

# SPLASH! 2016 Course Catalog

## Arts and Music

### **Introduction to Jewelry-Making (A153)**

In this course, you will learn the arts of making earrings. Each person will have the opportunity to work hands-on and bring home at least a pair of earrings at the end of the day!

### **Roots and Branches of American Traditional Music (A147)**

Learn about traditional music from different regions of the U.S. and its origins. What styles are out there? What makes them unique? This workshop will provide a chance to explore styles of music often neglected in American music education, such as New England, Appalachian, Bluegrass, and Cajun.

### **The Wonderful World of Fiddle Music and Musical Improv (A148)**

We'll learn exciting traditional tunes, develop musical improvising skills, and most importantly, have fun! Students should preferably have experience in playing a musical instrument, but it is not required.

### **The Art of Origami: Ingenious Paper Creations (A161)**

Origami is the art of creative paper folding that originated in the Imperial Japanese Court during the 17th century. Today, Origami is a popular past time for many individuals. This class will go over step-by-step tutorial on how to fold beautiful and extravagant things out of paper. Come learn and create your very own origami art!

## College Preparation

### **How to Master the Interview: Tips and Tricks (C166)**

If you want to find a job or internship, then interviews are crucial. It's a lot more than talking about yourself. In this class, we'll go over common behavioral interview questions and how to answer them successfully. Students will have the opportunity to practice these skills and see how they do!

### **Let's Travel Abroad Together (C152)**

Have you ever thought about studying abroad in college? This course will guide you through the "idea" using the teacher's own personal experiences. A list of scholarships, tips, and advice will also be given by a two-time recipient of a study abroad scholarship.

## Humanities and Social Studies

### **Introduction to Japanese (H149)**

This course is an introduction to Japanese culture and language. Components of the language including hiragana, katakana, kanji, and simple phrases will be discussed. Japanese culture including art, anime, and movies will be explored as well!

### **Introduction to Korean (H159)**

Come learn basic and useful Korean greetings and phrases that are heard daily in Korea! We will also be exploring various aspects of Korean culture including art, music, and food!

### **The Ethics of Hard Work: The Clash of Western and Eastern Ideals in America (H146)**

How does "hard work" affects the lives of Asian Americans? In this course, we will explore the history behind the said phrase, the model minority myth, and the cultural clash between East and West. We will examine how social identities, oppressive institutions, and systems all interconnect.

## Computer Science, Math, and Engineering

### **Introduction to Programming/Computer Science in Python (M154)**

Are you interested in learning how to make computer programs? In this class, we will be going over the basics of how programming works - both in the sense of how to write a program, and how to think like your computer does. No previous experience necessary!

### **Introduction to Computer Programming in Java (M164)**

This class will cover the basics of computer programming using Java. The main point of this class is to get students into the mindset of problem-solving and become exposed to the basics of programming in Java. Bringing a laptop is recommended, but not required for this class.

### **Introduction to 3D Animation (X168)**

This course will introduce the aspect of 3D animation through the use of the Blender program. The student will learn how to animate and make movie scenes from scratch or from imported materials. Students will also gain first-hand experience/guidance in making their own animation. Coding is not necessary.

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## **An Introduction to Set Theory and Functions (M156)**

Unsatisfied with the input-output definition of the function you learned in Algebra? In this class we'll give a more rigorous definition. We'll begin with introducing the core notation used in Set Theory, and look at examples. From this, we will define a correspondence, and see that a function is a special case of a correspondence.

## **Lying with Statistics and the Z-Test (M167)**

This course intends to give a general overview of the introductory Statistics courses that many college students take. The second half of the course will focus on how statistics is used in our daily lives to manipulate public perception. Thus, this course will train your analytical eye to see through the surface of the numbers often reported in "studies."

## **3D Design for 3D Printing (E165)**

Come learn how to design objects in 3D! We'll teach you the basics of creating models that are ready to 3D print. From action figures, to model rockets, to useful household gadgets, you'll be able to make it all! Learn to transform an idea into an object by the end of the day! We'll focus on 3D design, with a very brief tutorial on how to 3D print your creations.

## Science

## **Conceptualizing Public Health: Influenza Vaccine Design (S162)**

Every year, individuals are recommended to get their flu shots right before the flu season, spanning from October through May. But where do these flu vaccines come from? How were they designed? This class will go over the structure of Influenza A virus, the basic science involving vaccine design, and the public health factors involved in vaccine creation.

## **Chemistry of Baking (S158)**

Interested in learning about how chemistry interplays with baking? Then this is the class for you! We will be going over how each ingredient used plays a critical role in formulating your final product, your delicious baked good.

## **Crash Course to DNA (S150)**

This course will cover the Central Dogma of molecular biology, where we will discuss the transition from DNA to protein. Our class will feature a fun DNA extraction experiment from bananas!

## **Immortality, Mind Control, and Zombies (S157)**

Learn how concepts from fantasy and fiction appear in the real world! We will cover the following topics: life, death, immortality, mind control, and zombies in a biological context. We will examine the origin of viruses, mind controlling fungi, and more. Emphasis on class interaction and the course will be taught through a biological lens.

## **Mind and Medicine (S160)**

This course will offer an overview of the dysfunction of the brain and nervous system that lead to disease. We will cover the basic biology of the nervous system, as well as specifics about the current understanding of diseases (ex. Parkinson's). Demonstrations of science technology may be given, time permitting.

## **The Beginning and End of Our Universe (S155)**

This class offers introductory level insight to the theories on how our Universe may have formed and how our Universe may end. If you are interested in Astronomy, Physics or just science in the general sense, then this course will be ideal for you!

## **The Power of Posture: What they Didn't Teach When You Learned about Puberty (S144)**

This course will discuss the importance of movement and functionality in the human body, and how society robs us of movement. What are the consequences of this, and possible solutions? This will be a class where no one sits in chairs!

## **Theoretical Neuroscience (S145)**

Learn the basics of theoretical neuroscience, from computational models of small circuit dynamics to research of mental illness, intelligence, and thought. This class is intended for students seeking an in-depth explanation of neuroscience above that of an introductory psychology class.

## **The Heart: The Engine of Life(S163)**

The human heart is an amazing and essential part of the body that is responsible for a plethora of functions. This course will provide an overview of the human cardiovascular system and common medical problems people have from a physiological lens.

Register at

<https://brandeis.learningu.org/learn/register.html>  
to see additional courses!