Making Your Makerspace Work

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Instructor Information

Instructor	Christian Sheehy
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Christian joined Xavier University as Digital Initiatives Librarian in 2015 after 7 years of public library management experience. He has 13 years of post-secondary, public, and corporate teaching experience both in-person and online. He has built and managed 2 successful library makerspaces, one public and one academic. He received his B.A. in English from Northern Kentucky University and his MLIS from Drexel University in Philadelphia. When not teaching, tinkering with tech, or managing an institutional repository, he is often seen scribbling with a fountain pen while sipping gunpowder green tea.

Email is the best way to contact your instructor directly. Email is checked periodically Monday – Friday during normal business hours. Email is not checked on weekends so it is the responsibility of the student to ask questions about assignments early in the week. Expect under a 24 hour turnaround on all emails during the business week. Emails received during weekends will be answered the next business day.

Course Information

Description: You are planning (or already have) a makerspace! This course provides concrete tips for engaging your users in exciting ways while helping them overcome the "intimidation factor" of using potentially complex (and expensive) equipment in a new and unfamiliar space. No matter what planning stage you are in for your makerspace, these tips will ensure you are better prepared for any unexpected challenges so you can stop worrying and start making! Weekly discussions cover hardware, software, and pedagogical trends in making. By the end of the course, participants will have a detailed plan of makerspace implementation as well as a compiled number of event plans and resources that can be used in their own makerspace. Let's make your makerspace work!

Prerequisite(s): None.

Term: TBD

Format: Online, Asynchronous

Technical Requirements: A computer with internet access, administrative rights to install and operate free software (Cross-platform software will be used when possible), ability to stream video and audio.

Learning Outcomes

Upon successful completion of this course, students will be able to:

- plan and budget for a dynamic makerspace with appropriate materials that align with organizational goals (children are the intended patron base, but concepts can be applied anywhere).

- promote a culture of making in their organizations and communities while minimizing the "intimidation factor" that makerspaces sometimes possess.

- facilitate a variety of classes and workshops in and out of their makerspace.

Time Commitment

This is a dense, 5 week course that includes readings, discussions, and writing assignments. Students should try to log in each day to access content and actively participate in discussions. Although each student will progress through activities at a different pace, expect to spend at least 3 – 5 hours each week with course material.

Academic Integrity

Academic honesty and integrity is expected in any academic environment. Students are encouraged to collaborate with and ask questions of other students, however all submitted work must be the student's own. Students who turn in work that is not their own will be immediately withdrawn from the class with a zero percent grade.

Grades

A grade of 70% or higher is required to pass this class and receive a certificate of completion. Certificates will be distributed by ALA several weeks after the instructor turns in final grades.

Required Components	80
Mechanics (Grammar/Spelling)	10
Creativity/Originality	10

Unless arrangements are made with the instructor prior to the due date, late assignments will receive a 20 point penalty for each day late. Grades for submitted assignments will generally be available with instructor comments within 3 days of submission.

Discussion Boards

Participation in discussion is necessary to get the most out of this course while learning from each other. Although not graded, active participation throughout each week is expected. The discussion board is a public forum and everything posted can be seen by everyone in the course, including the instructor. You are encouraged to provide your honest viewpoint, but be respectful of the views of your classmates. Objectionable, sexist, or racist language will not be tolerated.

The instructor will participate in discussion boards throughout each business week. Although each discussion will be kept available to students throughout the course, the instructor will only participate during the week each discussion prompt is assigned.

Course Outline - Subject to change

Each week of class runs from Monday - Sunday with any assignments for the week due on Sunday by 11:55PM EST. Each week includes a brief lecture, required readings, assignments, and discussion questions. Content for each week is typically made available the Friday before the week begins.

A list of readings for each week may be found on Zotero.

Week 1: Money: Selling the Makerspace to leadership, producing a budget, and making the first purchases

Lecture

- Introduction

- Selecting Physical or Mobile Spaces

- Drafting a Proposal

- Producing a Budget

- Purchasing

Readings

Assignment

- Discussion

- Hardware Selection and Justification

- Making Project

Week 2: Launching: Staffing, training, and policies

Lecture

- Establishing and Enforcing Policies

- Hiring and Staffing

- Defining, Preparing, and Testing Competencies

Readings

Assignment

- Discussion

- Checklist of Employee Competencies, Space Policy Document

- Making Project

Week 3: Cultivating a culture of making: Marketing and relationships, accessibility, "intimidation factor"

Lecture

- Making a Welcoming and Accessible Space

- Building Relationships

- Failing with Style

Readings

Assignment

- Discussion

- Marketing Plan

- Begin Planning Kit and Event (Due Week 5)

- Making Project

Week 4: Facilitating Events

Lecture

Readings

Assignment

- Discussion

- Continue Planning Kit and Event (Due Week 5)

- Making Project

Week 5: Reviewing progress, assessment

Lecture

Readings

- Discussion

- Complete Kit and Event

References

[1] Fleming, L. (2015). *Worlds of making: Best practices for establishing a makerspace for your school.* http://www.worldcat.org/oclc/896862218

[2] Frauenfelder, M. (2014). *Maker dad: Lunch box guitars, antigravity jars, and 22 other incredibly cool father-daughter DIY projects.* http://www.worldcat.org/oclc/869140961

[3] Graves, C., & Graves, A. (2017). *The big book of makerspace projects: Inspiring makers to experiment, create, and learn.* http://www.worldcat.org/oclc/945947294

[4] Lang, D., Brian Jepson, & Rebecca Demarest. (2014). *Zero to maker: Learn (just enough) to make (just about) anything.* Sebastopol, CA: Maker Media. http://www.worldcat.org/oclc/929122939

[5] Maslyk, J. (2016). *STEAM makers: Fostering creativity and innovation in the elementary classroom.* http://www.worldcat.org/oclc/922911451

[6] Thornburg, P. D. P. D. D. (2014). *The Invent to Learn Guide to 3D Printing in the Classroom: Recipes for Success.* Constructing Modern Knowledge Press. http://www.worldcat.org/oclc/941186227