



# MAKERSPACE COURSE TRACKS



## □ **\*General Orientation for the Melrose Center**

This orientation is your key to accessing the creative and collaborative spaces in the Melrose Center. Get an overview of the Photography Studio, Video Production Studio, Audio Production Studio, Makerspace and Simulation Lab. Explore upcoming classes and workshops and learn about the best practices to maximize your experience.

## 3D DESIGN AND PRINTING

### □ **\*3D Printer Orientation**

Learn 3D printing terminologies and concepts by importing a 3D object file and set up printing parameters on the Flashforge Creator 3 Pros printers.

### □ **3D Design and Printing with Moment of Inspiration Level 1**

Create basic shapes and objects with Moments of Inspiration, a 3D design software. Develop 3D objects using common 3D design tools. Learn the skills you need to start developing your own prototypes.

### □ **3D Design and Printing with Moment of Inspiration Level 2**

Up your 3D design skills with Moments of Inspiration, a 3D design software. Develop 3D objects using loft, revolve and array tools. Learn the skills you need to start developing your own prototypes.

### □ **Fundamentals of 3D Sculpting with Nomad Sculpt**

Create a simple 3D sculpt and learn to navigate Nomad Sculpt's workspace and the basics of 3D sculpting.

### □ **\*Access Assessment – Makerspace Machine**

Prior to booking a 3D Printer, users are required to successfully complete a machine specific assessment. Successful completion of the General Orientation for the Melrose Center, the 3D Printer Orientation and this session grants access to the Makerspace 3D printers during Open Lab hours.

## SILHOUETTE CAMEO 4

### □ **\*Silhouette Cameo Orientation**

Learn to create and set up a cut file with Silhouette Studio, how to use the Silhouette Cameo 4, its features, materials and possible projects.

### □ **\*Access Assessment - Makerspace Machine**

Prior to booking the Silhouette Cameo 4, users are required to successfully complete a machine specific assessment. Successful completion of the General Orientation for the Melrose Center, the Silhouette Cameo Orientation and this session grants access to the Makerspace Silhouette Cameo during Open Lab hours.

*\*This class is required to gain access to all Makerspace machines.*



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## LASER CUTTING

### □ **\*Orion Laser Cutter Orientation**

Learn laser cutting and engraving concepts with the Orion Motor Tech 55w Laser Engraver and Cutter. Import vector files into RDWorks, set up file for laser to process and learn how to use the Orion Laser Engraver and Cutter.

### □ **\*XTool Orientation**

Bring your design to reality with the xTool P2 Laser Cutter and the xTool F1: Laser Engraver at the Makerspace. Learn machine operations, safety precautions, and how to gain access to these machines.

### □ **\*Access Assessment - Makerspace Machine**

Prior to booking the laser cutters, users are required to successfully complete a machine specific assessment. Successful completion of the General Orientation for the Melrose Center, the laser cutter Orientation and this session grants access to the Makerspace 3D printers during Open Lab hours.

## MAKER SECTION

### □ **Foamsmithing Workshop Part I & II**

Foamsmithing is the art of creating props and costumes using different types of foam. In this 2-part workshop, you will get hands-on experience and learn different cutting techniques, where to find patterns, how to put together a mask and the different tools and techniques used for finishing your foamsmithing project.

### □ **Advanced Foamsmithing Workshop**

Advance workshop where you will use what you have learned from part I and II of the foamsmithing workshop and apply it to advance patterns. This workshop offers different props or masks on rotation. Keep a look out on the schedule for more information.

### □ **Introduction to Soldering Basics**

Build a simple circuit with a soldering iron and components. Learn to safely use a soldering iron correctly to join components and wires.

### □ **Open Lab**

If you have access to any of the machines in the Makerspace or need to use some of our tools and workstations, our open labs offer you the opportunity and the space to work on your projects. Offered on Tuesdays, Thursdays and Saturdays. Be sure to check the schedule for dates and times. All makers and cosplayers are welcome!

### □ **Family STEAM Saturdays**

Offered the 1st and 3rd Saturday of the month. A time where families can come in to our makerspace and either do a free play with snap circuits or a guided lab. Be sure to check out our schedule for dates and times as it is subject to change.

### □ **Maker Workshops**

Maker Workshops are offered every month. Projects are different every month and it showcases what can be done with the machines in our Makerspace. Be sure to check our schedule for more information.

*\*This class is required to gain access to all Makerspace machines.*