

EXPLORE ACADEMY

Livonia

COURSE CATALOG
2022-2023 School Year



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EXPLORE ACADEMY

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CURRICULAR OVERVIEW

EXPLORE ACADEMY



WELCOME

This is Explore Academy’s course catalog for the 2022-2023 school year. Explore Academy has reinvented the learning process through an elective-based, student-centered model to provide students choice in how they will master the required content and invest in their own learning. This catalog details the academic model and how it works and course descriptions for all seminars offered this year!

THE SEMINAR SYSTEM

Explore Academy does not follow the traditional school system of semester-long / year-long courses. In most grade levels, the school’s academic year is split into smaller learning modules, called seminars, which vary in length depending on grade.

Explore Level	Grade Level	Approximate Seminar Length
Middle		
100 - 200	6 - 8	Quarter - 44 days
High		
300 - 1000	9-12	Term - 22 days

Students in grades 6-12 are required to take at least five seminars per day with a seven-period schedule, leaving them with two available “flex” periods during which they will eat their lunch and receive academic support if needed. For students in 6-8 grade, flex periods are required for academic support workshops; for students in 9th grade or higher, flex periods are structured depending on the need for academic support.

Explore Academy seminars are built in a way not offered anywhere else. Each seminar focuses on a specific set of standards, allowing students to focus their studies across a shorter time period. Throughout the seminar (44-day quarter), students will work toward mastering the standards within each seminar, demonstrating their mastery on the exit exam that covers the seminar’s standards.

GRADUATION REQUIREMENTS

The school's graduation requirements are shown in the table below. Individual credits are earned for each seminar. One dual enrollment semester credit (DACC or NMSU) is required of all students.

SUBJECT AREA	
ENGLISH	24
MATHEMATICS	24
SCIENCE	24
SOCIAL STUDIES	24
FINE ARTS	8
PHYS ED / HEALTH	8
FOREIGN LANG.	12
ADD'L MAJORS / MISC	20
MAJOR CAPSTONE*	2
TOTAL	144
(CREDIT BUFFER)	(16)
DUAL ENROLLMENT	1 sem.

*For Major Capstone, the two required credits are included in the majors credits, so they are included in the total credit calculation.

THE SEMINAR

The Explore Academy seminar operates differently from a traditional class in that each class focuses specifically on a theme. Aligned with the school's goal of promoting students as active learners, the seminar represents a student-driven approach to learning as students are expected to drive the flow of the class. The seminar structure translates to work outside of class as well, as the expectation is that students come to class prepared each day.

ELECTIVE-BASED LEARNING

Explore Academy's core philosophy centers on student choice in learning, and because students are allowed to choose *how they learn and how they will ultimately fulfill their academic requirements*, every course at Explore Academy can be considered an elective in nature. As

students move through the curriculum, they are provided more and more freedom to choose *how* they fulfill their requirements.

SKILL-BASED APPROACH

Explore Academy utilizes an approach which focuses on student choice in content as they develop 21st century skills for success in college. English, math, and science focus on four skills which guide students as they move through the curriculum. Social studies focuses on content groups with increasingly complex skills at each level. While students must master the content in each seminar, they must also show mastery in the skill(s) specific to that seminar. Students may move through each skill *independently* from every other skill (explained further below).

The sixteen skills across the four content areas are shown below:

ENGLISH	MATHEMATICS	SCIENCE	SOCIAL STUDIES
- Argument - Research/Communication - Literature - Language	- Equations - Functions - Shapes - Statistics	- Argument - Analytics - Investigation - Modeling	- World History, Government, and Economics - US History, Government, and Economics - NM History

COURSE STRUCTURE

As shown in each student's credit analysis, skills are shown as columns (with some variation in social studies levels 100-300). This is shown in a simplified form below. Aside from the vertical alignment of the skill, the tiers at each level represent an increasing level of understanding (level of difficulty), while tracks follow a skill through increasing levels of development.

