

Kreiva Academy



Trimester Two
Program of Studies

Welcome!

In recent months, the resilience of the Kreiva community has shown in the face of one of the most challenging years for students, families, and educators alike. I have been so proud of our students who continue to meaningfully contribute and adapt in our new virtual and hybrid learning environments. Our teachers are continually seeking innovative and engaging ways to deliver instruction, build relationships with students, and reflect and build on what we are learning as we navigate what it means to teach during a pandemic. We are grateful to our Kreiva families for the support you continue to provide to your students and school community as we continue to make our way as a new, innovative charter school.

During the 2020 Summer, Kreiva teachers took part in intensive professional development focusing on what it means to be a Project-Based school. Our Upper and Lower school teams created multi-year learning maps with strategically aligned learning goals. We decided to change our “core” courses (math, science, humanities) to year long courses to more effectively align learning goals with course content and to insure student access to all learning targets during their lower and upper school experiences. Teachers came up with “Big Ideas” that link concepts across courses for each trimester. The “Big Ideas” are real world themes that are relevant to the everyday lives of students. When concepts are woven across and throughout different classes and linked back to a central idea, our processes for teaching and learning mirror how our brains work. When we are able to link learning across classes, the connections that are made lead to deeper learning and understanding.

In this Trimester’s Program of Studies, you will see the continued evolution of “Big Ideas” that started being developed during Trimester 1. Thank you for your continued support in our journey as an innovative and exemplary Project and Competency-Based Charter School.

Regards,
Jenn Siegfried
Director of Academics

Kreiva Lower School Trimester 2

Big Idea: Culture

How is this Big Idea Important?

The Big Idea for our Lower School project is to study and learn about culture. One of the ways that our Lower School students will deepen their educational experience is by learning about other cultures. This trimester we will delve into a myriad of myths in order to gain a better understanding of historical civilizations, their culture, and how those cultures affect our modern society. The following driving questions will guide our exploration through culture and myths: How were ancient myths used to teach moral lessons? What can we learn from ancient civilizations to guide our modern living? Why are myths, and the study of mythology important to our understanding of the human condition?

How do ancient myths, cultures and legends influence our modern society? Myths and legends shape our world and still appear as morals, lessons, and archetypes throughout music, movies, and pop culture. In this project, you will explore the ancient worlds and use these to create your own Oscar winning myth movie. Dive into the Epic of Gilgamesh and explore the hero's journey. Take on the role of a Greek god or goddess. Then use science to find the reality within the myth.

Questions we will be exploring:

- In what ways did ancient cultures have an enduring influence on modern society?
- Why are myths, and the study of mythology important to our understanding of the human condition? What meanings, or moral lessons do the myths have for us today?
- What can we learn from ancient civilizations to guide our modern living?
- What is a civilization and how do the elements of culture affect its development

Trimester 2 Lower School Core Course Descriptions (Students are enrolled in each of the core courses)

Course Name	Description	Learning Targets to be Covered
Science: Mythbusters!	Don't step on a crack or you will break your mother's back. An apple a day keeps the doctor away. Ever wonder where these silly rhymes come from or whether or not this is true. In this class, we will become real mythbusters and explore the solar system, the cosmos and every day myths using science. Our goal will be to find the truth within the myths. We will seek to understand the universe, the sun, moon and earth system and weather patterns using experiments to prove the difference between myths and	MWR.5, MWR.7, MSL.5, MSL.6, WSP.1, WSP.2, WSP.3, WSP.4, TE.1, TE.2, TE.3, TE.4, MES.3, MES.5, MES.6, SEP.1, SEP.2, SEP.3, SEP.4, SEP.5, SEP.6, SEP.7, SEP.8

