://amzn.to/2wmOsNn>
- **flush cutting pliers** - <http://amzn.to/1OESE0W> or <http://bit.ly/2wis8EA> (\$4)
- **inexpensive Safety Glasses**, Clear Lens <https://amzn.to/2wlstGT>
<http://bit.ly/wUf2fe> (\$2)
- **A reliable box/bag** to carry tools and parts to class. A tackle box
. <http://bit.ly/2CLkiIY> or larger option but, take care not to crush materials:
<https://amzn.to/2wooAks> (\$7-20)
- Arduino UNO R3 or compatible clone \$5 to \$30
Recommended: Needle nose pliers <http://amzn.to/1OET9rO>
<http://bit.ly/2wkf4Pe> (\$2-4)
- **As needed batteries** to power projects (I recommend stashing a couple of 9V batteries in your kit right away).

****This kit has most of the tools you will need for \$30** <https://amzn.to/2R9k724> and <https://amzn.to/2RgGlj3>. Or here is a link to a bunch of kits with various tools:
<http://amzn.to/2iThwN>

UWF Course Description(s)

ART 4633C Interactive Art 3.0sh(may be repeated 3x for credit) An exploration of the design of interactive environments for design professionals. Issues addressed include accessibility, usability, interface, and information design. A greater emphasis on prototyping techniques and software best suited to the contemporary marketplace.

Student Learning Outcomes - ART4633C Interactive Electronic Art

- Students will be able to recognize, describe the expanded set of media, forms, practices, and disciplinary lineages found in Interactive Electronic and New Media Art.
- Students will be able to demonstrate skills in programming, electronics design, and fabrication.
- Students will be able to combine skills, concepts, techniques to produce interactive electronic art and designs.
- Students will be able to create interactive designs using computation, sensors, humans, objects, and/or the environment.
- Students will be able to identify career opportunities within the world of art and design.
- Students will be able to develop products using a process that is consistent with high professional standards.

Description of Topics Covered

This course will explore electronics, hardware design, human-machine interface, etc. as a viable method and medium for art. The course will focus on learning the basics of electrical theory, design, and the histories of art and technology hybrids. This is a hands-on learning course in which you will work with the modification/adaptation of technology, using sensors, developing interfaces, and programming microcontrollers. Students will additionally examine artists, works, and genres of New Media; including physical computing, electronics, robotics, experimental music, HMI, and product design.

Grading Procedures & Assignment/Project Weighting

<ul style="list-style-type: none"> • Participation assignments....10 points • Blog posts.....30 points • Artist Presentation.....20 points • Project 01.....20 points • Project 02.....<u>30 points</u> 	<p>Letter Grades</p> <p>A ≥ 92% Superior</p> <p>A- ≥ 89%</p> <p>B+ ≥ 86%</p> <p>B ≥ 83% Above Average</p> <p>B- ≥ 80%</p> <p>C+ ≥ 77%</p> <p>C ≥ 74% Average/Competent</p> <p>C- ≥ 71%</p> <p>D ≥ 63% Below Average/Needs Work</p> <p>F > 63% Incompetent</p>
<p>Total 100 points</p>	

- Coursework will include both interim and ongoing assignments and Formal Projects. See value weighting of each category above. It is critical for the student to complete all work. Failure to do so can severely lower the final grade for the course.
- Assignments must be received before the deadline per assignment guidelines in order to receive credit. Assignments not received by the time the instructor evaluates work will not receive credit.

- Formal Projects are due at the scheduled critique time and must be received per project guidelines. Project requirements and dates may be announced in class and/or posted by electronic media such as email or class website.
- **Formal Project Critique attendance is mandatory.** A student who fails to attend and participate in formal community reviews/critiques will receive a zero grade for the project.
- Incomplete and late Formal Critique Projects will not be discussed during the public critique. Students may apply for an exception for qualified absences (see Excused Absences below). Grades for a late Formal Project will receive a 10% reduction for each business day it is late. After the fifth business day, the grade will be zero.

