

Course Catalog — *Arts*

A320: 3D animation using Blender

Andrew Chen

This class will introduce you to all the fundamentals and the tools used in Blender in order to create, manipulate, and model three dimensional objects and scenes.

Open to students grades 7 through 12

Sat 12:00pm–1:00pm

Sat 2:00pm–3:00pm

A318: Animate: An Introduction to 2D Frame By Frame Animation

Osamah Mandawi

Teaches the Twelve Basic Principles of Animation, as described by the legendary Frank Thomas and Ollie Johnston, two of Disney's Nine Old Men. Covers animation resources, free platforms, exercises, and even contests to participate in. No drawing skills required.

Open to students grades 6 through 12

Sat 1:00pm–2:00pm

A319: Animate: Workshop

Osamah Mandawi

Workshop to accompany “Animate: An Introduction to 2D Frame By

Frame Animation”. We will work on anima-

tion exercises using the FlipaClip app. Android:

<https://play.google.com/store/apps/details?id=com.vblast.flipaclip&>

iOS: <https://apps.apple.com/us/app/flipaclip-cartoon->

[animation/id1101848914](https://apps.apple.com/us/app/flipaclip-cartoon-animation/id1101848914).

Open to students grades 9 through 12

Sat 4:00pm–5:00pm

Sat 3:00pm–4:00pm

Course Catalog — *Humanities*

H302: Famous (and Infamous) Battles of Classical Europe

Christopher Martin

A fun and engaging survey of Classical European Military History, covering topics such as the Punic Wars, Caesar's Expeditions in Gaul, Roman-Parthian Conflict, and even the early victories of encroaching tribal cultures like the Goths and Visigoths.

Open to students grades 8 through 12

Sat 12:00pm–1:00pm

Sat 1:00pm–2:00pm

Sat 3:00pm–4:00pm

H299: Intro to Archaeology

Kelsie Ehalt

Learn about what archaeologists study and do in the field, from an archaeology student who has dug at Bronze Age sites in Israel!

Open to students grades 6 through 12

Sat 12:00pm–1:00pm

H296: Italian 101

Leah Sagan-Dworsky

Basic Italian class. Will be starting from zero.

Open to students grades 6 through 12

Sat 4:00pm–5:00pm

Sat 3:00pm–4:00pm

Sat 2:00pm–3:00pm

Sat 1:00pm–2:00pm

Sat 12:00pm–1:00pm

H307: The Persian War

Joshua Hoffman

This lecture based course will be on the legendary David vs Goliath conflict between a coalition of Greek City-States lead by Athens and Sparta against the largest empire the world had ever seen.

Open to students grades 7 through 12

Sat 12:00pm–1:00pm

H308: Athens VS Sparta. The Greek World Wars. 431-404.

Joshua Hoffman

This class will cover the great war between the city-states of Athens and Sparta. Essentially the Greek World Wars, this Peloponnese War lasts over 30 years and has lasting impact on the future of Greece. In this conflict both Athens and Sparta control half of Greece, and the winner has the opportunity to become the first ruler over a united Greece.

Open to students grades 7 through 12

Sat 1:00pm–2:00pm

H306: Culture and You

Morgan Silcox

Learn more about how to navigate your culture and others' as the world becomes more globalized! This course will focus on ideas of identity and belonging.

Open to students grades 6 through 12

Sat 4:00pm–5:00pm

Sat 1:00pm–2:00pm

Sat 2:00pm–3:00pm

Sat 3:00pm–4:00pm

H300: Making Meaning in Life out of Literature

Ella Miller

In this class, we will examine short stories that reflect existential philosophy to look closer at our These stories can help look at meaning in our own lives. How can we know ourselves? How can we find our own unique happiness in a world of conformity? What does it mean to live a meaningful life? Why do we feel lonely? What is free choice and how do we engage with it?

(Camus, the Little Prince)

Open to students grades 7 through 10

Sat 4:00pm–5:00pm

Sat 2:00pm–3:00pm

H317: Slavery and the Civil War

Henry Wasserman

This course is a serves as a brief introduction to the principal cause of our nations deadliest conflict: slavery. The American Civil War was a war that drastically reshaped and redefined the United States in ways that we still grapple with today. In this class we will be examining an overview of the how and why civil war broke out in 1861, and the intuition of slaverys key role in the outbreak of the war.