Tier	500-level	500-level
Tier	400-level	400-level
Tier	300-level	300-level
	Skill 1	Skill 2

CHOICES

As students move up to each tier, they are afforded more choice in how they complete their requirements. In middle school, students are given the choice between two distinct flavors for each

of their seminars. Beginning in 9th grade at the 300-level, the model expands greatly as students begin choosing between three or more flavors of each seminar based on their interests.

COURSE CODES

Choices for a given requirement are designated by course number. ***The first two digits identify the requirement; the third digit identifies the flavor.***

Example: for the SCI 410 credit, students may take SCI 411, SCI 412, or SCI 413.

All three classes earn the same (SCI 410) credit.

PLACEMENTS

Transfer students at several grade levels will be required to take a placement test to ensure they are placed at the correct Explore level for their current proficiency level.

Grade level of transfer student	Placement test(s) required	Optional placement test(s)
6-8	none	math, language arts

The school does its best to offer optional placement exams when parents or students are concerned about their placement in math or language arts seminars. This can be both for concerns about needing to be placed back to fill learning gaps or placed forward into more challenging seminars. For example, a 6th grader may take a placement test to qualify to bypass ENG 110 in order to start in ENG 210. They would thus take a placement exam which would assess their mastery of the ENG 110 content. Similarly, a 7th grader may request a placement test for math because they had struggled throughout grade 6 and are not sure if they know the standards that correspond with the 6th grade, MTH 100 seminars at Explore Academy. In both instances, the placement test will allow the school to ensure that the student is in the right seminar for their proficiency level.

CREDIT ANALYSIS

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Upon reaching grade 9 (or enrollment thereafter), each student will be provided with an individual credit analysis to show them where they are in meeting their graduation requirements. The spreadsheet will display credits earned including transfer credits applied to Explore Academy's system. The credit analysis will be updated monthly and will be shared with students and parents to view online at any time.

Students should always refer to their credit analysis before scheduling classes or making changes to their current schedule of classes. It is strongly recommended that students follow their credit analysis closely.

An example of the credit analysis is shown below. The four skills for each content area are outlined below each track (see previous sections).

SOCIAL STUDIES				ENGLISH				SCIENCE				MATHEMATICS			
SOC ST 700-LEVEL [MAJORS]				ENG 600-LEVEL [MAJORS]				SCI 600-LEVEL [MAJORS]				MTH 1000-LEVEL [MAJORS]			
SOC ST 600	SOC ST 610	SOC ST 620	SOC ST 630	ENG 500	ENG 510	ENG 520	ENG 530	SCI 500	SCI 510	SCI 520	SCI 530	MTH 900		MTH 920	
SOC ST 500	SOC ST 510	SOC ST 520	SOC ST 530									MTH 800	MTH 810	MTH 820	
SOC ST 400	SOC ST 410	SOC ST 420	SOC ST 430	ENG 400	ENG 410	ENG 420	ENG 430	SCI 400	SCI 410	SCI 420	SCI 430	MTH 700	MTH 710	MTH 720	
SOC ST 300	SOC ST 310	SOC ST 320	SOC ST 330	ENG 300	ENG 310	ENG 320	ENG 330	SCI 300	SCI 310	SCI 320	SCI 330	MTH 600	MTH 610	MTH 620	MTH 630
WORLD HISTORY		US HISTORY		ARGUE/LOGIC	LITERATURE	COMMUNICATION	LANGUAGE	ARGUMENT	ANALYTICS	INVESTIGATION	MODELING	MTH 500		MTH 520	MTH 530
												MTH 400	MTH 410	MTH 420	MTH 430
												MTH 300	MTH 310	MTH 320	
												FUNCTIONS	EQUATIONS	GEOMETRY	STATISTICS

