DIG6746C – Sensor and Electronic-Based Art - Fall 2023

INSTRUCTOR : Katerie Gladdys

EMAIL: kgladdys@ufl.edu

CLASS MEETING TIME: M +W 3:00-6:00 /optional Friday small group tutoring sessions

CLASS LOCATION: FAC306

OFFICE HOURS: W - 10:45-11:45 or by appointment

OFFICE LOCATION: FAC301 or online - https://ufl.zoom.us/s/9597018114

CREDIT HOURS: 3

Class announcements, homework assignments, critique dates, and special events are communicated verbally in class, through email, and on our class website in the announcement section. Supplementary resources and extra credit opportunities are also noted on the website. Most assignments will be submitted online and accessible from Canvas

TOPICS

HCI, electronics, serial, parallel, Maker culture, microcontrollers, soldering, programming, Arduino, memory, C programming, variables, hex,decimal, binary, virtual, analog, performance and responsive objects, interactivity as dynamic, socially engaged, and collaborative processes, robots, aesthetics of interactive artifacts with respect to discourses in the visual arts, communications and performance, representation, visual language, link, rhizome structures, multiplicity, network, documentation, storage, performance, schematics, meters, components, input, output, memory, variables, serial communication, motors, analog and digital sensors, sound, data logging, breadboarding, circuit design, adaptation (in no particular order and this list is subject to change)

COURSE DESCRIPTION

Physical computing/HCI (Human Computer Interaction) explores how devices respond to and interact with human physical action.

In this three- credit class, students will create artwork that explores physical interfaces beyond mouse/keyboard/screen interactions through the use of microcontrollers and sensors. This course introduces students to basic electronics and programming, microcontrollers and sensors. Through readings, discussions, practical exercises, individual and collaborative projects, students will develop an articulate, theoretical basis for conceptualizing and discussing works presented in class as well as their own creative projects. Emphasis will be placed on the ways that the technology and interactivity relate to the content of the work.

Physical computing takes a hands-on approach, which means that you spend a lot of time building circuits, soldering, writing programs, building structures to hold sensors and controls, and figuring out how best to make all of these things relate to a person's expression.

OBJECTIVES

- Students will demonstrate understanding of the following concepts and techniques both through creative and written assignments:
- Explore recent and current trends in maker culture
- Learn techniques of basic electronics
- Create art work that that explores interactions between humans and processes such as motion, mapping, sound, position, gesture recognition
- Learn to solder and wire circuits Demonstrate skills in basic C/C++ programming with Arduino and Processing
- Integrate tools and concepts from science technology into art making
- Articulate theoretical perspectives relevant to cultural experimentation with embodiment, physical computing, motion detection, gesture recognition, activated objects and alternative interfaces
- Generate and develop ideas and concepts through personal research
- Develop visual literacy and critical thinking skills through participating in critiques. Experience diverse approaches to develop art practice within a studio environment.

- Learn about artists past and present who work incorporate HCI and physical computing into their art practices
- Develop your personal artistic process and vision using sensors and electronics
- Have fun

METHOD OF INSTRUCTION

The method of instruction for this course is comprised of lectures, screenings, demonstrations, hands-on in-class exercises, readings/research, response papers, assigned projects, and critiques. Students should expect to spend a minimum 6-8 hours weekly outside class to work on circuits and programming, read, write, work on projects and do both technical and art-based research.

COURSE SCHEDULE

- WEEKS 1-4 introduction to programming electronics, microcontrollers, digital input and output, serial output, memory and variables, analog input, analog output, a little sound
- WEEKS 5-8   digital output, motors, more sound, USB and serial communication, shift registers
- WEEKS 9-12 buses, wireless communication, data logging, connecting to the internet?
- WEEKS 13-16 project development and critique

REQUIRED COURSE MATERIALS

Your lab fees cover most of the materials and supplies for this course. You may have to spend around $100.00 or more on other supplies for your final project.

For this class you will need to have access to a computer and fast internet. The class will meet in the FAC306 computer lab where you have access to computers. You may also use your own laptop. Here is the link to the School of Art and Art History's laptop requirement specifications https://arts.ufl.edu/academics/art-and-art-history/programs/studio-art/technology-requirements/

I purchased 3 kinds of Arduinos and you will receive one on the first day of class. You will then go into the electronics room and gather the sensors and materials you will need to create a kit. You will want to purchase a plastic box to keep your breadboard and prototype safe. I would suggest a clear plastic box that is at **least** 12"x12"x2".

