Citizen Science: How Everyone Can Contribute to Research

When you think of research, do you picture a scientist in a white lab coat with goggles on? This may be a common visual, but research is a diverse field. In fact, all of us can participate in research! This course will explore the rapidly developing field of citizen science, where any individual can report their findings and observations for scientists to use in their studies. Students will evaluate these projects compared to traditional research and also participate in a variety of projects themselves, where they will work with technology, explore the environment, and think about research on a global scale. Individuals will enter as students and leave as researchers!

Designing Your Dwelling

Would you like to live in a mansion or ultra-modern cliff-dwelling? Perhaps a cabin in the woods is more your style? Join us to examine the intersection of taste, design, and budget. In this class we will explore the decisions that are necessary to make when designing and building a dwelling. We will learn the different types and required elements of house design, draw specific floor plans, construct models, and make decisions considering the costs of construction, materials, and loans. We will complete every detail (including appliances and furnishings!) to create an affordable dwelling that would be ready to inhabit.

Explorations in Neuroscience

In Explorations in Neuroscience, we will investigate the form and function of the human brain, such as how the parts of the brain work together. We will also examine what happens when the brain does not work properly. We will delve into our five senses and dissect cow eyes (an optional activity) to further examine how the human eye works. Visiting neurologists will teach us about the latest brain research. We will investigate latest neuroscience findings, teach each other by creating our own brain research lesson, and share our presentations in a culminating research conference. Join us as we play synapse tag, explore the nervous system, and create model neurons in our quest to understand the brain!

Harry Potter and the Philosopher’s Ethics

Have you ever wondered what makes a hero heroic and a villain villainous? How can we really tell which actions are right and which actions are wrong? Philosophers have been trying to answer these questions for thousands of years, and they have developed an array of theories to try and figure it out. In this course, we use the Harry Potter series to help us learn some of the most influential strategies for understanding ethical questions. By focusing on concepts like character and virtue, duty and the moral law, and the consequences of actions, we will have tools we can use to look at the tough decisions people make. Classes will focus on different scenarios from the Harry Potter books in which the characters face difficult ethical decisions and students will learn to apply ethical theories in order to better understand what it means for people to act rightly or wrongly. Both muggles and wizards are welcome!