



Studio M (Studio Maker) is a combination design and build class offered to H.T.M students as both an exploratory and after school program. Studio M is a workshop environment where students engage in creative, critical, constructive processes to develop products and projects. Studio M is a place where craftsmanship is honored, engineering and art skills are honed and exploring and experimenting, with a variety of skills and materials, are the focus.

Ms. Charlie Linnik [clinnik@hightechhigh.org](mailto:clinnik@hightechhigh.org)

[www.studio-maker.weebly.com](http://www.studio-maker.weebly.com) [www.charlielinnik@weebly.com](http://www.charlielinnik@weebly.com)

## Shop Safety Guidelines & Expectations

### SAFETY IS OUR UPMOST RESPONSIBILITY

The safety of everyone is the number one importance. Therefore, in order to participate in any hands-on construction in the workshop, all students must follow shop safety guidelines and expectations. **Failure to follow these rules will result in the student not being allowed to participate in the activity.**

1. SAFETY FIRST!!!! All students will need to pass an operator and safety test before working with power tools
2. All students must be wearing appropriate safety gear at all times during tool usage.
  - Safety glasses/goggles must be worn at all times!
  - A respirator mask must be worn while cutting any shop materials (wood, plastic, etc.), or if someone else is cutting shop materials at the worktables nearby.
  - Ear protection must be worn when operating power tools rated at 100 decibels
  - Wear gloves while handling shop materials that splinter easily.
  - Secure long hair back.
  - No loose jewelry, clothing, scarves, etc.
3. Be completely focused on what you are doing.
4. No horseplay, fooling around or distracting a classmate while they are working
5. Keep all body parts well outside of the operating part of the machine
6. No eating, drinking, or chewing gum in the classroom
7. No cellphones
8. If you feel uncomfortable operating the tools, ask Ms. Charlie or Ms. Carrie for help.
9. If you hear or see something strange, stop what you are doing immediately (don't try to fix it), and ask Ms. Charlie or Ms. Carrie for help.
10. Do NOT force anything. If you are having difficulty, ask Ms. Charlie or Ms. Carrie for help.
11. Do NOT remove or adjust any safety guards on power tools
12. Leave all tools in the same or better condition then when you found them.
13. Return all parts to the correct location in the classroom.

## The 4 R's

Respect Others

Respect Yourself

Respect Materials

Respect Studio M

Students are expected to come to class on time, and prepared. Students will be learning how to properly use a variety of tools, learn techniques and work with an array of materials – therefore an open, positive and focused mind are expected in Studio M. All students are expected to utilize class time appropriately, support one another's learning and put forth their best effort.

*Be open-minded, be brave & put forth the effort to accomplish amazing things!*

## **Grades**

The grades for this class are calculated on a total points-based grading system. Each assignment, performance and project will be given a set number of points, which will be summed in order to calculate one's final semester grade. This means that assignments with larger point values will have a larger impact on a student's final grade. The following assignments and activities will be included as part of the final grade:

1. Assignments (benchmarks, Makers Manuel responses, readings, tool technique sheets, etc.)
2. Projects (both small and larger projects)
3. Participation and Effort: a strong maker student is prepared, meets deadlines, acts professionally, maintains focus and engagement, and participates actively. Class is utilized effectively and efficiently without distracting the learning of others.

**DUE DATES:** project due dates are crucial for student work to be exhibited during events and exhibitions. In order to pace work appropriately, to allow for high levels of craftsmanship and thought, **BENCHMARKS** are placed throughout the process of projects to help students meet final due dates of projects successfully.

**BENCHMARKS** are mini-deadlines that let a student know where they should be throughout the timeline of the project. Think of it, as "this is where I need to be in order to meet final project deadline".

### **Assessment of Performance and Work**

As art is subjective in its nature, student's assignments will be assessed using the following four categories in order to objectively quantify a student's performance.

**Creativity:** work reflects self-expression and imagination

**Originality:** work has a distinct, and individual style and approach

**Craftsmanship:** student takes the time to craft a well-produced and thoughtful product.

**Effort:** intensity of work habit and commitment shows that one is engaged and devoted to the challenge of the project

## **Absences**

Students are required to contact the teacher to collect the information, and the work they missed when they were absent. All students are required to make-up missing work before and/or after school, and turn the work in the time agreed between student and teacher.