You also may use the components in the electronics room next to FAC302. Some of the components like resistors and switches you may take an use as part of this class. Please feel free to use other components like Arduino shields etc. Be mindful that some components are more expensive and not as easily replaced and although consumables are a shared resource.

You also have access to tools such as wire strippers, wire nippers, multi-meters, and soldering stations which will be inventoried and collected back at the end of the semester.

Another item important for this class is your **cell phone camera**. You are required to document circuit assignments by recording a short video of your circuit working and then posting the URL of the video to Canvas.

There are also components that you are welcome to use are located in the Electronics Studio between FAC302 and the FAC306 lab. Depending on what you make, you may need to purchase extra components for your projects or if you let me know soon enough, I can look into purchasing if there are available funds.

If you create a project which uses other types of sensors, you can also purchase them from the vendors listed on the Resource page.

REQUIRED TEXT AND APPS

Exploring Arduino: Tools and Techniques for Engineering Wizardry **SECOND EDITION** by Jeremy Blum 2020 ISBN-978-1-119-40537-5

Circuit Playground App by Adafruit Industries

SUPPLEMENTARY TEXTS

Beginning Arduino by Michael McRoberts 2013 ISBN 978-1430250166 This book is also can be accessed as an e-book from the UF library

Manga Guide To Electricity by Kazuhiro Fujitaki and Matsuda 2012 ISBN-1593271972

Getting Started in Electronics by Forrest Mims 2003 ISBN-0945053282

Getting Started with Arduino. Massimo Banzi. O'Reilly Media, 2008 ISBN 10: 0-596-15551-4 | ISBN 13: 9780596155513

Making Things Talk: Practical Methods for Connecting Physical Objects. Tom Igoe. Make Books, 2007.

Physical Computing: Sensing and Controlling the Physical World with Computers. Tom Igoe and Dan O'Sullivan. Course Technology PTR, 2004.)

ACCESS TO SOFTWARE

All software is free, open source and can be found in the FAC306 lab. Software can also be downloaded onto your computer- Arduino, and Processing.

You will also need a YouTube or Vimeo account or a way for turn in videos of working circuits for a grade. Please be sure that I can access the video without having to log in or install a software other than the internet.

ACCESS TO EQUIPMENT AND FACILITIES

The FAC306 Lab is a Mac lab and demos will be done on a Mac computer. Arduino and Processing run on both Mac and PC.

Michael Christopher will meet with us the first week of school and get your Gatorlink ID, put you into the system, and then you have access to the FAC306 Lab. Please use the following URL to access scheduler to sign up for Blackbox Studio if you need a space to set up work outside of critique. Generally I reserve the BlackBox Studio 12 hours prior to critique so that students can set up. Sometimes I am not able to do

this if other classes needs the room prior.
https://ufl.instructure.com/courses/369006

ONE OF PERKS OF THIS CLASS IS THAT YOU HAVE 24/7 ACCESS TO FAC306 AND THE KEY CODE TO THE ELECTRONICS ROOM

Here is a URL with the FAC306 Lab Hours and Cage Equipment Checkout Schedule: http://plaza.ufl.edu/mchristo/306-schedule.html This is subject to change. The latest schedule is on the door.

For more information on FAC306 Computing's Policies, Procedures and Guidelines: http://plaza.ufl.edu/mchristo/306-schedule.html

GRADING AND EVALUATION

The purpose of grading is to clearly and accurately pinpoint the strengths and weaknesses of your progress. You will receive grades on all assignments and meet with me throughout the course to discuss the semester project, evaluate progress, in order to note strengths and areas for improvement. Your overall grade will be based on your understanding of the information and ideas discussed, and your formal, technical, and conceptual progress as demonstrated in projects and exercises, and professionalism during the course. If you feel comfortable, I welcome and prefer feedback as we move through the semester so that I can address any concerns as they happen.

Distribution of Course Grades

Projects - Total 50% = Semester Project - including project development - These points are not weighted.

