

2020-21 High School Course Catalog

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Core Courses

English

Composition and Identity

Instructor - Gabe Johnson

Fulfills English Requirement

Offered in the 2020-2021 School Year

In “Composition and Identity” students will learn and practice foundational writing skills in both non-fiction forms, such as essays and personal narratives, as well as fiction forms such as short stories and poems. The readings for this class will revolve around the theme of *Identity* as it pertains to one’s self and to one’s community, as well as how it relates to less tangible things such as literature, a geographical region, a nation, and even a historical period. We will ask the question, *what does it mean to have an identity at all*. Students will also develop a deeper understanding of the English Language through study of vocabulary and grammar.

American Literature and Composition

Instructor - Gabe Johnson

Fulfills English Requirement

Not Offered in the 2020-2021 school year

In “American Literature and Composition”, students will learn how to craft effective essays through a variety of techniques and improve vocabulary through weekly lessons. Students will explore American literature from the Native Americans to the Civil Rights Movement. Students will learn to analyze and understand complex or difficult works through reading comprehension techniques. Students will also be able to explore some of the themes and motifs of the reading selections through creative writing.

World Literature and Composition

Instructor - Gabe Johnson

Fulfills English Requirement

Prerequisite: Composition & Identity, and American Literature and Composition

Offered in the 2020-2021 School Year

In “World Literature and Composition”, students will explore a variety of cultures through the literature of the region. Students will read both historical and modern works of literature that reveal deep truths about the diversity of humanity, as well as the similarities we all share. As they take this world tour, students will also work towards developing college level

analysis and composition skills, focusing mainly on academic writing. Students will learn to apply filters to a work of literature, and to be able to engage the writing in new and novel ways.

Modern Literature and Composition

Instructor - Gabe Johnson

Fulfills English Requirement

Prerequisite: Composition & Identity, and American Literature and Composition

Not Offered in the 2020-2021 school year

In “Modern Literature and Composition”, students will explore the themes and practices of Modernism and Postmodernism in literature. Through a detailed look at some of the most important modern works, beginning with Virginia Woolf and Franz Kafka, students will explore some of the social and environmental issues facing the modern world. Students will learn to synthesize the analysis, close reading, grammar, vocabulary, and writing techniques they’ve learned in high school to produce college level essays and analysis.

Mathematics

Algebra 1

Instructor - Grant Yost

Math Credit

Prerequisites: Math 8

Offered in the 2020-2021 School Year

Algebra 1 provides formal understanding of algebraic concepts that are necessary for higher level math courses. In this course, students will learn how to use basic algebraic skills in wide range of problem solving situations. Students will master the concepts of functions and how to graph linear functions by plotting points, using slope, and using intercepts. Students will also learn to solve the system of linear equations by graphing, substitution and elimination methods. We will also focus on inequalities and nonlinear equations.

Throughout this course we will focus on real life examples and problems. At the end of the course, students will be able to grasp the use of algebra in real life and for further math applications.

Geometry

Instructor - Grant Yost

Math Credit

Prerequisites: Alg. 1

Offered in the 2020-2021 School Year

Geometry is a course in logic, proof, and measurement. Students will develop their ability to construct formal, logical arguments and proofs in geometric settings and problems. Some of the topics covered include definitions, postulates, and theorems regarding angles, segments, lines, arcs, congruent triangles, similar triangles, special quadrilaterals, parallel lines, circles, coordinate geometry, area and volume formulas, transformations, constructions, and right triangle trigonometry. This course will involve constructions and models of geometric concepts.

Algebra 2

Instructor - Grant Yost

Math Credit

Prerequisites: Alg. 1, Geometry

Offered in the 2020-2021 School Year

This course is designed to build on algebraic and geometric concepts. It develops advanced algebra skills such as systems of equations, advanced polynomials, imaginary and complex numbers, and quadratic equations. The course also includes the study of function generality and how it applies to root functions, rational functions, polynomial functions, exponential functions, and logarithmic functions. The content of this course is important for students' success on both the ACT and college mathematics entrance exams.