FINE ARTS				FOREIGN LANGUAGE				PHYSICAL EDUCATION			
FINE ARTS	FINE ARTS	FINE ARTS	FINE ARTS	FOR LANG	FOR LANG	FOR LANG	FOR LANG	PHYS ED	PHYS ED	PHYS ED	PHYS ED
FINE ARTS	FINE ARTS	FINE ARTS	FINE ARTS	FOR LANG	FOR LANG	FOR LANG	FOR LANG	PHYS ED	PHYS ED	HEALTH 1	HEALTH 2
FINE ARTS	FINE ARTS	FINE ARTS	FINE ARTS	FOR LANG	FOR LANG	FOR LANG	FOR LANG				

MAJORS				MAJORS / ELECTIVES			
MAJORS	MAJORS	MAJORS	MAJORS	MAJORS	MAJORS	MAJORS	MAJORS
MAJORS	MAJORS	MAJORS	MAJORS	MAJORS	MAJORS	MAJORS	MAJORS
MAJORS	MAJORS	MAJORS	MAJORS	MAJORS	MAJORS	MAJORS	MAJORS

GRADUATION PROGRESS		STUDENT SEMINAR SCHEDULE								NOTES
TOTAL CREDITS EARNED	0	TERM 1	TERM 2	TERM 3	TERM 4	TERM 5	TERM 6	TERM 7	TERM 8	
TOTAL CREDITS REMAINING	220	ENG 301	ENG 301	ENG 301	FLEX	ENG 301	ENG 301	ENG 301	ENG 301	
CURRENT STANDING	9th Grade	FLEX	FLEX	SOC 514	FLEX	FLEX	FLEX	FLEX	FLEX	
CURRENT GPA (CUMULATIVE)		SOC 514	SOC 514	SOC 514	SOC 514	SOC 514	SOC 514	SOC 514	SOC 514	
CURRENT GPA (CORE)		FLEX	FLEX	MTH	ENG 512	FLEX	FLEX	FLEX	FLEX	
CLASS RANK		SCI 432	SCI 432	SCI 432	SCI 432	SCI 432	SCI 432	SCI 432	SCI 432	
DUAL ENROLLMENT		PE 311	PE 311	FLEX	PE 311	PE 311	PE 311	PE 311	PE 311	
SENIOR THESIS		SPA 301	SPA 301	FLEX	SPA 301	SPA 301	SPA 301	SPA 301	SPA 301	

THE MAJOR

High school students are required to complete a specific amount of majors credits within each content area. After that requirement is met, they are required to continue study in an area(s) of their choosing to further explore specific career pathways as they begin focusing their interests as they transition to college.

As students enter their senior year, or perhaps before, they will need to declare a major. The major will consist of at least ten (10) seminars from one particular major area. Students may graduate with double and triple majors depending on the focus areas they chose to explore. Students also have the option to create a hybrid major with teacher approval, combining seminars from two complementary majors (Animal Science and Medicine for a Veterinary Medicine major, for example).

LEARNING CATEGORIES

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Another feature of this catalog is the category system used to give even more insight into how each seminar will be taught. At the end of each description, there is at least one category in parenthesis. These categories show more specific information about each seminar so that expectations are clear for students prior to enrolling. The categories used for specific seminars within this course catalog are:

- Cooperative group-based
- Inquiry-based
- Lab-based
- Analytical focus
- Writing-intensive
- Reading-intensive
- Technology-intensive
- Problem-based learning
- Project-based learning
- Mature content
- Self-paced
- Math-intensive
- Hands-on learning

IMPORTANT NOTE: classes within the mature content category will cover topics and expose students to various forms of media (video clips, movies (R-rated), literature, photography, etc.) which are mature in content. **Students and parents should be aware of this in choosing specific seminars.**

SCHEDULING OVERVIEW

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Explore Academy operates on a schedule similar to most universities where students are provided the freedom to choose when to schedule their classes and free time.