Assignments and Participation - Total 40% (weighted) = documentation of circuits, reading responses, coming to class with all materials, in-class exercise, keeping up with assignments, homework, quizzes, and exercises, participation in class discussions,

Attendance - Total 10% = Coming to class and participating

In-class and Homework Assignments

In-class and homework assignments are considered participation and are 40% of your grade. You will be evaluated through exercises, participation, research, presentations, and technical proficiency with the various software applications, their aesthetic application, and problem solving. In-class and homework exercises are a weighted total (40%). Many of these assignments will involve documenting working practice circuits and reflection on the conceptual context of an interactive art and design practice. There will be a few traditional objective assignments with coding, circuitry diagrams such schematics and Fritzing, as well as calculating resistance and current. Reading/writing assignments are graded on their completeness and expression of thought, as well as their demonstration of critical consideration regarding the readings and artworks under discussion. Here is a link to the rubric for how written assignments are evaluated. Electronics homework assignment grades are based upon uploaded videos of a working breadboarded circuits or my physical checking of your circuits in class. Rubrics which describes the criterion for writing assignments and circuitry documentation are attached to each assignment and may also be found under the Rubric category in Canvas navigation. Success in this class is a **gradual** and **incremental**. Each skill that you learn is built upon the knowledge you gained learning a previous skill. This is not a class where you can pull three all-nighters and come up with a successful project unless you have much previous electronics knowledge. **It is critical that you keep up so that you can create a successful semester project.**   The in-class and homework assignments are graded using values ranging from 5-20 points depending on the complexity of the activity.

Semester Project

The semester projects is worth 50% of your grade. The project will be formally critiqued by the class and then graded by me. Projects will be graded on their success in the following areas: concept development, risk-taking, experimentation, excellent design, craftsmanship, ambition, technical competency, and meeting project deadlines.

Over the course of the semester, there will be benchmark assignments devoted to project development. These include a proposal, a formal presentation of the proposal to the class and people with expertise outside of UF, circuit and interface

prototypes, meetings with myself and your peers as well as regularly posting to the the project discussion to show your progress in developing sketches, diagrams, reflective notes and concepts. My goal in all the classes that I teach, is that you are building an studio/design practice/habit that takes you through school and beyond.

The project will have its own Canvas discussion. You will begin discussion thread and add process work and research related to the project to the discussion not unlike an online sketchbook. Each person will have their own discussion thread. Every post should have the date followed by the title of the project. Use the discussion as a way to develop a vision of your work that engages with the readings, screenings and exercises that we do in class. Write with clarity and purpose. Project proposals, project presentations, prototypes, and a final reflections with have their own discrete grade that become part of the total 50% of the semester project grade. Writing on the discussion will be more stream of consciousness when you are ideating for a project or responding to work that you in the midst of making. All process on the discussion counts towards your grade for the semester project. You are expected to document your research and write at least ten reflections over the course of the semester. In addition to writing, discussions should and can contain images, links to websites, tutorials, pieces of code, video and even sound that you feel relates to your projects. If you function better using a tangible/physical sketchbook, you are also welcome to scan in pages from your sketchbook use those to post to the discussion. Be aware that all posts must be visible and legible. I need to be able to easily read just just by looking at your post, without manipulation such as rotation, excessive zooming in and out. Each student is also invited to comment on the discussion posts of fellow students; it is assumed that all comments are civil, respectful, and constructive.

_____

Grading Scale

- A   100-94
- A-   93-90
- B+ 87-89
- B   83-86
- B- 80-82
- C+ 77-79
- C   73-76
- C- 70-72

- D+ 67-69
- D   63-66
- D- 60-62
- E   59-0

All homework assignments and projects are due at the beginning of class. Most in-class assignments are due by the end of class or if unable to finish by the end of the day. Each day that an assignment is late, 10% from the maximum possible grade is deducted. Work turned in after the time stamp for that assignment on Canvas is considered as late (-10%).

A grade of C- or below will not count toward your major degree requirements. For more information on UF policies on grade points, see https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/.

PARTICIPATION + ATTENDANCE

What constitutes participation?

- complete readings the associated assignment prior to class
- contribute to class discussions
- ask relevant questions
- respond thoughtful
- be consideration for classmates
- attend every class period
- positive attitude and open mind

Expectations for Class Participation

Participation by all members is critical to the success of this class. Participation includes contributing to ongoing discussions and critiques, suggests alternative ways of approaching projects, along with a thoughtful process and strong work ethic. Participation is evaluated with respect to both quality and quantity.

Attendance is also 10% of your grade. If you do not show up and are not present for the entire class, you lose points. The 10 points awarded for participation are weighted.