Pre-calculus

Instructor - Grant Yost

Math Credit

Prerequisites: Alg.1, Alg.2, Geometry

Offered in the 2020-2021 School Year

This course is designed to cover topics in Algebra ranging from polynomial, rational, and exponential functions to conic sections. Trigonometry concepts such as Law of Sines and Cosines will be introduced. Students will then begin analytic geometry and introduction to calculus concepts such as limits, derivatives, and integrals.

Calculus

Math Credit

Prerequisites: Alg.1, Alg.2, Geometry, Pre-Calculus

Not Offered in the 2020-2021 school year

Calculus is an introduction to differential and integral calculus: the study of change. This course will cover Limit and Continuity, Derivatives and application of Derivatives, Integral and application of integral, Sequences, L'Hopital's rule and Infinite Series. Calculus emphasizes skills, theory, and applications. Calculus opens doors to higher mathematics, science, and technology.

Sciences

Earth Science

Instructor - Andrew Rabin

Science Requirement

Prerequisites: None

Offered in the 2020-2021 School Year

Earth science is the study of the interactions between the physical environment of the earth and living organisms that inhabit the earth. This class is interdisciplinary and will complement and provide foundation for the study of biology, chemistry and physics. As a result of this course, students will be able to respond to the essential question "How do humans impact the earth?" also students will gain essential science and math skills necessary for success in high school and beyond.

Biology

Instructor - Andrew Rabin

Science Requirement

Prerequisites: None

Offered in the 2020-2021 School Year

Biology is the study of life. It is the study of what makes us unique while simultaneously being the study of what unifies all living things together from bacteria, to protist, to fungi, to plants, and to animals. This course will enable you to critically evaluate topics in the news such as genetically modified organisms, public health epidemics, species extinctions and biodiversity loss.

Chemistry

Instructor Andrew Rabin

Science Requirement

Students will learn about the chemical and physical properties of matter, energy transfer and conservation, and the study of these major concepts. While learning the scientific language and calculations, students will also gain a global perspective by applying this knowledge with functional design of everyday items found in the world around us. Students will use the scientific method to conduct laboratory experiments, document their work and write reports. For example, students will use their newly acquired scientific knowledge conducting reactions to make soap, "gold" pennies, and hollow penny shells.

Prerequisites: Earth Science, Algebra I

Corequisite: Algebra 2 or Permission of the Instructor

Deep Ecology

Instructor - Andrew Rabin

Science Requirement

Prerequisites: Earth Science and Biology

Offered in the 2020-2021 school year

Deep Ecology is a lens through which to study the environment and the human impact on that environment. A basic premise of Deep Ecology is that all life has inherent value and that human interests are not more important than the value of the natural world. A deep ecology worldview requires a systems thinking approach to complex problems. This course is inherently interdisciplinary, drawing on all the sciences as well as philosophy, history and language. This course will rely heavily on both individual and collaborative projects.

Social Studies

World History

Instructor - Hadley Sinclair Cluxton

Social Studies Requirement

Prerequisites: None

Not Offered in the 2020-2021 school year

World history is a massive subject! We will begin our survey around 1200 CE and work our way to the present, centering the histories of Africa, Asia and Latin America while also touching upon major European events. We will use a wide variety of primary and secondary sources in a CR/IR format. This means that for each lesson that requires reading, we will have a short, background common reading (CR) read by the entire class as well as a short individual reading (IR) read by each student. The short individual readings will be self-selected from a list of relevant topics from the history of science, fashion history, the history of art, food history and women's history, among other subjects. This adds richness to our discussions and also allows the student to explore and pursue personal interests within the field of history. This is a discussion-based seminar class with creative projects sprinkled throughout the year.

