

**Instructor Information**

<b>Instructor</b>	<b>Email</b>	<b>Office Location</b>
Melissa Wrenchey	mwrenchey@lwsd.org	Rm 117-Town Hall

Conferences should be planned in advance using a meeting request. Students are always present for these opportunities.

**General Information**

**Description**

This class has developed over the course of six years of STEM scholarship and lots of learning and lab experience. Students learn and apply real life **Entrepreneurship** skills in a **#MakerEd** setting. We have the privilege of being both entrepreneurs and engineers to create relevant, integrated projects. Our course is a passion project: Developing an innovator's mindset to solve authentic problems and use an entrepreneurial grit and engineering processes to create and present deliverables.

**Expectations and Goals**

What can you expect?	What should I expect?
There will be lots of opportunities to personalize learning	You will come to class on time excited to learn
Content is integrated and enjoyable	You will ask questions
You will drive your learning and we can find more extensions	You will always have something to work on
The lab will be a safe space for learning; all are welcome	You will follow all safety protocols
I will respect your space while encouraging growth	You will follow instructions as required to turn in work
I answer grade questions face to face during posted lab time, leaving class for all students to work and engage in learning time	You will talk about missing work during posted lab time and understand that missing deadlines has penalties
Exploration and Passion will drive class time; you may work on things at home only because you want to.	You will be sure to follow through with instructions in class so you do not have to carry work over multiple days.

\*there will be more specific course instructions but we are in this **journey together** and *respecting each other* is really the **foundation**.

## What can parents and families expect?

I will use **OneNote** and a calendar feature to post assignments and deadlines. I will also use **PowerSchool** for deadlines and announcements for *larger* projects. Daily work will often be reflections and forms to complete online. If you want to keep up with your scholar's work, ask them what they did during class and how we ended the day. In **OneNote** you can check the **Reflections, Sketches and Planning, ClassNotes** sections and compare with the calendar that day. I also do not discuss grading with parents over e-mail. Students are always involved in their academic process and should be the first to ask questions about missing work.

### Required Materials

- Arduino Kit in November (\*e-mail will follow with link)
- Charged laptop and stylus

### Course Objectives

<b>Mindsets</b>	Improving Socio-emotional Skills
	Exploring Entrepreneurial awareness
<b>Entrepreneurship standards</b>	Exhibit Management skills
	Demonstrate Business Knowledge
	Practice Vocational skills
<b>Entrepreneurship Focus on maker projects:</b>	
	Your Inspiration
	Your Purpose
	Your Customers
	Distributing your Product
	Your Community Responsibilities
	Improving your Product
	Partnering with other Producers
	Marketing your Product
	Projections for your Product Future

## Course Schedule

<b>Major Projects</b>
Paper Automata
Interactive Programming
DECA Design Challenge
Reinvent the Controller
Mapping Stories
Exploring micro-controllers
Arduino and Sustainable Cities
Game Design Team Project
Freshman PBL with Graphic Production
Final TBD

### Grade Breakdown (approximately):

Daily progress, reflections, notes  
60%

Meeting project deadlines 5%  
class roles 5%

Larger projects, submissions 25%  
Challenges 5%

### STEM Grading Policy:

**A = 90 - 100**

**B+ = 87-89**

**B = 84-86**

**B- = 80-83**

**C+ = 77-79**

**C = 74-76**

**C- = 73-70**

69 and below NC

<b>Course Themes</b>
Sustainability
Team Building
Researching businesses and trends
Inclusive Design
Engineering principles
Documentation
Design Thinking
Contest Based Mentorship
Community Outreach
Integrated projects with other subjects

# What will this class look like?

**The class work is a combination of Engineering Design Principles and Entrepreneurship Standards**

## **What does start of class look like?**

Sometimes I start early, you want to be in class and ready to engage with your laptop open.

## **What are my responsibilities in class?**

Have your laptop charged, come ready to do teamwork, follow instructions by checking OneNote calendar and/or listening the planned instruction, being present with classmates, being responsible for work that needs to be completed before you leave

## **What can I do when I am gone?**

Meet people and establish a reciprocal trio of collaborators you can rely on when you are absent. They can help you get up to speed when you are gone.

## **What are other things we do in class?**

We are going to create a safe space for everyone; that means we greet all new people to our room, visitors, upper class people and adults. One person will greet the newcomer and explain to them what we are doing that day. This role will be assigned ahead of time. (you will do this 2-3 times each semester)

Additionally, another person will take notes for the class and leave the notes in the collaboration space. Summarize what we did that day, take pictures and add them to the Collaboration space in OneNote. (you will do this 2-3 times each semester).

See something Say something Do something--we have lots of cool things in this lab, they need to stay that way #letskeepthingsnice4all If there is trash on the floor, pick it up, are tools in the wrong place, put them away, treat other people's projects like your own

## **How do I show what I am working on?**

Have a daily calendar you keep of what you did in class in your OneNote Notebook section

Check class notes requirements for that day:

Do you have a deliverable? This might be a drawing, a reflective writing response or a form to complete. In case I miss it, be sure to add your own notes.

For bigger projects, I break down deadlines so we have smaller check points to be checked in.