This class is very experiential and experimental in nature. We will do a lot of in class activities for which you will get credit. Many of these activities cannot be "made up" outside of class. You will miss out on a great deal if you do not come. There is a correlation in studio classes between attendance and final grades. You have a better chance of doing well if you come to class. A student who wishes to have an absence excused they must provide the instructor with a written/email explanation of absence ahead of time and/or appropriate verification when necessary (e.g., letter from doctor or parent) is required the week following the absence. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx Absences can include sickness, religious holidays, and doctor's appointments in addition to not attending class for personal reasons. It is your responsibility to come and talk with me if there are extenuating circumstances that would result in more than three absences.

Lateness and Leaving Early

I will take attendance at the beginning of each class. If you are not present at that time, you will be marked as absent unless you see me at the end of class letting me know that you came so I can correct my attendance sheet. You are expected to stay for the entire class period. I generally check to see who is around after the break. If you leave, your attendance will be recorded as late. Four late marks count as an unexcused absence. If you know that you will be late or absent, please let me know in advance by contacting me at kgladdys@ufl.edu. Both lateness and absence will also have an effect on your participation grade.

Late Assignments

The semester for this class needs to be completed on time. If you turn a project after the deadline, 10% will be deducted for each day the project is late. In-class assignments that are 10 points or less may not be made up unless you have

contacted me in advance. If you arrive late and miss the better part of an in-class assignment, you are welcome to do the assignment on your own time, but I will not give credit for it. It is not fair to the students who were on time. All assignments and projects must be submitted on the date due. Projects **will not be accepted after the due date without prior permission.** Students who miss class must obtain information from peers; handouts can be obtained from class website.

Make-up of assigned work due to extenuating circumstances must be completed within 1 week of absence.

Keeping and Making Up

If you are having difficulties for any reason in understanding the material and completing the work for this class, you need to make an appointment to meet and talk with me. Do not wait until the last minute (right before an assignment is due) or until you are totally lost to contact me. Requirements for class attendance and make-up exams, assignments, and other work are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

ENGAGING WITH ONE ANOTHER

In our structured and unstructured discussions and dialogue, we also will have many opportunities to explore some challenging issues and increase our understandings of different perspectives. Our conversations may not always be easy; we sometimes will make mistakes in our speaking and our listening; sometimes we will need patience or courage or imagination or any number of qualities in combination to engage our texts, our classmates, and our own ideas and experiences. Always we will need respect for others. Thus, an additional aim of our course necessarily will be for us to increase our facility with the sometimes difficult conversations that arise as we deepen our understandings of multiple perspectives – whatever our backgrounds, experiences, or positions.

I want this class to be fun and meaningful with everybody feeling comfortable to contribute to the dialogue. This is how we learn. Effective learning/teaching is a creative and co-constructed experience with give and take between teacher and

student and between student and student. Key to facilitating an environment for learning is respect. Disruptive and disrespectful actions make for stressful atmosphere which is not conducive to learning.

Here are some thoughts and suggestions for cultivating community.

- Treat every program interaction, both in and out of class and critique, as if you were professional colleagues who need to work together to be successful.
- Be an active listener who seeks to understand.
- Honor multiple perspectives and experiences that others bring to the program.
- Take responsibility (for your statements, actions, interactions, academic performance).
- Assume good intent on the part of others.
- Pause and reflect before reacting.
- Use every class session and every interaction with peers to think about your future as an artist and teacher.
- Conduct yourself with personal integrity and honesty. See UF Student Honor Code policies below.
- Communications outside of class with individuals as well as the class are done via email, please check your @ufl.edu email account regularly for updates and additional course information.
- When collaborating with others for group projects, you are expected to do your share of the work and communicate effectively with others in your group i.e. providing correct contact information to the rest of the group, responding to emails and phone calls regarding the group project, attending meetings to work out assignments and schedules.

It is my intent that students from all diverse backgrounds and perspectives be well-served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that the students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender identity, sexuality, disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture.

Electronic Device Policy

A note on cell phones, texting, and checking one's email during class: Research has shown us that even having our cell phones on the table in front of us diminishes our ability to learn well; further, taking notes via computer diminishes one's ability to process information. Checking texts, emails, and messages is also unprofessional and disrespectful to our class community. Please put your phones on vibrate, do not check email, Facebook etc. via computer during class; I will do so as well. I appreciate your cooperation with this important aspect of creating a class of which we all want to be a part. Sound or visual recordings may not be made during class time except in particular circumstances as defined by the university. These include the following:

- The recording is part of a class assignment.
- The student has an accommodation from the Disability Office and has made previous arrangements with the instructor.
- Students are allowed to record video or audio of class **lectures**. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are for personal educational use and in connection with a complaint to the university, or as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited.

