

Pop-Up Class Series: Fall 2017

Date	Class	Instructor	Location
October 11 (6-8pm)	Geographic Information Systems	Robert Neff	LNDL
October 25 (6-8pm)	Practical Photoshop	Julie Sayo	LNDL
November 2 (6-8pm)	Basics of Tinkercad	Youlanda Halterman	LNDL
November 8 (6-8pm)	3d Scanning	Billy Friebele & Jon Malis	LNDL
November 15 (6-8pm)	Arduino Blink Challenge	Yanko Kranov	Loyola Engineering

Geographic Information Systems (October 11)

Robert Neff

Location: LNDL, Lab A

<http://tinyurl.com/lndl-pop-f17-gis>

Geographic Information Systems (GIS) are the dominant tools for spatial analysis in all sectors of the economy, including sociodemographic analysis used to determine optimal locations for retail establishments, managing utilities and other public infrastructure, analysis human-environmental systems and processes, and military applications, to name a few. In this pop-up course, students will be exposed to the analytical power of GIS through a hands-on exercise that highlights some of the more basic and accessible analysis tools in a real-world analysis problem using publicly available data. Students also will learn about the broad analytical power of GIS through a brief introductory lecture (~20 minutes) at the start of the session. Students will leave this pop-up course having completed a spatial analysis and created their own maps to display the results. These activities are designed to give students a greater appreciation for the analytical power of GIS and the potential to develop valuable and marketable skills through future course work.

Practical Photoshop (October 25)

Julie Sayo

Location: LNDL, Lab A

<http://tinyurl.com/lndl-pop-f17-photoshop>

This pop-up class will cover the essentials to get you started in Photoshop. Photoshop is Adobe's photo editing software. We'll cover how to retouch images, color correction, digitally restoring old and damaged photographs and other practical applications for the software. Participants are encouraged to bring images (digital or printed) that they would like to restore. No experience with Photoshop is necessary.

Basics of Tinkercad (November 2)

Youlanda Halterman

Location: LNDL, Lab A

<http://tinyurl.com/lndl-pop-f17-tinkercad>

Explore the basics of Tinkercad, an easy to use web based tool to design 3d models. In this pop-up, each participant will learn to manipulate shapes to create 3 dimensional objects, create a 3D model that will later be printed at the library and create a user account that will allow them to continue to explore and design 3d models anytime and anywhere.

3D Scanning (November 8)

Billy Friebele, Jon Malis

Location: LNDL, Lab A

<http://tinyurl.com/lndl-pop-f17-3dscan>

In this workshop we will introduce the concept of 3D scanning, including handheld infrared scanners, 3D scanning attachments for cell phones, photogrammetry and free apps that allow users to create 3D models from photographs. A 3D scanner is a device that analyses an object to collect data about its shape. It then constructs a digital model that can be altered, animated, or 3D printed. This can also be accomplished by stitching multiple photographs together.

Participants are encouraged to bring objects to scan. Note: shiny objects are more challenging! We will experiment with different scanning techniques and learn how artists can use these files for 3D printing, augmented reality, and other creative projects.

Arduino Blink Challenge (November 15th)

Yanko Kranov

Location: Loyola Engineering

<http://tinyurl.com/lndl-pop-f16-arduino>

The "Arduino Blink Challenge" lesson explores how computer and software engineers work to solve the challenges of a society, such as providing systems for turning lights on and off automatically. Students work in teams to set up and program an Arduino board to turn a light on and off at a 5 second on and 2 second off interval. Teams build their system, program and test it, reflect on the challenge, and present their experiences to their class.