



**LIS5916 – Managing Makerspaces(3 credits)**

Section(s)

TERM 20XX, COURSE MEETING DAY/TIME, COURSE MEETING LOCATION

Mode of Instruction: Online

*“Students all meet with instructor for class weekly, synchronously, using a multi-media conferencing system such as Collaborate, at a specific class time indicated in the University’s course schedule for each semester. Additional asynchronous interactions (e.g., discussion forums) among students and with instructor may also be required to complete the course.”*

**Instructor:**

**Email:**

**Office:**

**Phone:**

**Course Location/Website:**

**Office Hours:**

**Teaching Assistant:**

**TA Email:**

**COURSE DESCRIPTION:**

This introductory course introduces students to skills, technologies, principles and issues involved in managing makerspaces and fab labs for emerging technologies, which has been an area of growing demand for information and technology organizations.

The course will focus on technology leadership and management as well as instructional and design aspects of operating spaces that support hands-on technology learning and use.

**COURSE OBJECTIVES:**

At the end of the course, the student will be able to:

- define and discuss the differences between emerging technology environments including makerspaces, hackerspaces, and fab labs;
- evaluate technologies and recommend solutions to design problems;
- use technologies to create new resources;
- assess technologies and formulate proposed plans for makerspace technologies and activities.

**COURSE MATERIALS:**

**Instructional Technologies** used in this course include resources such as Google Cardboard and Raspberry Pi; Tinkercad (<https://www.tinkercad.com/>) ; MeshLab (<http://www.meshlab.net/>); MeshMixer (<https://www.meshmixer.com/>); and Linux (<https://www.linux.org/>)

**Required Readings:** Weekly readings as assigned and posted to the course website. Readings linked from the course site include sources such as Make (<https://makezine.com/>)

## **COURSE ASSIGNMENTS AND EVALUATION:**

- **Class Activities:** Demonstrate participation in weekly class learning activities through posting to class discussion boards. (10 points)
- **Project Portfolio:** Create an online project portfolio site (wiki, blog, digital portfolio or web site) as a framework for sharing your project materials and progress. (10 points)
- **Project Proposal:** Write a 3-page proposal for your makerspace project (2 pages of text and 1 page of visual schematics/diagrams/visual mockup in Times New Roman, 12 point, doublespaced. (30 points)
- **Project Presentation, Specifications, Guide & Assessment:** Complete and document your makerspace project, including documentation of the “do it yourself” specifications for your project via text guide instructions, visual schematics/diagrams, and images/video. Include: your own assessment of your project, how it might be improved, and what you learned from the project (7 pages in Times New Roman, 12 point, doublespaced.) Present your project in class in a brief 2 minute presentation, and upload to your project portfolio site your full completed project documentation (specifications, guide, schematics & visuals). (50 points)

A rubric for each assignment and each activity will be provided on the course web site.

## **GRADE CALCULATION:**

Class Activities	10pts
Project Portfolio	10pts
Project Proposal	30pts
Project Presentation/Specifications	<u>50pts</u>
	100pts

## **Grading Scale**

A	93 - 100	C	73 – 76
A-	90 – 92	C-	70 – 72
B+	87 – 89	D+	67 – 69
B	83 – 86	D	63 – 66
B-	80 – 82	D-	60 – 62
C+	77 – 79	F	0 – 59

## COURSE SCHEDULE:

<b>OUTLINE OF TOPICS COVERED:</b>
Course Introduction and Logistics, and Project Portfolios
Intro to Makerspaces & Fab Labs
Exploring Makerspace Technologies
3D Printing
3D Visualization
Raspberry Pi & Unity
Makerspace Projects and Project Management Tools
Design Thinking & Spatial Literacy
Assessing Makerspaces and Fab Labs
Managing Makerspaces
Special Issues in Makerspaces; Finances & Marketing
Project Presentations & Wrap Up: The Future

## SCHOOL POLICIES

### Copyright Statement

Some of the materials in this course are possibly copyrighted. They are intended for use only by students registered and enrolled in this course and only for instructional activities associated with, and for the duration of, the course. They may not be retained in another medium or disseminated further. They are provided in compliance with the provisions of the Technology, Education, And Copyright Harmonization (TEACH) Act (refer to the 3/7/2001 TEACH Act at [www.copyright.gov/legislation/archive/](http://www.copyright.gov/legislation/archive/)).

### Sexual Harassment Policy

It is the policy of the University that its employees and students neither commit nor condone sexual harassment in any form. [http://registrar.fsu.edu/bulletin/graduate/information/university\\_notices/](http://registrar.fsu.edu/bulletin/graduate/information/university_notices/)

### iSchool Hardware and Software Requirements

A list of all hardware and software requirements for students participating in the School of Information (iSchool) courses can be found at the following location: <http://ischool.cci.fsu.edu/academics/online/requirements/>

### Student Eligibility for an Incomplete Grade

Incomplete ("I") grades will not be assigned, except in the case of exceptional unforeseen circumstances that occur within the last three weeks of the semester and your work has otherwise been satisfactory.

## UNIVERSITY POLICIES

### University Attendance Policy:

Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be

accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

### **Academic Honor Policy:**

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "...be honest and truthful and...[to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at <http://fda.fsu.edu/Academics/Academic-Honor-Policy>)

### **Americans With Disabilities Act:**

Florida State University (FSU) values diversity and inclusion; we are committed to a climate of mutual respect and full participation. Our goal is to create learning environments that are usable, equitable, inclusive, and welcoming. FSU is committed to providing reasonable accommodations for all persons with disabilities in a manner that is consistent with academic standards of the course while empowering the student to meet integral requirements of the course.

To receive academic accommodations, a student:

1. must register with and provide documentation to the Office of Accessibility Services (OAS);
2. must provide a letter from OAS to the instructor indicating the need for accommodation and what type; and,
3. should communicate with the instructor, as needed, to discuss recommended accommodations. A request for a meeting may be initiated by the student or the instructor.

Please note that instructors are not allowed to provide classroom accommodations to a student until appropriate verification from the Office of Accessibility Services has been provided. This syllabus and other class materials are available in alternative format upon request. For more information about services available to FSU students with disabilities, contact the

### **Office of Accessibility Services**

874 Traditions Way  
108 Student Services Building  
Florida State University  
Tallahassee, FL 32306-4167  
(850) 644-9566 (voice)  
(850) 644-8504 (TDD)  
[oas@fsu.edu](mailto:oas@fsu.edu)  
<https://dsst.fsu.edu/oas>

### **Syllabus Change Policy**

"Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice."

### **Free Tutoring from FSU**

On-campus tutoring and writing assistance is available for many courses at Florida State University. For more information, visit the Academic Center for Excellence (ACE) Tutoring Services' comprehensive list of on-campus tutoring options - see <http://ace.fsu.edu/tutoring> or contact [tutor@fsu.edu](mailto:tutor@fsu.edu). High-quality tutoring is available by appointment and on a walk-in basis. These services are offered by tutors trained to encourage the highest level of individual academic success while upholding personal academic integrity.

**Confidential campus resources:**

Various centers and programs are available to assist students with navigating stressors that might impact academic success. These include the following:

**Victim Advocate Program**

University Center A, Rm. 4100

(850) 644-7161

Available 24/7/365

Office Hours: M-F 8-5

<https://dsst.fsu.edu/vap>

**University Counseling Center**

Askew Student Life Center, 2nd floor

942 Learning Way

(850) 644-8255

<https://counseling.fsu.edu/>

**University Health Services**

Health and Wellness Center

(850) 644-6230

<https://uhs.fsu.edu/>