

# CSSL: January / February / March Schedule

	Monday	Tuesday	Wednesday	Thursday
9:00-9:30				
9:30-9:45	Morning Meeting	Morning Meeting	Morning Meeting	Morning Meeting
9:45-10:30	Advising	Economics	Cooking	Modelling the World
10:30-11:15	Magic: the Bettering			
11:15-12:15	Lunch	Lunch	Lunch	Lunch
12:15-12:30	Afternoon Meeting	Afternoon Meeting	Afternoon Meeting	Afternoon Meeting
12:30-1:15	Movie Making	Movie Making	Marine Biology	Movie Making
1:15-2:00	Philosophy			
2:00-2:45	Algebra			Cartooning Club
2:45-3:00	Cleanup Time	Cleanup Time	Cleanup Time	Cleanup Time

fig. 1 -- a schedule, color-coded by staff-member -- figuring out which color is which staff member is left as an exercise for the reader

This is our upcoming schedule up through the end of th) It is based on a combination of student, staff, and family interests and abilities.

Class descriptions follow, but remember that all classes will, to a certain extent, be directed towards the interests of whichever students show up for them. The first couple of sessions of a class are both a good time to express your interests, as well as a good time to try out a new class and see if it's fun or interesting for you!

If there's something that you're very interested in learning or working on, but don't see it on the schedule, please talk to a staff member (perhaps your advisor!) -- we'd love to help you learn or do almost anything, and if we don't have the knowledge or skills to do so, we will do our very best to find someone who does. We all are excited to help you with prettymuch anything.

That said, apart from the class descriptions, we also offer a list of the kinds of topics and skills the various staff members are able and excited to offer tutorials on. Let them guide and inspire you, but don't be afraid to ask us about stuff that's not on the list.

## **Class Descriptions**

### **Fish and Us -- Zach**

Many students have requested marine biology as a class and so I present the comparative anatomy class, *Fish and Us*. We will explore the complex inner workings of the human body as well as the fish...body, and how each has made different adaptations to survive in their environments. I expect diagrams will be drafted, awkward questions will be answered, and students will be engaged.

### **3D Modeling -- Zach**

This project-based class will walk students through the complex but powerful program Autodesk Inventor. This program allows students to create accurate 3D models of nearly any object or device they choose. Models can then be exported for 3D printing or 2D layouts.

### **Drawing -- Zach**

We'll take time each week to explore a new medium or technique for free drawing. Water colors, charcoal, ink and more will all be explained and explored.

### **Nova -- Zach**

After a long week, Thursday afternoons call for peaceful nature documentaries. The videos are about 40 to 50 minutes in length and afterwards (and probably during) we'll discuss questions we had and facts we learned.

### **History -- Kelly**

We will continue with the history of the Cold War, beginning with the situation in Vietnam prior to and through the Vietnam War (Jan 21- Feb 4); the struggle for independence of India (Feb 9-27); the creation of Israel (Mar 2-13). (All dates approximate.)

### **Espionage -- Kelly**

This class will be a combination of history/current events and social experimentation. We will discuss the history of spycraft & its role in world history throughout the ages, including ancient Egypt & Greece, Medieval Europe, the American Revolutionary War, Civil War, World Wars I and II, Cold War

& the modern era of NSA wiretapping & wikileaks. We'll also cover various aspects of cryptography and other spy skills, which we will then use to run "games" - experiments in cryptography and psychology where everyone who wants can participate in putting theory into practice!

### **Art Circle -- Kelly**

Every week we will explore a new art medium - charcoal, pastels, watercolors, various types of clay, collage, pen & ink, etc. We will also look at famous pieces of art that are relevant to each day's media.

### **Movie Making -- Bryce**

In Movie Making we are working as a group to write and produce a short film. The movie will be set at Parts and Crafts where the kids, with the help of an alien named Nachos Nostril and a talking robot stop a group of Ne'er do Wells who are stealing the power from Parts and Crafts and all of Somerville.