Open to students grades 8 through 12

Sat 2:00pm–3:00pm

Sat 3:00pm–4:00pm

H301: Introduction to Existential Philosophy

Angel Motto

Ever wonder why you're here?

Why humans are on Earth?

Do you ever feel like you don't fit in?

Existential philosophy explores questions related to existence, our values, and our roles in the world. We explore such things as "constructs" and meaning behind action.

If you tend to ask questions that no one can give you clear answers to, exploring existential philosophy may just give you the direction necessary to find what you seek.

Open to students grades 8 through 12

Sat 3:00pm–4:00pm

H310: The Greco-Roman Wars

Joshua Hoffman

The Romans, fresh after fighting Carthage, clash in the East with the successors of Alexander the Great. The West collides with the East in a series of wars that will shape the Greek world for centuries to come, the winner of which will become the undisputed ruler over the entire Mediterranean, from Portugal to Palestine.

Open to students grades 7 through 12

Sat 3:00pm–4:00pm

H297: Philosophy: An Overview

Matt Robin

Philosophy is a subject that is not often taught or even described until college, so once students finally get there, they have no idea what philosophy really is or what it entails. This course provides a clearer description of philosophy for

any student that is interested in the subject, whether they want to pursue it in the future, study it now or just want to learn about it for fun.

Open to students grades 9 through 12

Sat 4:00pm–5:00pm

H309: The Second Carthaginian War: Rome and Hannibal

Joshua Hoffman

This course is a lecture covering the famous Second Carthaginian War (and a quick summary of the first), the famous conflict between Rome and the Carthaginians.

Open to students grades 7 through 12

Sat 4:00pm–5:00pm

Course Catalog — *Science*

S303: Our Planet, Our Future: What We Can Do As Students

Emily Chou

This course will include introductory material about climate change, global warming, and the impact that humans have on Earth. (Topics: fossil fuels, big corporations, recent events/news, plastic pollution, deforestation, air pollution, water pollution, natural resource depletion) It will then go on to explain what individuals/students can do to combat such a huge issue that often seems out of our hands. It's imperative for everybody - students especially - to at least be aware of or educated about what is happening to our Earth now, what our future may or will look like, and the specific changes that we can make as a generation.

Open to students grades 6 through 12

Sat 12:00pm–2:00pm

Sat 2:00pm–4:00pm

S312: Peeking into the World of Computer Science

Zuhaer Islam

In this one hour class, I would like to talk about the significance of Computer Science today. I would like to stimulate interest in the young minds for trying out Computer Science. Also, I would definitely clarify some myths, rumors, and misunderstandings about the discipline, and that it's really not something to be scared about.

Open to students grades 6 through 12

Sat 12:00pm–1:00pm

S314: Thinking Like a Coder

Joanna Xiong

This is a beginner friendly computer science course designed to empower students with the ability to think like a coder and navigate coding with more ease. In this course, students will not learn to code, but they will acquire logical thinking that is essential to coding in any programming language.

Open to students grades 8 through 12

Sat 2:00pm–3:00pm

Sat 12:00pm–1:00pm

S294: Crash Course to Genetics

Elizabeth Chernobelsky

This course will cover patterns of inheritance in humans. We'll learn the basic structure of chromosomes and genes and discuss various techniques of genetic analysis, such as Punnett squares. The class will give you the chance to understand the causes and think about potential treatments of incurable genetic diseases.

Open to students grades 9 through 12

Sat 1:00pm–2:00pm

Sat 3:00pm–4:00pm

S315: How to Start Composting

Erin Magill

Interested in gardening, houseplants, or diverting waste from landfills? Come learn about composting! We'll cover the benefits of compost and types of composting facilities, and then how to start your very own worm compost bin, or "vermicompost."

Open to students grades 9 through 12

Sat 1:00pm–2:00pm

S313: Why is Math?

Michael Richard

Students often wonder why they've been taught what they've been taught in math class? "Why must we learn the quadratic formula?" "When will this help me in life?" I want to explain why I think math is a worthwhile and fascinating pursuit that helps us understand the world in a unique way.

Martin Hairer, winner of this year's \$3 million breakthrough prize in mathematics said that "Maths is truth. Once you discover something in maths, it applies to all eternity."