Students will build their schedules based on their interests and will be grouped with other students who share common interests. As such, as students began 8th grade, Explore Academy does not group students by age. Within the recommended sequence of courses (see above), Explore Academy students are free to choose their classes, lunch, and flex periods for each term.

As students begin creating their schedules, they will develop priorities in the seminars they prefer and will have to resolve their own conflicts in choosing specific seminars over others.

IMPORTANT NOTE: While it's conventional that students take one class within a given topic area per term (one math, one English, one science, etc.), students should feel free, based on the versions of the classes that are offered and how their schedule arranges itself, to take multiple classes from the same content area in the same term (example: taking two science classes at once).

CLASS LIMITS

Seminars are generally capped at eighteen (18) students. For grades 6-8, the classes are filled by administration based on student choices, providing balanced classes while giving students as many of their first choices for flavor as possible. The worksheets in this catalog help students pick out their favorite seminar flavors so they can be best prepared when the scheduling forms open and they get to input their selections!

FLEX PERIODS

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OVERVIEW

Lunch services will be provided during periods 4 and 5, so all students will be scheduled into a flex period during one of these times.

IMPORTANT NOTE: students may only enroll in one lunch flex period per term.

The first priority for flex periods is to allow time for students to prepare for their classes. Students are expected to arrive for each class prepared for the lesson at hand, and it is for this purpose that the flex periods should be used. Explore Academy has various tutors, both student and staff, available each period to assist students with their work and provide academic guidance as needed. All students begin with the expectation that they will study during their flex time.

STRUCTURE

Flex for grades 6-8 serves two purposes- dedicated study time and enrichment time. Students will be assigned to a flex room where they can study, see their peers, work collaboratively, participate in activities, attend workshops, etc. Students who are struggling in classes or who have failed seminars the quarter before will be assigned to a tutor for more individualized support.

Throughout the year, workshops will be offered to provide students assistance in developing skills necessary for success as they leave Explore Academy. Workshop topics vary from academic to those which cover general life skills, including organizational skills, assistance with technology (apps, cloud-based computing), study skills, ACT/SAT prep, resume building, job interview preparation, personal finance management, cooking 101, basic car maintenance, college/financial aid application assistance, etc.

SCHEDULING 101



EXPLORE ACADEMY

OVERVIEW

Middle school scheduling at Explore Academy teaches students about making effective choices about their education. Students will choose one elective per quarter, thus they will each take four electives every school year.

SCHEDULING STEPS

STEP 1: Get familiar with this **course catalog!** It has all your seminar choices for the year. You will receive a registration form via email with your options for each term.

- You will select your **top choices for core and elective seminars**

STEP 2: Pick your CORE CONTENT classes

- **Each quarter**, you will have a choice between two flavors in English, math, science, and social studies.
 - Grade 6 - 100-level seminars, Tier 1 in the curriculum maps
 - Grade 7-8 - 200-level seminars, Tier 2 in the curriculum maps

STEP 3: Pick your ELECTIVE classes

- You can choose from general middle school electives which may be offered in PE, art, music, and foreign languages. These are called Tier 2 in the curriculum maps
- You can also choose from middle school content area electives, called Mini Majors, which offer students a look ahead at high school majors. These have their own section at the start of the Electives section
- All middle school electives are 200-level

TIP: You will be asked to rank how important your choices are. Pick carefully! You may not always get your first choice.

STEP 4: Wait for your new schedule to be announced

- Administration will develop your schedule for the year, working hard to give you as many of your picks as possible

HELPFUL FACTS

- You will have five classes per day and two flex periods. One flex is your lunch and the other flex is your study group
- Lunch flexes are always period 4 or 5
- Your classes and flexes will change every quarter (every 44 days)
- Middle school electives are for all grades 6-8

DRAFT WORKSHEET

EXPLORE ACADEMY



DRAFT 1

	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
Per. 1				
Per. 2				
Per. 3				
Per. 4				
Per. 5				
Per. 6				
Per. 7				