	reality	
Humanities: Written in the Stars	Written in the Stars students will study myths and ancient cultures to gain better insight into history and where we come from. Students will use the following driving questions to guide their journey through the past: How do we define civilization? In what ways did ancient cultures have an enduring influence on modern society? How were ancient myths used to teach moral lessons? What can we learn from ancient civilizations to guide our modern living? The students' final project will be an Oscar Award winning movie that they create and star in!	MWH.1, MWH.2, MWH.3, MWH.4, MLA.3, MWR.7
Humanities: Intro to Mythology	Intro to Mythology will explore Greek & Roman Myths & Monsters! Through a variety of readings and visual media, we will explore atrocious acts, uncommon strength, the sacrifice of heroism, the nobleness of generosity, the trials of faith, and the power of love. We will also think about how these myths are relevant to us today and how they connect us to an understanding of the human condition. This study will result in creative presentations and artifacts!	MWH.1, MWH.2, MWH.3 MLA.3, MWR.5, MWR.7, MSL.3, MSL.4, MSL.5, MSL.6,
Foundations Math	<p>When we began to think about how to develop our math program at Kreiva Academy we started to think about our students' needs. We realized there were many students who had gaps in their math education. We decided that regardless of where each student was at as individuals, we wanted to give them a solid math foundation from this point going forward. So, Foundations was born. We have developed a Mathematics program that will continue to teach, and reteach specific Learning Targets over the course of three years. This will grant students the opportunity to join Kreiva and develop a strong mathematical foundation, no matter what level they are at upon entry. Combining the Agile Mind program with hands-on and technology based projects, students will develop their math skills and put them into practice with real world applications. Our Math program will ensure that our Lower School Students will all enter High School with the solid foundation that is necessary for them to be successful in the 21st century.</p> <p style="text-align: center;">Foundations I Trimester 2</p> <p>During Trimester 2, students will continue to develop their skills in completing computations with multi-digit numbers and common factors and multiples (MNFO.4). They will also be introduced to graphing locations on the Cartesian coordinate plane (MNFO.2)</p> <p style="text-align: center;">Foundations II Trimester 2</p> <p>Foundations II students will continue to develop completing computations with multi-digit numbers and common factors and multiples (MNFO.4). They will learn about ratios (MNFO.6) and learn to apply basic</p>	

	<p>strategies to manipulate rational numbers (PALG.2), solve one variable equations and inequalities (PALG.5) and begin learning statistics focusing on finding and interpreting probabilities of compound events (MST.3) and simple events (MST.2).</p> <p style="text-align: center;">Foundations III Trimester 2</p> <p>Foundations III students will develop their understanding of linear and nonlinear association (MST.4), and learn how to graph linear equations (PALG.6)</p>
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Lower School Enrichment Choices (Students select 1 enrichment course)

Course Name	Description	Learning Targets
Build Our Own Adventure ONLY OPEN TO COHORTS 1 AND 2)	Expanding on the themes of teamwork, collaboration and creating community, this enrichment will focus on building relationships. This will be done primarily through role playing games, such as choose your own adventure books and mystery solving games. The first half of the trimester will be focused on building relationships/community and the second half will focus on role playing games, like Dungeons and Dragons, Werewolf, and creating your own choose your own adventure book.	WSP 2, WSP 3, WSP 4, MWR.3, MWR.5, TE.4
Body Shop (OPEN TO ALL COHORTS)	In Body Shop, you will create a custom fitness program that is tailored to your current interests, abilities and fitness levels. In this class you will: Meet weekly with the instructor, map out your independent activities, and participate in group exercise classes. +During the week you will also tackle your fitness goals and log in your results! This class will help you to achieve physical wellness by engaging in activities that promote a healthy lifestyle in a safe and effective way.	HE.2, PE.1, PE.3, PE.6
Intro to Music Production (ONLY OPEN TO COHORTS 1 AND 2)	Whether you are a seasoned musician or just passionate about music in general, the Introduction to Music Production course will guide you through the concepts important in building a strong foundation in music production. You don't have to have a background in music theory or specialized equipment to take this course. Your laptop and a pair of headphones is all you need to learn the concepts of drum programming, creating melodies, developing amazing sounds with synthesizers, learning to use vocals in	TE.1, ART.2, ART.4

	production and going from initial ideas to completed songs in whatever style you prefer. Importantly, the platform used for production also allows you to collaborate with your classmates in real time, whether side-by-side or remotely. The key to music production is creativity, so if you've got that you're ready to go.	
Become a graphic novelist! (OPEN TO ALL COHORTS)	Students will be the authors of their own graphic novels! They will write out and develop a character and environment and with their creativity craft a graphic novel to share their imaginative creations with the world. We will also be reading <i>Persepolis</i> and working to understand another culture by reading that graphic novel. As we read, seeing how geography, society, and economics impact the surroundings of a young girl as she lives through the Iranian Revolution.	MGEG.2, MGEG. 4, MECO. 4, MLA. 4
Design Your Own Enrichment	Is there a hobby or interest area you would like to study for 12 weeks? If so, create a plan of what you would like to study and map out 15-20 hours of self-study. You will need to also submit a proposal for how you will demonstrate what you have learned during the study. If you are interested in this option, a proposal will need to be submitted to Mrs. Siegfried by December 4th.	TBD
Opt Out	You may choose not to participate in enrichment during Trimester 2 if your parent signs a permission form. If you choose not to participate in an enrichment, an opt-out form will be emailed to you and your parent and will need to be returned by Monday, November 30.	

