

Tech Learning Studio
INF 385T Unique: 28425
W 12-5 pm UTA 1.208

Instructor: Jennifer Allen
jennifer.allen@utexas.edu

Office Hours: Let's call it during class

I. Course Description

In this class we'll learn how to learn new technologies.

We'll do this in three ways: 1) we'll learn new technologies ourselves, 2) as a studio group, we'll reflect critically on our learning processes, and 3) we'll review some literature (academic and practitioner, formal and informal) on learning techniques.

Students will define their own learning goals and projects, over three projects during the course, working both independently or in small groups of people interested in learning the same thing). One project must be physical in nature.

The definition of technology is extremely broad: examples of topics might include a new programming language or paradigm (e.g., object orientation, or model-view-controller), a new data representation (e.g., SQL, RDF, JSON-LD, or XML), new statistical techniques, version control, CAD design, GIS.

The bulk of this class is students learning independently. Students should recognize that the professor is not going to teach these topics---indeed the professor won't know many of the technologies students choose to learn---students are going to teach themselves. Rather, the professor (and other students) are going to help each other reflect on their learning (as well as introduce a few topics of general usefulness).

A studio class?

A studio class is a special kind of class, often found in Architecture or Fine Arts. My take on the studio experience is:

- We see each other working, learning, and reflecting.
- We help each other reflect and learn about learning through shared critique.

- We identify ways we can help each other learn (concretely and learning about learning)

Probably the most crucial part here is that we will meet for 5 hours (rather than 3). There will be breaks, but think of this as taking most of the time you'd spend outside class and spending it together. We will work to make our learning and reflection visible to each other (not an easy task!). Students will demonstrate their learning processes and outcomes, both at the end of projects and during the projects. Examples of ways we might do this are: code samples, screencasts, reflection essays, design documentation, videos, and physical prototypes.

II. Course Aim and Objectives

This course will enable you to:

- Spend time learning technologies of your choice (alone or in small groups)
- Display your learning to peers and the wider world
- Provide supportive feedback on the learning projects of others
- Think critically about the literature on learning (in a technology context)

III. Disclaimer

This syllabus is subject to change at any time.

IV. Tentative Course Schedule

Date	Week	Topic	Assignment Due
1/20	1	Syllabus day	
1/27	2	Project 1	Learning Blog Checkpoint 0
2/3	3	Communities of Practice & Mindsets Project 1	
2/10	4	Asking Technical Questions Online Project 1	
2/17	5	Project 1	Learning Blog Checkpoint 1
2/24	6	Project 2	

3/3	7	Constructivism Project 2	
3/10	8	Project 2	
3/17	9	NO CLASS: SPRING BREAK	
3/24	10	Project 2	Learning Blog Checkpoint 2
3/31	11	TBD	
4/7	12	Project 3	
4/14	13	Learning Styles Project 3	
4/21	14	Project 3	
4/28	15	Project 3	Learning Blog Checkpoint 3 Community of Practice Paper
5/5	16	Wrap-up	

** Because we won't be meeting physically every week you will all be posting weekly to a Canvas discussion that I will create each week. This will sometimes take the place of the beginning of class time when you all share what you're working on that day in class. You will be required to have a minimum of one original post if you are not physically in class that day. You will also be required to have a minimum of one original post on the first day of each project (so 1/27, 2/24, and 4/7). You will not be required to respond to others in these discussions, but I encourage you to do so, especially if you have experience with the technology one of your classmates is learning.

V. Course Requirements

- Tech Learning Blog

Students will keep a blog that describes their technology learning.

The blog should be a reflection of your process, showing your missteps as well as your successes. The blog is, therefore, not just a polished set of tutorials

(although it's fine to have some featured posts that summarize/publicize your successes).

Your blog will be a key part of displaying your learning to others and seeking their feedback.

During Checkpoints 1-3 you will be assigned two other student's learning blogs to look through and comment on.

You will have 4 different checkpoints for your blogs:

- Checkpoint 0
 - Establishing your first learning project
 - Identifying technology learning blogs in that area
 - At least one in-progress post

- Checkpoints 1-3
 - Show your progress for your projects
 - The expectation is that you have a minimum of one blog post from each day of class that you were working on your project (so at minimum 4)

- Weekly Check-ins (2 per project; 6 total)
 - Show your progress for your projects
 - The expectation is that you have a blog post about what you have worked on during the week.

- Community of Practice paper

Description of a "community of practice" in one of your areas. "Community of Practice" is an approach to social learning that we'll review through readings for the class, but the wikipedia page gives a useful summary: [Community of Practice](#). In the paper you should use the readings we covered in class to provide the framework through which you analyze/describe your community of practice.

The paper is due near the end of course, but you should do it along with the learning project to which it relates. Since face to face is a traditional part of a community of practice you must include attending/describing Meetups in your area in town.

The paper should be about 1500 words. If you prefer to think in pages:
<http://wordstopages.com/>

- **Attendance and Participation**

All students are expected to attend two in-person classes for each project cycle. This means that for each of your three projects you will be expected to physically attend two of the four classes. I have created a [basic Google Sheet](#) for you all to sign up for the days you would like to attend class in person. The goal for this sheet is to limit the number of people in each class to at half of the class at a time. If you prefer to be in class every week, please don't be afraid to let me know.

You are still expected to be available and working on your technology during class time even if you are not physically in class that day. I am going to be checking in with those who are working remotely through Zoom at least once during class time. The sign-up sheet for those times is the same sheet as the one for in-person class sign-up.

Attendance will be taken. What you get out of this course will be greatly impacted by your participation therefore it is important that you not only attend class but participate in any class discussions and be actively working on learning your chosen technologies.

This will also include your participation in Canvas discussions.

All this being said, it is possible to obtain a negative participation grade.

VI. Grading Procedures

Attendance and Participation: 50%

Learning Blogs: 40%

Communities of Practice Paper: 10%

VII. Readings (most readings are posted on Canvas)

Communities of Practice and Mindsets

Dweck, Carol. "Carol Dweck revisits the growth mindset." *Education Week* 35, no. 5 (2015): 20-24.

Rattan, Aneeta, Catherine Good, and Carol S. Dweck. "'It's ok—Not everyone can be good at math": Instructors with an entity theory comfort (and demotivate) students." *Journal of Experimental Social Psychology* 48, no. 3 (2012): 731-737.

Wenger, Etienne. "Communities of practice and social learning systems." *Supporting Lifelong Learning: Volume II: Organising Learning 2* (2001): 160.

[Wenger's website](#)

[Wikipedia article on Community of Practice](#)

Asking Technical Questions Online

Lakhani, Karim R., and Eric Von Hippel. "How open source software works: "free" user-to-user assistance." In *Produktentwicklung mit virtuellen Communities*, pp. 303-339. Gabler Verlag, 2004.

Raymond, Eric Steven, and Rick Moen. "How to ask questions the smart way." Retrieved on March 16 (2006): 2006.

<http://catb.org/~esr/faqs/smart-questions.html>

[Stack Overflow Tour](#)

Constructivism

Papert, Seymour. *Mindstorms: Children, computers, and powerful ideas*. (Basic Books, Inc., 1980), 19-37

[Wikipedia article on Constructivism \(up to section 3, beyond if you want\)](#)

Ito, Mimi. "Why Minecraft rewrites the playbook for learning." *Boing Boing* (2015).

Retrieved from <https://boingboing.net/2015/06/06/why-minecraft-rewrites-the-pla.html>

Learning Styles

Glenn, David. "Matching teaching style to learning style may not help students." *The chronicle of higher education* (2009): 1-3.