My class would begin with showing real life applications for math that aren't so obvious, (why sunflowers grow in a certain way, why ropes take a certain shape when hung up). And I will move on to talk about what mathematicians actually do and why we find math interesting.

Open to students grades 9 through 12

Sat 4:00pm–5:00pm

Sat 2:00pm–3:00pm

S321: Intro to Java

Andrew Chen

This course will introduce the language of JAVA.

Students will learn the basics of JAVA and learn how to write programs using JAVA. Topics covered will include primitive types, methods, loops, and logic (if, else statements).

No experience needed.

Open to students grades 7 through 12

Sat 3:00pm–4:00pm

Sat 4:00pm–5:00pm

Course Catalog — *Social Science*

O293: Introduction to economics: economics in the field of finance, politics, education, and environment

Ruoxi (Kathy) Zhang

This course will be an introduction to the field of economics. No math or economics knowledge is required. Besides the description of a basic demand-supply model, students will be introduced to some of the fun facts of economics in financial, macro, educational, and environmental economics. Students are expected to apply economics into daily decision-making process after this class.

Open to students grades 8 through 12

Sat 12:00pm–1:00pm

O298: Right Under Your Nose: How to Use The Internet to Find Out About Anything

Salvatore LaRussa

You probably know that the internet is a great place to find all kinds of things like memes, recordings of Tik Toks, the directions to your friend's houses, and recipes for cakes you can make in a mug. But what about the more important stuff? Did you know that, publicly available on the internet, there is the information to figure out why there's that weird abandoned lot in your neighborhood? Or why the cops are racing past your house in the middle of the night? Or, even more surprising, that Border Patrol was using predator drones to spy on protestors in Minneapolis? Crazier still, using only publicly available information on the internet, people just like you and me have tracked down the soldiers involved in shooting down a passenger airliner over Ukraine, and are actively watching human rights abuses by dictators and despots all over the world. This class is about how you can use the internet to find out not only the stuff that everyone knows, but to figure out some things people have long forgotten or really want to stay hidden.

Open to students grades 8 through 12

Sat 1:00pm–2:00pm

Sat 2:00pm–3:00pm

O316: Sociological Approach to Modern Love

teresa shi

Have you ever felt confused by stepping into the dating scene or simply consuming the reality dating shows? Feeling anxious when all of your friends already had the experience. Being disappointed by trying to find the right person. Looking through all of the psychological explanations to adapt to the dating market. I mean why do we need a partner after all?

In this class, we will examine the reality show's dating scenes from different counties and explore some concepts about gender roles and modern love under the sociological context. Hopefully, you will be able to pick up traces of the romantic

culture while consuming it.

Open to students grades 9 through 12

Sat 1:00pm–2:00pm

Sat 4:00pm–5:00pm

O323: The Perfect Bedtime Story

Zoe Lazar

Want to know what makes the perfect picture book? Do you want to bond over your favorite books from childhood? This class will be an exploration into the art of being a children's book author and what it takes to write a best seller. We will discuss illustrations, rhyme and much much more. Get ready to get creative and harness you inner child!

Open to students grades 6 through 12

Sat 3:00pm–4:00pm

Sat 2:00pm–3:00pm

O292: Writing About Economics

Jake Rong

This course introduces students to economic writing through real-world examples. Students will learn how to find economic data, think critically about economic news, and interpret economic indicators.

Open to students grades 9 through 12

Sat 2:00pm–3:00pm

O305: What's at the intersection of environmental justice, racial justice, public health and climate change?

Sabrina Chow, Jesse Zucker

This past summer as the coronavirus pandemic continued to affect the US and the world, activists across the country came together to support the Black Lives Matter movement and started a conversation about racial justice in the US. As these conversations of racial justice in the US continue on, conversations have also started looking into the intersection of racial justice and other areas of social justice, including environmental justice, sustainability and climate change. The earth as we know it is dying because of the detrimental effects of climate change and if policy changes are not put into effect soon, the world as we know it will change forever. Join us to learn more about the intersection of environmental justice, racial justice and climate change and have a discussion about how all of social justice is interconnected and learn about ways to make a difference in your community. We will also touch upon the public health aspect of climate change and sustainability and how COVID-19 is impacting the health of not only our species, but also our planet.

Open to students grades 9 through 12

Sat 4:00pm–5:00pm