Kreiva Upper School Trimester 2

Big Idea: Alternate Realities and Diversity

How is this Big Idea Important?

We as humans have always wondered “What If?”, and this has been a core of who we are and our thoughts. What if Lincoln survived his assassination? What if Einstein had not developed quantum physics? What if Mary Shelly had never written Frankenstein? What if Pythagorus had not built his theory? An entire Marvel Comics line was entitled *What If?* and became massively popular, just like DC Comics’ *Elseworlds*. The literary work of Harry Turtledove and Suzanne Collins; video games like *Wolfenstein*, *BioShock* or *Assassin’s Creed*; and movies like *District 9*, *Inglorious Bastards*, and *Red Dawn*.

All alternate realities, affected by people.

Our theme for this trimester is **Alternative Realities** and **Diversity**; the diversity of individuals, societies, communities and environments that creates our perception of reality. At the core of that we will examine how our personal diversity leads to choices and decisions that create these “parallel earths”. Do we prevent or exacerbate climate change? Do we foment political change or political unrest? Do our writings and literary works inspire art or tear down establishment? Do our mathematical theorems create easy solutions or complex problems? We will use our understanding about how our choices influence the world to develop a 10-year improvement plan for Manchester to present to the mayor.

Trimester 2 Upper School Core Course Descriptions (Students are enrolled in each of the core courses)

Course Name	Description	Learning Targets
Science: Alternate Ecosystems	We will seek to answer the “What ifs” of the natural world. What if the world we live in looked completely different? What if we didn’t evolve from apes? This course will explore how our everyday day choices push us towards an environmental utopia or dystopia. We seek to understand how ecosystems and biodiversity are dependent on choices we make. We will explore how choices can lead to evolution and adaptations and discuss alternate options to evolution. We will discuss how the environmental choices made every day can change our world.	ES.6, ES.7, LS.4, LS.5, LS.7, LS.8, SEP.1, SEP.2, SEP.3, SEP.4, SEP.5, SEP.6, SEP.7, SEP.8, TE.1, TE.2, TE.3, TE.4, WSP.1, WSP.2, WSP.3, WSP.4, WR.5, WR.7, SL.3, SL.6, GEG.1, GEG.3
Humanities: Humans and Society	This course will examine the role that individuals play in the development of rural, suburban, and urban communities. Topics include individualism and society, the changing nature of community, social inequality, political power, technological change,	RE.1, RE.2, RE. 4, RE. 7 WR.1, WR.2, WR.4, WR.8, LA.3, LA.5 CIV 1. CIV 5

	<p>and the relationship between the built environment and human behavior. Analysis of these topics will lead students to make claims about how they wish to see their communities develop, and what they would like their local and state government to do in order to strengthen their communities. This course will bring together techniques from the fields of history and language arts, with our main texts chosen from among "House On Mango Street" by Sandra Cisneros, "Mexican Whiteboy" by Matt de la Peña, "Oranges Are Not the Only Fruit" by Jeannette Winterson, and "Born a Crime" by Trevor Noah. Each of these texts will allow us to explore individual perspectives and unique feelings of alienation from their communities.</p>	
<p>Humanities: <i>Apocalypse to Anarchy</i></p>	<p>Humanity is a funny term - as is society. They are often thought to be synonymous with each other, but very rarely act in the best interest of the latter. We as individuals like to think that we can work collectively to better our society, yet often through our own actions manage to tear it apart.</p> <p>In <i>Apocalypse to Anarchy</i>, we will be examining how through dystopian writing and alternate realities in video games and comics often reflect the fears and worries of humankind. By examining government, regulation, economics, civics, and literature, we will understand and discuss how society and humanity can eb and flow.</p>	<p>RE. 4, 6, 7; WR. 2, 4, 6; SL. 2, 4; LA. 2, 4-6; CIV. 1, 2, 5-8; GEG. 1, 3, 4; WH. 1-4; WSP. 1-4; ART. 1-4</p>
<p>Math 1</p>	<p>During this trimester, we will be looking into the ideas of linear functions and equations, how to solve for systems involving them, and how to graph them. To do this, we are going to use howthemarketworks.com. This website gives the students each \$100,000. With this, we will play around in the stock market, record our data, and construct a linear equation based on the money made throughout the project.</p>	<p>TBD</p>
<p>Math 2</p>	<p>During this trimester, we will be looking into quadratic equations. How to construct them, factorization, and find the maximums and minimums of the parabolas. To do this, we will look into how businesses choose pricing for items based on the profit and public interest to buy them.</p>	<p>ALG.5, ALG.6, ALG.7</p>

