

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.

## Charlie Linnik clinnik@hightechhigh.org

## www.studio-maker.weebly.com www.charlielinnik@weebly.com

## Shop Safety Guidelines & Expectations

## SAFETY IS OUR UPMOST RESPONSIBLITY

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 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 for help.

- 10. Do NOT force anything. If you are having difficulty, ask Ms. Charlie 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.

#### <u>The 4 R's</u>

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 more details, benchmarks, due dates and timelines may be passed out

## Semester 2: January 18th to June 22nd

| DATES                                      | PROJECTS/ASSIGNMENTS  |
|--|---|
| Jan 18th-28 <sup>th</sup>                  | W.1 Jan 18 <sup>th</sup> -21 <sup>st</sup>  |
| Jan.17 <sup>th</sup> MLK Day -No School    | More project academics, goals, details, process, benchmarks and more will be discussed during class throughout semester   |
|  | <ul> <li>Safety Contract for Studio M (makerspace)</li> <li>Intro to Studio M – art and maker exploratory class</li> </ul>  |
|  | What is Studio M?   |
|  | <ul> <li>Who is an artist/maker?</li> <li>What is the maker movement and why is it important to me?</li> <li>Craftsmanship: what is it?</li> <li>Project-Based Learning at HTH and beyond!</li> </ul>   |
|  | <u>Tin Box O'Me:</u><br>A semester collection of art challenges and techniques  |
|  | <ul> <li>Intro to tin box and goal/purpose of the project</li> <li>Art Assign #1 and #2</li> <li>Photography 101: High-contrast, light control, clarity and creative portraiture. How to capture more than the physical self.</li> <li>Text and Design 101: how to combine fonts, colors, images to one style and portrayal</li> <li>Tools &amp; Techniques demo (aka tips and tricks in the arts)</li> <li>Canva.com 101</li> <li>Project block work time:<br/>Work on art assignment #1 – design layout, title, portrait photo, style AND work on art assignment #2 – High contrast portraiture with /style and creativity. Anti-boring!</li> </ul> |
|  | <ul> <li>W.2 Jan 24<sup>th</sup>-28th</li> <li>Continue working on art assignment #1 – Title, photo, layout and style</li> <li>Work on art assignment #2 – High contrast portraiture w/style</li> <li>Critique and feedback time</li> <li>Reviewing craftsmanship and effort in the arts</li> </ul>   |
| Jan 31 <sup>st</sup> -Feb 25 <sup>th</sup> | W.3 Jan 31 <sup>st</sup> -Feb 4 <sup>th</sup>   |
| Feb 18th Presidents Day (No School)        | More project academics, goals, details, process, benchmarks and more will be discussed during class throughout semester   |
| Feb 21st Presidents Day (No School)        | Pre-Launch: surprise activity which launches into project   |
|  | Awesome Awkward Moments Project   |
|  | <ul> <li>Launch awesome awkward moments: the positive experiences and cool weirdness in our lives. Celebrating the positive outlook.</li> <li>Creating giant collaborative list of awesome awkward moments</li> <li>Review Photography 101: focus, clarity and contrast and CREATIVITY</li> </ul>   |

|  | <ul> <li>Intro do PBN project details, goals, design and process</li> <li>Figure out that awesome awkward moment</li> <li>Writing piece on awesome awkward moment</li> </ul>  |
|--|---|
|  | W.4 Feb 7 <sup>th</sup> -11 <sup>th</sup>   |
|  | <ul> <li>Defining creativity and uniqueness</li> <li>Photo time! Begin photography component for project. Aim for simplicity, creativity and quality (but, don't forget other photo requirements!)</li> </ul>   |
|  | W.5 Feb 14 <sup>th</sup> -17 <sup>th</sup>  |
|  | <ul> <li>Painting 101: acrylic painting and refine paintbrush skills, tips and tricks</li> <li>Practice activity: using tips and techniques begin painting your own PBN</li> <li>Intro to PBN program and design</li> <li>Work on PBN program and design (Goal: finding what you need/want)</li> <li>Color Palette Intro</li> </ul> |
|  | W.6 Feb 22 <sup>nd</sup> -25 <sup>th</sup>  |
|  | Begin working on PBN  |
| Feb 28 <sup>th</sup> -Mar. 3 <sup>rd</sup> | W.7 Feb 29 <sup>th</sup> -Mar 3 <sup>rd</sup>   |
| Mar 4th Staff Day (No school)              | More project academics, goals, details, process, benchmarks and more will be discussed during class throughout semester   |
|  | <ul> <li>Continue working on PBN</li> <li>Aim for being finished with final art piece and story piece</li> </ul>  |
| Mar 7 <sup>th</sup> -24 <sup>th</sup>      | W.8 Mar 7-11 <sup>th</sup>  |
| Spring Break March 28th to April 8th       | More project academics, goals, details, process, benchmarks and more will be discussed during class throughout semester   |
|  | <ul> <li>Student reflection and connection</li> <li>Project overview and achievements/accomplishments</li> <li>Review art tips, techniques and creative design-thinking</li> </ul>  |
|  | W.9 Mar 14 <sup>th</sup> -18th  |
|  | <ul> <li>Intro to Art Assign #3: Character Layout (You!)</li> <li>Begin photo and art resource collection</li> <li>Exhibition preparation</li> </ul>  |
|  | W.10 Mar 21 <sup>st</sup> -25th   |
|  | Awesome Awkward Moments Exhibition<br>(HTMM All School Exhibition)  |
|  | <ul> <li>Prepare and create exhibition</li> <li>Student Reflection</li> <li>Studio M clean-up</li> </ul>  |
|  |   |
| April 12th- May 26th                       | W. 11 Apr 12 <sup>th</sup> -15 <sup>th</sup>  |