DRAFT 2

	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
Per. 1				
Per. 2				
Per. 3				
Per. 4				
Per. 5				
Per. 6				
Per. 7				

CORE CONTENT AREAS

Curriculum Maps
Course Descriptions



MATHEMATICS



CURRICULUM MAP

FUNCTIONS II	EQUATIONS II	SHAPES II	STATISTICS II
MTH 200	MTH 210	MTH 220	MTH 230

FUNCTIONS IA	FUNCTIONS IB	EQUATIONS I	SHAPES AND STATISTICS I
MTH 100	MTH 110	MTH 120	MTH 130

FUNCTIONS	EQUATIONS	SHAPES	STATISTICS
SKILLS			

SEMINAR	COURSE	SEMINAR VERSIONS/FLAVORS
Functions IA	MTH 100	MTH 101 - Recipe Test Lab
Functions IB	MTH 110	MTH 111 - Great Works of Math
Equations I	MTH 120	MTH 121 - Algebra Cafe Food Or Beverage?
Shapes/Statistics I	MTH 130	MTH 131 - Score! Team Or Individual?
Functions II	MTH 200	MTH 201 - Math Modeling
Equations II	MTH 210	MTH 211 - Equations for Sale
Shapes II	MTH 220	MTH 221 - The Art Of Geometry: Which Pieces Will You Choose?
Statistics II	MTH 230	MTH 231 - What Are The Odds? Which Game Will You Create?

MATHEMATICS



COURSE DESCRIPTIONS

MTH 101 - RECIPE TEST LAB - EDIBLE OR NON-EDIBLE

Do you ever wonder why recipes work the way they do, or what happens when too much of an ingredient is added? In this flavor, students will use ratios, fractions, and decimals while exploring a variety of both food and non-food recipes. Students will create their own original recipes and determine the math behind a classmate's creation. (PBL, HAND)

MTH 111 - GREAT WORKS OF MATH - SCULPT OR PAINT

Can math be a work of art? In this flavor, students will learn about percents, integers, and expressions by turning them into art. Students will have a chance to explore different mediums such as drawing, coloring, painting, and thread work while learning these topics. Students will then get to complete a final project using a medium of their choice. (PROJ, HAND)

MTH 121 - ALGEBRA CAFE FOOD OR BEVERAGE?

Running a cafe takes more than delicious food and drink options! In this flavor, students will learn how algebraic expressions and equations are used to run a business. They will even get to create a plan for their own original cafe and show off their math skills as they create a signature drink or baked good. (ANA, WRIT)

MTH 131 - SCORE! TEAM OR INDIVIDUAL?

What do field goals have to do with math? Students will play games such as paper football and trash basketball in order to learn geometry and statistics in this game based flavor. Students will develop their own game to further study one of these topics. Will they choose a team game or an individual? (PBL, PROJ)

MTH 201 - MATH MODELING - 2D OR 3D

How do you "make" math? In this flavor, students will examine integers, exponents, and expressions as they complete unique construction projects. Students will ultimately choose how to explain one of the concepts they learned during the term with an original construction project. (HAND, PBL)

MTH 211 - EQUATIONS FOR SALE - FOOD OR DRINK

Did you know that algebra is involved in sales? In this flavor, students will use algebra, ratios, and percentages to calculate costs and sales projections for different products. Students will get a chance to create their own products and choose how to sell them to their classmates. Students will figure out how to maximize their profit and market their items. (PBL, COOP)

MTH 221 - THE ART OF GEOMETRY: WHICH PIECES WILL YOU CHOOSE?

Let's bring geometry to life through art! In this flavor, students will learn to see art as a series of shapes and angles, while they learn the math behind it. Students will complete a series of projects and at the end of the quarter select their favorite pieces to put on display! (PROJ, HAND)

MTH 231 - WHAT ARE THE ODDS? WHICH GAME WILL YOU CREATE?