Specifically, students may not publish recorded lectures without the written consent of the instructor. A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session. Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Code.

_____

WHAT YOU CAN EXPECT FROM ME

- End class on time or within two minutes of scheduled ending time unless previously notified

- Answer student email with in 24 hours or less (usually a lot less) unless I am out of the country or in a place where there is not email. My office phone is NOT the best way to reach me as I am often in the lab teaching or in my studio working. Face to face communication in class or email are the preferred methods of communication.
- Return assignments in a timely manner
- Be available during my office hours. If I am not in town, I will let you know in advance if I am not able to attend office hours.
- Listen to student concerns and questions.
- Explain, answer and research questions regarding the topics of the class. The nature of technology and learning is ever evolving. If I do not have an immediate, answer, I will research your question and get back to you in a timely fashion with a solution or a reference to a relevant resource.
- Abide by the grading scale above and not change dates for turning in assignments unless the class as a whole has agreed upon the change.

_____

ONLINE COURSE EVALUATIONS

Students are expected to provide professional and respectful feedback on the quality of instruction in the course by completing course evaluations via GatorEvals. Guidance on how to give feed back in a professional and respectful manner can be found at https://gatorevals.aa.ufl.edu/students/. You will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

GENERAL UNIVERSITY POLICIES AND SERVICES

UF STUDENT HANDBOOK

This resource covers most policies and procedures important to students - https://dso.ufl.edu/resources/student-handbook/

contact for the Disability Resource Center and accommodations

I will make every attempt to accommodate students with disabilities. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester. Disability Resource Center -– https://disability.ufl.edu/

contacts for Counseling Wellness Centerincludes personal, academic, crisis and career services. Dial 352-392-1575.

https://counseling.ufl.edu/

contacts for U Matter We Care

If you or someone you know is in distress, please contact umatter@ufl.edu or call 352-392-1575 or visit https://umatter.ufl.edu/. A team member will reach out to the student in distress.

contacts for Student Health Care Center

Dial 911 for medical emergencies. Dial 392-1161 for urgent after-hours medical questions. Dial 392-1171 for after-hours mental health assistance. https://shcc.ufl.edu/

contacts for UF Shands Emergency Room/Trauma Center

Dial 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL, 32608 https://ufhealth.org/emergency-room-trauma-center

contacts for Safety and Security
University Police Department - http://police.ufl.edu/

Dial 911 for emergencies.
Dial 392-1111 otherwise.

ENVIRONMENTAL HEALTH AND SAFETY

https://arts.ufl.edu/site/assets/files/37319/saahhealthandsafetyhandbook.pdf

Each student must complete a H&S STUDENT WAIVER FORM (available next to the copier in the SAAH office) and on-line (see address above). Waivers must be turned into the SAAH Director of Operations before the end of the 2nd week of classes. Because we use some hazardous materials as part of the electronic components that become part of our projects, please pay particular attention to the guidelines below.

Appendix I:
Area Specific Information: Art + Technology
1. Hazards of Materials
Batteries, old monitors, lamps from digital projectors if broken may release mercury.
THERE ARE NO KNOWN HEALTH HAZARDS FROM EXPOSURE TO LAMPS THAT ARE INTACT.

2. Best Practices
Though not much waste is generated, the Digital Media technician is certified for handling Hazardous Waste by the University of Florida. For installations or sculptural elements, please cross-reference with other area specific information as needed.

3. Links
n/a

4. Area Rules
All users of the studio classrooms are expected to follow studio area rules at all times. If you have any questions, ask your instructor.

- Follow all SA+AH Health and Safety handbook guidelines (the handbook should be reviewed by your instructor and can be found at: www.arts.ufl.edu/art/healthandsafety)
- Follow the SA+AH Satellite Waste Management Chart in the classroom and other health & safety guidelines posted for your media.
- In case of emergency, call campus police at 392-111
- File an incident report (forms may be found in the SAAHH &S handbook, the SAAH faculty handbook and in the main office.) Turn completed forms into the SAAH Director of Operations within 48 hours of the event.
- Alcohol is forbidden in studios.
- Familiarize yourself with the closest eyewash unit.
- No eating or drinking in computer the lab.
- Do not use spray adhesive in the studios or in the building. There is a professional and safe paint spray booth in FAC-211A for your use.
- Shoes must be worn at all times.
- Protective equipment must be worn for hazardous work.