### **Space Past -- Bryce**

In Space Past we'll take a look at what we know about our universe and how we learned it. We'll try to figure out what all that stuff floating around in space is and what tools we have to find out.

### **Civil Rights -- Katie**

Civil Rights: This class will look at the contemporary civil rights movement, Black Lives Matter, in the context of the push for anti-discrimination and equal voting rights in the late 1950's to 1960's. Topics will include the Montgomery Bus Boycott, Brown vs. Board of Education, the murder of Emmett Till, Freedom Summer, the Black Panthers, and others. Contemporary analogues include Project Hip-Hop, the anti-foreclosure work of City Life Vida Urbana, de facto resegregation in schools and real estate, and post-Ferguson protests in response to the deaths of Mike Brown and Eric Garner.

Primary source text: <http://civilrightsteaching.org/>

### **Role-Playing -- Katie**

An interactive writing class about twisted fairy tales. Using the Grimm roleplaying scenario as a basis, each kid develops a character and write a story back and forth as we battle trolls, climb impossibly tall mountains, and rescue each other from dire and silly scenarios.

### **Recreational Math -- Will**

A survey of topics in puzzling, playful, theoretical, and otherwise weird math -- the kinds of stuff they don't usually teach you in school. Possible topics include graph theory, combinatorics, probability, fractals/chaos/complexity, game-theory, and number-theory. Think of Martin Gardner, Lewis Carroll, Vi Hart...

**Magic: the Bettering -- Will**

How to analyze, think about, and improve at the card game Magic: the Gathering (a recent area of tremendous enthusiasm among CSCL students.) Special focus here will be on competitive play. We will do math, and we will read and discuss the body of writing on Magic: the Gathering theory. And we will play games and test strategies. We may inadvertently take the naive fun out of the game, but we will definitely get better and win more.

**Chemistry -- Will**

A mostly hands-on and experimental introduction to chemistry -- theory and lab-technique. Primary texts will be Robert Thompson's *Illustrated Guide to Home Chemistry Experiments: All Lab, No Lecture* and the Thames and Kosmos C3000 chemistry kit -- <http://www.thamesandkosmos.com/products/chem/c30002.html> . Amount and kind of focus on lecture and theory will be dependent on the temperaments of class participants.

**Algebra -- Will**

A continuation of the first semester's Algebra 1 class, based off of the *Art of Problem Solving: Introduction to Algebra* curriculum.

**Gym -- Will (and everyone else from time-to-time)**

Football and tag and capture-the-flag and sword fighting. A group of kids goes out to the park to play for 45 minutes or so. Usually there are kid-organized games and sports of various kinds, as well as independent imaginative play, climbing on the play-structure, swinging on swings and running around and being silly.

## Tutorials on Offer

Below is an entirely non-comprehensive list of the kinds of things the Parts and Crafts staff are good at and enjoy teaching tutorials on. If any of these things interest you, you should talk to the appropriate staff member and try to set up a time to work and learn together!

<p><b>Zach</b> Math Economy Biology and other science topics Photoshop/Illustrator Wood and metalworking Bicycles -- how they work, how to make them work better Locks, mechanisms, and other kinds of object-cleverness Sewing Cooking</p> <p><b>Will</b> Test Prep Math Guitar Fencing (the sport, not the method of keeping people out of locations or the practice of selling illegal goods) Writing Electronics + Robotics Computer Programming (including but not limited to the following)</p>	<p><b>Kelly</b> French, Spanish Literature/Reading Writing/Grammar/Spelling Handwriting/Cursive Art/drawing Knitting/Sewing/Crafting Photography</p> <p><b>Bryce</b> Math Carpentry/Woodworking Blender (3D modelling) Photoshop Physics Writing Computer Programming (including but not limited to the following) -scratch -java/processing -python</p>
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-Scratch  
-java/processing  
-html/css/web apps  
-scientific modelling/simulation -- physics, biology, complexity  
-game development in Unity  
-Minecraft Modding

-game development in Unity  
Boardgame Making

**Katie**  
Math  
Writing  
Reading  
Test prep