This game based flavor explores the topic of probability through various games and real-world examples. Students will also spend the quarter developing their own carnival game and put on a probability carnival for the school. (SELF, COOP)

ENGLISH

CURRICULUM MAP



ARGUE/LOGIC II	LITERATURE II	RES/COMM II	LANGUAGE II
ENG 200	ENG 210	ENG 220	ENG 230

ARGUE/LOGIC I	LITERATURE I	RES/COMM I	LANGUAGE I
ENG 100	ENG 110	ENG 120	ENG 130

ARGUE/LOGIC	LITERATURE	RESEARCH/COMM	LANGUAGE
SKILLS			

SEMINAR	COURSE	SEMINAR VERSIONS/FLAVORS
Argument I	ENG 100	ENG 101 - Feed Your Face
Literature I	ENG 110	ENG 111 - You Got Me Messed Up!
Research / Comm I	ENG 120	ENG 121 - Dystopian Nightmare Or Utopian Paradise?
Language I	ENG 130	ENG 131 - Schoolhouse Rocks Grammar!
Argument II	ENG 200	ENG 201 - I, Robot
Literature II	ENG 210	ENG 211 - Surviving Middle School: I Got This!
Research / Comm II	ENG 220	ENG 221 - Survivor Island
Language II	ENG 230	ENG 231 - Tiktok Grammar



COURSE DESCRIPTIONS

ENG 101 - FEED YOUR FACE

Everyone loves to eat, everyone's at least gotta eat, and talking about food is something many people of all ages enjoy. Our preferences are important, but so are other aspects of what we consume--nutrition, culture, ethical production, etc. This is a topic where everyone can bring something to the literal and figurative table. Students will write argumentative papers on the topic of their choice. (ANA, INQ)

ENG 111 - YOU GOT ME MESSED UP! - THE USUAL SUSPECTS OR RESTART

What happens when you get accused of something you did not do or a prank gets out of hand? Find out through exploring the novels *Restart* by Gordon Korman or *The Usual Suspects* by Maurice Broadus. The reading will focus on learning the elements of fiction and gaining a personal writing voice. Students will produce written narratives of real or imagined events using their authentic voice. (READ, WRIT)

ENG 121 - DYSTOPIAN NIGHTMARE OR UTOPIAN PARADISE?

What makes a society wonderful? What makes it a nightmare? In this seminar, students will have the chance to explore and research various topics relating to what makes society great--or horrible. Students will learn the characteristics of utopias and dystopias and carry out research projects on fictional and real worlds/places and identify what characteristics the places contain. In their final flavor research project, students will invent their own utopia or dystopia. (INQ, WRIT)

ENG 131 - SCHOOLHOUSE ROCKS GRAMMAR! - VIDEOGRAPHY OR SONGWRITING

Ever get a song stuck in your head or sing along to your favorite video? What if you could use songs and videos to memorize how to use pronouns or parts of speech? Through the creation of videos and song lyrics, students will learn the rules of grammar and create lasting memories in the process. (COOP, PRO)

ENG 201 - I, ROBOT

In our modern world/society technology is everywhere. Students may start to consider questions like how much is too much technology? Is AI really as good as people make it out to be? This seminar will give students an opportunity to explore questions about technology and create claims based on their findings. (ANA, INQ)

ENG 211 - SURVIVING MIDDLE SCHOOL: I GOT THIS! - A ROYAL GUIDE TO MONSTER SLAYING OR CINDER

Want to make middle school the best time ever? By discovering what you like, how to study, and who you are, you are the key to making learning fun. Explore the novel *A Royal Guide to Monster Slaying* by Kelley Armstrong or *Cinder* by Maurice Broaddus to learn how these characters solve their problems. Learning style inventories, personality tests, and games will help us learn who we really are. Students will tell their own stories through personal narratives of real or imagined events. (READ, WRIT)