Math 3	We will be taking a look at the world of statistics. During this trimester, we will be discussing probability and how something as simple as a coin flip or a dice roll can create multiple different outcomes and different realities. We will watch a video that demonstrates this concept and then create our own alternate universes based on probable outcomes.	ST. 1, ST. 2, ST.3
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Upper School Enrichment Choices (Students select 1 enrichment course)

Course Name/Open to?	Description	Learning Targets
Intro to Music Production (Only Open to US Cohort 1)	Whether you are a seasoned musician or just passionate about music in general, the Introduction to Music Production course will guide you through the concepts important in building a strong foundation in music production. You don't have to have a background in music theory or specialized equipment to take this course. Your laptop and a pair of headphones is all you need to learn the concepts of drum programming, creating melodies, developing amazing sounds with synthesizers, learning to use vocals in production and going from initial ideas to completed songs in whatever style you prefer. Importantly, the platform used for production also allows you to collaborate with your classmates in real time, whether side-by-side or remotely. The key to music production is creativity, so if you've got that you're ready to go.	ART.2
PSAT/SAT Prep: Tips and tricks! (Required for all 11th grade students, other US interested students are welcome to take this class)	PSAT & SAT prep class will help students get a head start on the test preparation process. Students will take practice tests through Khan Academy so they're completely comfortable with the test and fully prepared to take the PSAT & SAT during their sophomore or junior year.	WSP.2
Chinese Language and Culture (Open to all US)	你们好! In this enrichment, we will explore the language and culture of one of the most populated and influential powers in the world: China. We will start learning the basics of Mandarin, practice some calligraphy, develop ourselves like Tang dynasty poets, explore ancient Chinese religion and philosophy like Daoism,	WH.5

	Confucianism, and Buddhism, play Mahjong and drink tea. We might also explore the circumstances of modern China: what does daily life in China look like today? 有兴趣吗? 哪, 你应该上我的课!	
Operation Roleplay (Open to all US)	What is a roleplaying game? A roleplaying game is a tabletop simulation where you create a character and adventure through various worlds and scenarios, and build and develop a collaborative story with your fellow players. In Operation: Roleplay!, we will jump into the game of Dungeons & Dragons, the greatest roleplaying game of all time. Whether it is protecting an dwarven mountain outpost from gnolls or unlocking an ancient vault of giant lore, the possibilities are endless.	WSP.1 WR.3 LA.1 LA.2 LA.6 GEG.1 ES.7 ART.1 ART.2 ART.3 ART.4
Lights, Camera, Action!: The 1960s Portrayed By Hollywood (Open to all US)	In this course, students will explore contemporary films as historical evidence for both the time period being depicted as well as the period in which the film is created. We will think about: is film reliable as historical evidence? What determines the reliability of films as historical evidence? What does this film say about the society and culture in which the film was created? Can this film be used to learn about history? The course will expose students to different cultures and conflicts in the history of our country, and will help students to become more sophisticated and informed consumers of visual media and the film experience of popular culture. Students will learn a new appreciation of the art of film and will understand better how the right skills and knowledge can help to create a just and healthy community. Films that will be analyzed include, "Selma," "The Trial of the Chicago 7," and "Hidden Figures."	WR.1, WR.2, WR 4. WR.8, SL.1-SL.4, LA.3, LA.7
Kreiva Capstone Project (Required for 12th grade students, open to other interested students)	Capstone is a two-trimester senior project course that provides an opportunity for students to solve real-world problems, create artistic pieces, pursue in-depth research, plan events, or develop whatever projects they are most interested in. Capstone is a chance to focus on one project over multiple trimesters framed around a central question of personal interest. Students will complete a project proposal, locate a project mentor, interview a professional, design a project, build a portfolio, and eventually present to a panel before graduation. The Capstone enrichment is for students who are expecting to graduate in June of 2021 and is also open to other students who are interested in getting a head start on their graduation project.	
Design Your Own	Is there a hobby or interest area you would like to study for 12	TBD

Enrichment	weeks? If so, create a plan of what you would like to study and map out 15-20 hours of self-study. You will need to also submit a proposal for how you will demonstrate what you have learned during the study. If you are interested in this option, a proposal will need to be submitted to Mrs. Siegfried by December 4th.	
Opt Out	You may choose not to participate in enrichment during Trimester 2 if your parent signs a permission form. If you choose not to participate in an enrichment, an opt-out form will be emailed to you and your parent and will need to be returned by Monday, November 30.	