| May 6th – Snow Day (No School) |   |
|--------------------------------|---|
|                                | Into to Electricity & Circuitry   |
|                                | <ul> <li>What is Electricity – atoms, protons, neutrons, etc.</li> <li>Circuitry 101 – positive and negative pathways, electrical components and devices, insulators, conductors, etc.</li> <li>Squishy Circuits experiment</li> <li>Battery Challenge experiment</li> </ul>  |
|                                | W. 12 Apr 18 <sup>th-</sup> 22 <sup>nd</sup>  |
|                                | <ul><li>Circuitry experiments</li><li>Review Electricity 101</li></ul>  |
|                                | Intro to E-Textile Project:   |
|                                | The Future of Circuitry & Creativity  |
|                                | <ul> <li>What is e-textiles?</li> <li>Science and the Arts: How does electronics and fabric connect with each other? Creativity + creations = Art + Science</li> </ul>  |
|                                | W. 13 Apr 25 <sup>th</sup> -29 <sup>th</sup>  |
|                                | <ul> <li>Creating the e-textile circuit with special electronic components from<br/>SparkFun (LilyPads, coin cell batteries, metal conductive thread, etc.)</li> </ul>  |
|                                | W.14 May 2 <sup>nd</sup> -6 <sup>th</sup>   |
|                                | <ul> <li>The Creature – think of a cool creature to create (Design and Drawing skills and techniques along with Design Thinking and Creativity)</li> <li>Cartoon character: Design and Inking</li> <li>Sewing 101 – how to thread a needle, how to make knits, running stitch and blanket stitch</li> <li>How/Why -Sewing and Design Templates</li> </ul> |
|                                | W.15 May 9 <sup>th</sup> -13th  |
|                                | E-Textile Creature  |
|                                | <ul> <li>Project Work Time: design our template, complete your circuit and create your creature</li> <li>Critique and feedback</li> </ul>   |
|                                | W.16 May 16 <sup>th</sup> -20th   |
|                                | E-Textile Creature  |
|                                | <ul> <li>Project Work Time: begin e-textile project process, sewing creature,<br/>incorporating e-textile, etc.</li> </ul>  |
|                                | W.17 May 23th-27th  |
|                                | E-Textile Creature  |
|                                | <ul> <li>Project Work Time: begin e-textile project process, sewing creature,<br/>incorporating e-textile, etc.</li> </ul>  |

| May 31 <sup>st</sup> - June 22nd                   | W. 18 May 31 <sup>st</sup> -Jun3rd   |
|--|--|
| May 30 <sup>th</sup> - Memorial Day (No<br>School) | More project academics, goals, details, process, benchmarks and more will be discussed during class throughout semester  |
|  | Prep for POLs and exhibition   |
|  | W.19 Jun 6 <sup>th</sup> -10 <sup>th</sup>   |
|  | P.O.L.s/Exhibition, Semester Reflections and Clean-up  |
|  | <ul> <li>Reflections on semester learning: things to celebrate, challenges and goals for next semester.</li> <li>Share-out on reflections of growth and accomplishments</li> <li>Studio M deep clean and re-set</li> </ul> |
|  | W.20 Jun 13 <sup>th</sup> -17th  |
|  | P.O.L. Week  |
|  | Final grades and student comments for semester II  |
|  | W.21 Jun 20-22nd   |
|  |  |
|  |  |



# SAFETY CONTRACT

We will be using real tools and real materials!

## **Shop Safety Guidelines & Expectations**

## SAFETY IS OUR UPMOST RESPONSIBLITY

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 Charlie for help.

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
- 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.

DIRECTIONS: With your parents, read through the safety contract for Studio M. If you and your parents agree, sign and date below.

| I<br>Iagree 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<br>those around me who are working as well. I will ALWAYS wear the proper<br>equipment when working with tools. I understand that if I do not follow the safety<br>guidelines I will lose Studio M privileges. |
| Print Name:   |
| Signature of Student:   |
| Signature of Parent:  |
| Date:   |
|   |
| ı<br>L  |

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

## DUE: Friday, January 21st