- Do not block aisles, halls or doors with stored items or when working. This is a violation of fire codes.
- Do not store anything on the floor. This impedes cleaning and creates a hazard.
- Installations must be removed as soon as possible after critique.
- Clean up spills immediately.
- Take items which do not fit into the trash to the dumpster, follow dumpster guidelines.
- Follow the **SA+AH CONTAINER POLICY** (see policy below)

LABELS

There are 2 types of labels used in the SA+AH-- yellow and white. Both labels are found at the red MSDS box and are supplied by the SA+AH. Each is used for a different purpose.

White:

- All new and or used products in containers (hazardous or what might be perceived as hazardous -i.e. watered down gesso, graphite solutions, satellite containers of solvents, powders, spray paints, fixatives, oils, solvents, etc....) must be labeled within the SA+AH to identify their contents. Labels can be found at the MSDS box in each studio and work area.
- All containers must be marked with your name, contents and date opened. All secondary/satellite containers for hazardous materials must be marked with content, your name and the date opened.
- All unmarked containers will be disposed of with no notice.

Yellow:

WHEN HAZARDOUS ITEMS ARE DESIGNATED AS WASTE. All containers must have a yellow label identifying the contents that are designated as trash for weekly EHS pickup.

- Flammable solid containers (red flip top) must have a yellow hazardous waste label on the outside (top).
- 5 gallon jugs must have a yellow hazardous waste label on the outside.

- Fibrous containers must have a yellow hazardous waste label on the outside (top).
- Each item in the blue bin must have a yellow hazardous waste label.
- Note: Hazardous Waste labels should include all constituents in the waste mixture as well as an approximate 2 percentage of the total for that item and must add up to 100%.
- Labels should also include the Bldg and room number of the shop generating the waste along with the Waste
- Manager for your area, this is located on the SWMA sign posted at the sink or at the Waste Management Area.

Reading Days

The two days prior to the start of examinations in the fall and spring semesters, generally a Thursday and Friday, are designated reading days. No classes or exams are held on these days. Instead, students are encouraged to use these days for study and review

>Twelve-day Rule

Students who participate in official athletic or scholastic, extracurricular activities are permitted twelve (12) scholastic day absences per semester without penalty. In any case, it is the student's responsibility to maintain satisfactory academic performance and attendance.

Absences for Religious Holidays

Students, upon prior notification of their instructions, shall be excused from class or other scheduled academic activity to observe a religious holy day of their faith. Students shall be permitted a reasonable amount of time to make up the material or activities covered in their absence. A student who believes that he/she has been unreasonably denied an education benefit due to religious beliefs or practices may seek redress through the student grievance procedure.

Honesty Policy

An academic honesty offense is defined as the act of lying, cheating or stealing academic information so that one gains academic advantage. As a University of Florida student, one is expected to neither commit nor assist another in committing an academic honesty violation. Additionally, it is the student's duty to report observed academic honesty violations. These can include: cheating, plagiarism, bribery, misrepresentation, conspiracy, or fabrication. https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/

Computer Use and Acceptable Use Policy

All faculty, staff, and students of the University of Florida are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. https://it.ufl.edu/policies/acceptable-use/

Disruptive Behavior

Faculty, students, Administrative and Professional staff members, and other employees [hereinafter referred to as "member(s)" of the University], who intentionally act to impair, interfere with, or obstruct the mission, purposes, order, operations, processes, and functions of the University shall be subject to appropriate disciplinary action by University authorities for misconduct, as set forth in the applicable rules of the Board of Regents and the University and state law governing such actions. A detailed list of disruptive conduct may be found at http://regulations.ufl.edu/wp-content/uploads/2018/06/4.040-1.pdf

Be advised that you can and will be dismissed from class if you engage in disruptive behavior.

Critical Dates on the University Calendar

https://catalog.ufl.edu/UGRD/dates-deadlines/

Giving Credit--Many of the ideas and resources for this class came from Rob Faludi and Tom Igoe's Physical Computing Class at NYU's ITP program http://itp.nyu.edu/physcomp/.