United States History

Instructor - Hadley Sinclair Cluxton

Social Studies Requirement

Prerequisites: None

Offered in the 2020-2021 School Year

The history of the United States is rich, deep, and fraught with complex issues. This year, we will be addressing the vital moments and inflection points of American history through several lenses, including those of the founding fathers, women, youth, Africans and African-Americans, Latinx, Indigenous, Asian-American, queer and differently-abled people. We will be using a variety of primary and secondary sources that help to shed light on the diversity of voices and experiences that have shaped our country's history.

Economics and Sustainability

Instructor - Hadley Sinclair Cluxton

Social Studies Requirement

Prerequisites: World History, U.S. History

Not Offered in the 2020-2021 school year

This year's class in Economics and Sustainability will be separated into three primary units, with Units 1 & 2 in the first semester and the entire second semester dedicated to Unit 3. In the Fall, the first unit will be on personal finance. We will look at topics ranging from basic banking to debt to paying for college, and our final project will be a realistic personal budget. The second unit will be a survey of major concepts in economic history, ranging from Adam Smith and Marxist economics to the Great Recession and feminist economics. In the Spring we will shift our focus to U.S. environmental history. We will begin with a look at America's environmental landscape before European contact, then work our way to the present, touching upon major issues of race, class and gender in U.S. environmental history.

Civics and Government

Instructor - Hadley Sinclair Cluxton

Social Studies Requirement

Prerequisites: World History, U.S. History

Offered in the 2020-2021 School Year.

Historians will reflect back on this year as an inflection point in U.S. history, and one of the major changes occurring this year includes the 2020 election. For Civics & Government, we will be using a full-color graphic adaptation of the U.S. Constitution as our foundational text. As we read through this vital document, we will be making relevant detours into topics such as the history and process of elections in the United States, major and minor political parties and their ideologies, what defines U.S. citizenship and why, our rights and our responsibilities as U.S. citizens, problematic trends within our judicial system, and civic engagement. Throughout the course we will be analyzing the tough issues that are rooted in the structural inequalities upon which our nation was built, and we will discuss ways in which we can make positive change.

Art, Music, & Creative Technologies

Explorations in Visual Art Techniques

Fee \$30

Instructor - Teri Adams

Fulfills Design Requirement

Prerequisites: None

Offered in the 2020-2021 School Year

In this Visual Design course students will develop an understanding for creating a successful work of art by studying the characteristics of Composition, Color, Elements, and Principles of Design. Students will be working with a variety of artistic tools, mediums and processes to create original works of art that express Ideas, Concepts, Themes and Events while referencing past and present artists and movements. Students will be able to recognize that each artistic problem can have multiple solutions. This notion will be practiced using Design Thinking Strategies. Once students have developed

their skills in the Foundations of Design, students will have the flexibility to work on their own series of works that are relative to their artistic goals and abilities.

Music Lab – Theory, Performance & Recording

Instructor - River Guerguerian

Fulfills Design Requirement

Prerequisites: None

Offered in the 2020-2021 School Year

Music, the organization of Sounds and Silences, is one of our greatest forms of communication. Music integrates listening to our internal and external environments. How do we access creativity in this busy world? Learn the fundamentals of music theory and technique to perform the music that you want to play. We will experience different types of music from around the world and their relation to the history of American music, and create our own songs.

The goal of this course is to heighten your musical craft, develop ear training, and introduce listening strategies to deepen your relationship with music. It is helpful to have some experience on an instrument or voice, but exceptions can be made. You are encouraged to bring your own instruments, but you will have access to a drum set, world percussion, keyboards, guitars, bass, ukuleles, and a sound system. We will play a variety of styles and encourage original compositions. Throughout the year you will have the opportunity to record your work and compositions in a recording studio setting.