## **Calendar**

\* All projects and activities are subject to change

\* Project sheets with details, benchmarks, due dates and timelines will be passed out

## Semester 1: August 22nd to December 16th

DATES	PROJECTS/ASSIGNMENTS
August 22 <sup>nd</sup> -26 <sup>th</sup>	<p>W.1 Aug. 22<sup>nd</sup>- Aug.26th</p> <ul style="list-style-type: none"> <li>• Safety Contract</li> </ul> <p style="text-align: center;"><u>Twig Pen of Awesomeness: Making Your Own Pen</u></p> <ul style="list-style-type: none"> <li>• Project launch and demo</li> <li>• Tools &amp; Techniques 101: how to use a bench vice, coping saw, drill press with table vice, bradpoint drill bits, belt/disc sander</li> <li>• Project Block: work on pen</li> </ul> <p style="text-align: center;"><u>What is Studio M?</u></p> <ul style="list-style-type: none"> <li>• Who is a maker?</li> <li>• What is the maker movement and why is it important to me?</li> <li>• Craftsmanship: what is it?</li> <li>• Craftsmanship check day (for twig pen)</li> </ul>
August 29th – Nov. 4th	<p>W.2 Aug.29th -Sept. 2nd</p> <p style="text-align: center;"><u>The Battle of Personas Project:</u></p> <p style="text-align: center;"><u>A Collaborative Project Between Humanities and Studio M</u></p> <ul style="list-style-type: none"> <li>• Project introduction and launch</li> <li>• Project prototype break down: product design and creation</li> </ul> <p style="text-align: center;"><u>Table Saw &amp; Band-Saw: Knock on Wood Mini-Project</u></p> <ul style="list-style-type: none"> <li>• Understanding wood: grain, edge, end and arris, making joints and using pegs, cutting rip vs. cross cut</li> <li>• Tools &amp; Techniques: using a measuring tape, cutting with a table saw, cutting with a band saw, using a hand drill</li> <li>• “ Measure twice, cut once”: checking your wood dimensions</li> </ul> <p>W.3 Sept.5th –Sept.9th <span style="float: right;">NO SCHOOL September 5th</span></p> <ul style="list-style-type: none"> <li>• Complete Knock on Wood Mini-Project</li> <li>• Cut down wood panels for Battle of Personas Project</li> </ul> <p>W.4 Sept. 12-16<sup>th</sup></p> <p style="text-align: center;"><u>Project Prototype and Design</u></p> <ul style="list-style-type: none"> <li>• Project design: Creating action and form – studying the fighting pose</li> <li>• Project prototype design</li> </ul>



	<p>W. 13 Nov. 14<sup>th</sup>-18th</p> <p style="text-align: center;"><u>CNC Router 101</u></p> <ul style="list-style-type: none"> <li>• From CAD to CAM to CNC</li> <li>• Preliminary story and illustration ideas</li> <li>• Project work time: Illustrator review and experimentation</li> </ul> <p style="text-align: center;">(Nov. 21st – 25th THANKSGIVING BREAK)</p> <p>W.14 Nov. 28<sup>th</sup>-Dec.2nd</p> <p style="text-align: center;"><u>Creating Molds for Figurine</u></p> <ul style="list-style-type: none"> <li>• Project Block: start designing figurine mold</li> <li>• Project Block: CNC router cutting</li> </ul> <p>W.15 Dec. 5<sup>th</sup>-9th</p> <p style="text-align: center;"><u>Injecting Molds with Plastic Injector Molding</u></p> <ul style="list-style-type: none"> <li>• Injecting molds with plastic molding</li> </ul> <p style="text-align: center;"><u>Staining and Finalizing Wood</u></p> <ul style="list-style-type: none"> <li>• Wood staining 101: how to use wood stain, linseed oil, etc.</li> <li>• Project block: sanding, staining and presenting</li> </ul>
<p>December 12<sup>th</sup> – Dec. 16<sup>th</sup></p> <p>Winter Break 12/19-1/1</p> <p>1<sup>st</sup> Semester Ends 12/16</p>	<p>W. 16 Dec. 12<sup>th</sup>-16th</p> <p style="text-align: center;"><u>P.O.L.s/Exhibition, Semester Reflections and Clean-up</u></p> <ul style="list-style-type: none"> <li>• Exhibition</li> <li>• Reflections on semester learning: things to celebrate, challenges and goals for next semester.</li> <li>• Semester celebrations, thoughts and reflections</li> <li>• Studio M deep clean and re-set</li> </ul>



# SAFETY CONTRACT

*We will be using real tools and real materials!*

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7. No cellphones
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9. If you hear or see something strange, stop what you are doing immediately (don't try to fix it), and ask Charlie for help.
10. Do NOT force anything. If you are having difficulty, ask Charlie for help.
11. Do NOT remove or adjust any safety guards on power tools
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**DIRECTIONS:** With your parents, read through the safety contract for Studio M. If you and your parents agree, sign and date below.

I \_\_\_\_\_ agree to the safety guidelines and expectations for Studio M. I will use all tools properly, ask for help if I need it, and will respect those around me who are working as well. I will ALWAYS wear the proper equipment when working with tools. I understand that if I do not follow the safety guidelines I will lose Studio M privileges.

Print Name: \_\_\_\_\_

Signature of Student: \_\_\_\_\_

Signature of Parent: \_\_\_\_\_

Date: \_\_\_\_\_

*These are general guidelines and expectations. They may be added, manipulated and/or modified according to the needs and safety of the studio.*

**DUE: Wednesday, August 24th**