



Jocelyn H. Lee Innovation Lab

# DECEMBER 2016

**Class Registration is Required: 281-488-1906**

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
* Registration Not Required † Meets in the Computer Lab			<b>1</b> 2:00 pm CNC Mill Orientation (2D) 7:00 pm Laser Cutter Orientation	<b>2</b>	<b>3</b>
<b>5</b> 7:00 pm CNC Mill Orientation (2D)	<b>6</b> 4:00 pm Incubator Project*	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b> 10:30 am 3D Printing Orientation†
<b>12</b>	<b>13</b> 4:00 pm Incubator Project*	<b>14</b> 7:00 pm 3D Printer Users Group*	<b>15</b> 2:00 pm CNC Mill Orientation (2D) 7:00 pm 3D Printing Orientation†	<b>16</b>	<b>17</b> 10:30 am Laser Cutter Orientation
<b>19</b>	<b>20</b> 4:00 pm Incubator Project*	<b>21</b> 4:00 pm Arduino 101	<b>22</b>	<b>23</b> <span style="color: red;">CLOSED</span>	<b>24</b> <span style="color: red;">CLOSED</span>
<b>26</b> <span style="color: red;">CLOSED</span>	<b>27</b> 2:00 pm Digital Fabrication Mini-Camp	<b>28</b> 2:00 pm Digital Fabrication Mini-Camp	<b>29</b> 2:00 pm Digital Fabrication Mini-Camp	<b>30</b> 2:00 pm Digital Fabrication Mini-Camp	<b>31</b> <span style="color: red;">CLOSED</span>



**Information for Persons with Disabilities:** Programs and services are Americans with Disabilities Act (ADA) Compliant. Special accommodations can be requested in advance by contacting the library.

**Clear Lake City-County Freeman Branch Library**  
16616 Diana Lane | Houston, Texas 77062 | 281-488-1906  
[www.hcpl.net](http://www.hcpl.net)



Jocelyn H. Lee Innovation Lab

# UPCOMING PROGRAMS AT THE CLEAR LAKE CITY-COUNTY FREEMAN BRANCH LIBRARY

The JOCELYN H. LEE INNOVATION LAB is a *makerspace* – a place for people to learn, share resources, work on projects and network with other creative minds. Access to the Lab and classes is free to the public.

**Participants under age 12 must be accompanied by an adult guardian.**

## 3D Printing Orientation

Get an overview of the Lab's 3D scanning and printing capabilities and discover easy ways to generate your own models and prints. This class is required for reserving print time on the 3D printers.

## 3D Printer Users Group

Share your latest 3D models, swap tips and collaborate on projects. The December 2016 meeting will be held on the second Wednesday, December 14<sup>th</sup>, instead of the normal third Wednesday (as it will resume in January 2017).

## Arduino 101

The Arduino is a small microcontroller making a big impact on the maker scene. Come learn how easy it is to develop your own circuits and programs in this hands-on class.

## CNC Mill Orientation (2D)

A mill is a cutting tool, similar to a router, which can mechanically cut shapes and patterns from woods, plastics and metals. This class will cover the basic operation of the Nomad 883, a desktop CNC, and demonstrate the basic software for cutting two-dimensional parts. (A second course for 3D-machining will be offered in the future.) This class is required to reserve time on the desktop CNC mill. **Experience with the Innovation Lab's 3D printers and/or laser cutter is strongly recommended.** Participants under age 16 must be accompanied by an adult guardian.

## Digital Fabrication Mini-Camp

This four-day 'mini-camp' will introduce teens to the basic fabrication tools in the Innovation Lab and the software used to create designs. Students will learn to use the 3D printers, laser cutter and desktop CNC mill along with other tools to make personalized items suitable for gifts and school projects. *Participants must be between ages 12 – 18 and are expected to attend all four afternoons of the camp (2pm – 5pm).* Please contact Innovation Lab Trainer Patrick Ferrell (patrick.ferrell@hcpl.net) for more information.

## Incubator Project

This experimental multi-week program will allow participants to work as a team to design and build an automated egg incubator. The project will require designing and fabricating mechanical and electrical systems (likely interfaced to a Raspberry Pi computer programmed using Python). When the project is completed, the incubator may be used at another HCPL branch to hatch chickens. Please contact Innovation Lab Trainer Patrick Ferrell (patrick.ferrell@hcpl.net) for more information.

## Laser Cutter Orientation

Learn the techniques for using the laser cutter and prepare your own jobs for cutting and etching. This class is required for reserving time on the laser cutter. *Participants under age 16 must be accompanied by an adult guardian.*

Jocelyn H. Lee Innovation Lab tools and programs are made possible with assistance from  
The Friends of Freeman Library