Materials Fabrication

Class Fee: \$40

Instructor - Clay Hufford

Fulfills Design Requirement

Prerequisites: None

Offered in the 2020-2021 School Year

This class is a new offering for students. So with that in mind, we will start out using some simple tools (tape measures, clamps, squares and drills) and gradually work into more complicated tools (saws, routers and other noisy things).

This is a class designed to help students answer such questions as: Which saw do I use? Which screws do I need? What type of wood is this? Why is this breaking? We will work to better understand how the built world stays together as well as realize why it sometimes fails. We will do a combination of solo projects and group projects, as well as an occasional group critique of our work.

Introduction to Filmmaking

Instructor - Eruch Adams

Fulfills Design Requirement

Prerequisites: None

Preferred student equipment: Smartphone capable of video or other digital video camera.

Offered in the 2020-2021 School Year

In this class, students will learn from past masters by watching films that helped to define and shape the film industry, and students will learn about specific techniques in script writing, camera work, editing, sound design, and lighting, and begin to practice these techniques with hands-on assignments. We will explore what's possible with cell phone video filming and editing. Together we will explore what makes a compelling character as we create our own. Reflecting on our favorite movies and television stories, students will reflect on how to create interest, mood, and humor in the film medium with a special focus on application in short films.

Language

Spanish 1

Instructor - Annie Livingston

Fulfills Language Requirement

Prerequisites: None

Offered in the 2019-20 School Year

This course provides students with opportunities to develop basic Spanish listening, speaking, reading and writing skills. Students will learn to communicate about basic needs and ideas in the present tense. Students will study the culture and history of Spanish-speaking countries and will research and present about a Spanish-speaking country of their choice. This course is organized by six thematic units with corresponding vocabulary and grammar. Each unit culminates with a project to demonstrate proficiency. This course is highly-interactive: students are expected to engage with the material and interact with one another through structured conversation practice, games and projects.

Spanish 2

Instructor - Melissa Myers

Fulfills Language Requirement

Prerequisites: Spanish 1

Offered in the 2018-2019 School Year

This is a course designed to be a continuation of Spanish 1. Students will continue to hone their previously learned skills in using the present tense to talk about themselves and the world around them, and will also be introduced to the present progressive tense, commands and both the preterit and imperfect past tenses. Games, role plays and hands-on projects will be accompanied by reading and writing assignments in order to develop skills in all four areas of communication, speaking, listening, reading and writing.

Research and Design

Section Instructors - Gabe Johnson, Andrew Rabin, and Annie Livingston

Graduation Requirement

Odyssey High School holds within its mission that we are a small, hardworking community, in which students are inspired by life and are prepared to assume their authentic place within it. Conducting authentic research and creating self-driven projects helps students learn to channel and focus their interests, and helps build organization, executive functioning, and self-evaluation. Students take Research and Design every year of high school, and each year builds upon the skills developed in the previous class. The individual sections of this class are:

R&D 1: Research Writing - This class focuses on developing a strong foundation of researching and writing in an academic style, and begins to lay the groundwork for students to engage in writing on the college level. In this class, students choose a topic, conduct thorough research, and write an 8-10 page research essay exploring some aspects of their topic.

R&D 2: Prototype Design - In this class, students turn their focus towards the hands-on work of creating a prototype of a project, based on the research they conduct. Students learn to plan a large project, how to set a schedule and stick to it, how and when to go back to the drawing board for changes, and finally, how to present what they learned to an audience.

R&D 3: Intensive Research and Project Development - This is a year long class that begins with a more in-depth version of the Research Writing class. Students begin to hone their process, focus on finding reputable sources, cross-referencing, and using academic language. In the second semester, students use this deeper research to propose a prototype design that explores the material in a hands-on way or interactive way.

R&D 4: Capstone Research and Project Design - This class is really meant to bring students research, writing, and project implementation skills in-line with college-level work. Students fine-tune their research and writing skills, and employ their project development skills to produce exceptional work and, in many cases, create a portfolio or a personally defining project that impacts their community in a meaningful way.