Attendance Policies

The University expects students to take full responsibility for their academic work and academic progress. To progress satisfactorily, students must meet the requirements of each course for which they are registered. Successful work depends to a large extent on regular class attendance. Students are held accountable for all assignments in each course, whether or not the assignments were announced during an absence. Attendance and participation are mandatory. Roll will be taken at the beginning of each class. Students are held accountable for all assignments in each course, whether or not the assignments were announced during an absence. Students are expected to attend class and participate during lectures, activities, and in studio time during scheduled hours. There is no substitute for studio time.

Critique attendance is mandatory. Students who fail to attend and participate in formal community reviews/critiques will receive a zero grade for the project. If you are seeking an emergency exception, please consult the Excused Absences section in this syllabus.

Absence Obligations (What to expect if you are absent) If a student misses a general (non-critique) course session, it is their responsibility to ask colleagues for notes, lecture materials and any other information distributed in class. The instructor will make reasonable arrangements to deliver the content or schedule lab time, but the instructor can not entirely redeliver the missed lecture and activities.

- **LATE/TARDY:** Students who arrive to class after the roll has been taken may be considered being late. Two (2) LATE/TARDY marks are considered one absence. It is the student's responsibility to make up material missed due to an absence. **A student may be marked with a TARDY if the student fails to participate or use the allotted time** (i.e. leaving early, working on materials for another class, etc.).
- **ABSENCE:** A student who is not present in class at least one half of the class period shall be counted absent from that class.
- **EXCUSED ABSENCES** (Official UWF Policy) Students must inform their instructor(s) of absences from classes prior to or as soon as possible after the absence. Instructors have the right to request verification for all excused absences. Faculty members must allow each student who is absent due to a reason recognized or accepted as an

"excused absence," as set forth below, the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence. The use of attendance records in grading and handling of any excuses for absences is left to the discretion of the faculty member responsible for the course, subject to the guidelines given below:

- *Students will be excused from class to observe religious holidays of their faith. No major test, major class event, or major University activity will be scheduled on a major religious holiday.*
- *Absences for imposed legal responsibilities (e.g., jury duty, court appearance) and military obligations will be recognized as excused absences.*
- *Absences resulting from participation in extracurricular activities in which students are official representatives of the University will be recognized as excused absences.*
- *Absences for serious illness, death or serious illness within the student's immediate family or other sound reasons offered by the student may be accepted as excused absences.*

Students participating in school-sponsored events or with an emergency should contact the instructor as soon as possible. Exceptions are at the discretion of the instructor.

- Any student seeking an excused absence for a professional affiliation or University-sponsored event must make arrangements with the instructor prior to the absence. Students who fail to give advance notice will not receive an exception.
- Official documentation is required in all cases. This document must identify the student, the dates missed, the events around the absence, be printed on official stationery or form, and include signature and contact information for the professor, coach, physician, court officer, etc.
- **UNEXCUSED ABSENCES:** Any absence that does not meet the criteria of an excused absence is an unexcused absence.
 - All students are allowed two unexcused absences that will not affect the grade. For every absence beyond the two allowed absences, five points will be deducted from the semester grade (thus four unexcused absences equal a 10 point reduction, five absences equal 15 point reduction, etc.)
 - **Six or more unexcused absences will result in a FAILURE GRADE**

Financial Aid Policies on Attendance

The Financial Aid Office tracks attendance for the first week. Failure to attend can result in financial aid disbursements being withheld.

<https://confluence.uwf.edu/display/public/Attendance+Confirmation>

Academic Conduct and Plagiarism

The [Student Code of Conduct](#) (PDF) sets forth the rules, regulations, and expected behavior of students enrolled at the University of West Florida. Violations of any rules, regulations, or behavioral expectations may result in a charge of violating the Student Code of Conduct. It is

the student's responsibility to read the Student Code of Conduct and comply with these expectations. The [Academic Misconduct Policy](#) (2017) defines various forms of academic misconduct and describes the procedures an instructor should follow when he or she suspects that a student has violated the Academic Misconduct Policy.

