



School for Scientific Thought

Saturday Science for High School students

February 2, 9, 23, March 2, 9, 2019 10:00am-12:15pm



Courses available:

The Art of Marine Biology: From Coast to Canvas

Marine habitats are the most biodiverse ecosystems on Earth and have been inspiring scientists and artists for hundreds of years, including Darwin himself! In this course we will explore the local marine wildlife of Santa Barbara County through animal dissections and class field trips to the beach to learn more about our local marine ecosystems and the seaweeds and animals that call these places home. We will also pair labs with various art projects students can opt to participate in, including algae and fish presses and animal sketching. Students will learn a number of skills used by biologists, such as microscopy, biodiversity measurements, and using field guides. (Ecology, Evolution, and Marine Science)

Explorations in Modern Physics and Astronomy

What's the difference between dark matter and dark energy? How do living things organize themselves into flocks and swarms? How does light diffract, and just what is a photon anyways? Join us as we explore topics at the forefront of modern physics research, including particle physics at the Large Hadron Collider, the history of the universe starting from the Big Bang, and everything in between! Each session will focus on a different field of physics and immerse students through discussion, demonstrations, and hands-on experimentation. No formal background in physics or math is required and all are encouraged to attend. (Physics)

Experiencing Digital Architecture and Computer Music through Virtual Reality

Can architecture be rhythmic? Can music be seen? What is the relationship between music and architecture? In this course, we will challenge what you think architecture and music are by examining how the intersection of these topics evolved over time through the lens of human experience and the technology. Students will learn the basic concepts of architecture and music through lectures and workshop. Students will have a lab tour to experience sound and space in a virtual reality environment. By using sketching, physical/digital 3D modeling, and a sound workshop, students will develop a hands-on experience to learn the creative techniques in building a musical-architectural virtual reality experience. (Media, Arts and Design)

Applications are due January 23 and classes start February 2!

<http://sst-csep.cnsi.ucsb.edu/>

It's fun, it's free and there is no homework! All participants are welcome to join a free pizza lunch following the classes each week.