Other Important Responsibilities & Classroom Expectations

- **Alarms:** In the case of a fire alarm, please immediately proceed to the entrance of Parking Lot M at Campus Drive on the north side of the art wing. Meet the instructor until we get an all clear. The instructor will lock the room so all personal items will be secure.
- **Course Subjects:** During the discourse of this discipline we may talk about matters which are at the fringes of our society. If at any time you find the subject or content of this course objectionable you are encouraged to discuss it. Be prepared to speak respectfully and dispassionately. If however, you find a presentation offensive you are permitted to quietly, without disrupting the class, excuse yourself. It is then your responsibility to contact the instructor for make-up work.
- **Overall Personal Responsibility:** Students are responsible for their own well being within the University system. If you need help, it is your responsibility to ask for it. The expectations at the University are high; you do not receive a grade, you will earn a grade.
- **Class Specific:** Health and Safety or other requirements/responsibilities, will be issued as part of the class materials and instruction. **NOTE!! CLOSED TOE SHOES ARE REQUIRED TO USE THE FABLAB. YOU WILL BE DIRECTED TO OBTAIN PROPER FOOTWEAR BEFORE YOU CAN USE THE FACILITIES.**

Assistance for Students with Special Needs

The University of West Florida supports an inclusive learning environment for all students. If there are aspects of the instruction or design of this course that hinder your full participation, such as time-limited exams, inaccessible web content, or the use of non-captioned videos and podcasts, reasonable accommodations can be arranged. Prior to receiving accommodations, you must register with [Student Accessibility Resources](#) (SAR). Appropriate academic accommodations will be determined based on the documented needs of the individual. For information regarding the registration process, e-mail sar@uwf.edu or call 850.474.2387.

Veterans Services

The UWF Military & Veterans Resource Center (MVRC) serves as a leading campus advocate for military and veterans students, working to ensure the needs of these individuals are met through coordinating with multiple university offices and services. The center provides assistance with the following: GI Bill ® education benefits, active duty tuition assistance, out of state fee waiver, tutoring, paper reading, counseling, disability accommodations, coordinating academic advising and referral to state /federal resources and services. The MVRC is located in

Bldg. 38. For more information on MVRC service, call 474-2550 or visit <http://uwf.edu/militaryveterans>

UWF Department of Art Computing Lab Policies

Students found in violation of these rules may have their access limited to the labs.

- No Food and Drink in the lab. Stow your food or use the white cabinet at the entrance to hold the container until you can take a break.
- Tools and resources are primarily reserved for the students enrolled in the Digital Media Art and Graphic Design courses. Please consult an instructor or Lab Technician before you begin.
- Do not interrupt classes. Open hours for homework and projects will be posted on the doors of the labs.
- Use of the computers during Open Lab Hours is usually acceptable for any students of the Department of Art if it doesn't impede the work of students enrolled in digital courses.
- Access to the Fabrication Lab may require additional training. Please consult the area manager or a FabLab Technician for information on the equipment and requirements.
- Follow any directions that Instructors or Lab Technicians give to you regarding the lab and equipment.
- Students must save their files on a removable media such as a USB thumb drive or an external hard drive. The lab machines may be wiped clean and reformatted at any time. There is no backup.
- Students are advised to develop a disciplined backup schedule. It is suggested to subscribe to an online backup service such as Mediafire, Carbonite or Dropbox in the case of drive loss.
- Never install any software on any machine. Please consult your instructor for assistance and permission should you find other resources necessary to complete your projects.
- You may not use the resources to print for classes other than Digital Media/Graphic Design. The printer equipment and materials are funded by these classes fees. Please consult a lab monitor or your instructor about when and how to print for class work.
- Print resources are available in class or with the assistance of Lab Technician.
- Please remember that we share these computers and other tools among several classes; please treat them in a manner that will ensure their cleanliness, longevity, and usefulness for all users.