ENG 221 - SURVIVOR ISLAND

Would you be able to survive if disaster struck? Students in this seminar will learn the foundations of research skills as they delve into the art of survival. Learn what it takes to endure a natural disaster, an extreme climate, or even the apocalypse! (INQ, WRIT)

ENG 231 - TIKTOK GRAMMAR - VIDEOGRAPHY OR SONGWRITING

Rn (right now) you're probably sus (suspicious) about a teacher saying grammar can be fun. But . . . what if you could use songs and videos to memorize the parts of speech or how to correctly use pronouns? Through the creation of videos and song lyrics, students will learn the rules of grammar. No cap. (COOP, PRO)

SCIENCE

CURRICULUM MAP



ARGUMENT II	ANALYTICS II	INVESTIGATION II	MODELING II
SCI 200	SCI 210	SCI 220	SCI 230

ARGUMENT I	ANALYTICS I	INVESTIGATION I	MODELING I
SCI 100	SCI 110	SCI 120	SCI 130

ARGUMENT	ANALYTICS	INVESTIGATION	MODELING
SKILLS			

SEMINAR	COURSE	SEMINAR VERSIONS/FLAVORS
---------	--------	--------------------------

Argument I	SCI 100	SCI 101 - I Feel The Earth Move
Analytics I	SCI 110	SCI 111 - Take Cover!
Investigations I	SCI 120	SCI 121 - Let's Make Cocoa! Warm Or Cold
Modeling I	SCI 130	SCI 131 - Project Survival: Humid Or Dry

Argument II	SCI 200	SCI 201 - Wait! I Needed That!
Analytics II	SCI 210	SCI 211 - The Sound of Science
Investigations II	SCI 220	SCI 221 - Kitchen Chemistry: Taste Or Watch
Modeling II	SCI 230	SCI 231 - Creating Monsters



SCI 101 - I FEEL THE EARTH MOVE - NATURAL DISASTERS OR PLATE TECTONICS

Have you ever wondered how the continents were formed? Students will be introduced to and analyze the effects of plate tectonics. By navigating the ancient continent of Pangaea students will see how the earth has changed. The relationship between earthquakes, volcanoes, and plate boundaries will really shake you up. (INQ, COOP)

SCI 111 - TAKE COVER! - LAND OR WATER

Do you know how to best protect against tornados and hurricanes? In the STEM based class, we will learn about the science behind wild weather and how to protect ourselves from it. Students will get to select the wild weather of their choice and construct a shelter to withstand it. Will your shelter fall or thrive? (HAND, PROJ)

SCI 121 - LET'S MAKE COCOA! WARM OR COLD

Do you like your cocoa hot or cold? This flavor turns up the heat as students learn how heat energy travels. Through a series of experiments, students will discover how to either insulate or conduct heat energy in order to keep something warm, or cool it down. Their final experiment will either have to keep cocoa warm or cold, based on their preference. (ANA, WRIT)

SCI 131 - PROJECT SURVIVAL: HUMID OR DRY

What does it take for living things to survive? Students will complete a quarter-long survival project and apply their learning to the survival of ecosystems. Students will put these skills to work as they try to create their own self-sustaining micro-ecosystem. (PBL, COOP)

SCI 201 - WAIT! I NEEDED THAT! - RECYCLING OR SUSTAINABILITY

Can trash save the planet? Students will be surprised to learn that recycling can save their lives. How many things can we reuse and repurpose to ensure our future? The earth? I needed that. (COOP, HAND)

SCI 211 - THE SOUND OF SCIENCE - SOLO OR GROUP

Waves are everywhere! Even if we can't always see them, we can sometimes hear or feel them. This science class will focus on waves and how they're produced in music. Students will create their own instruments and compose their own original piece. Will you be a solo artist, or join up with a group? (PROJ, INQ)

SCI 221 - KITCHEN CHEMISTRY: TASTE OR WATCH

Chemistry doesn't have to take place in a lab, there is chemistry right in our very own kitchens! This flavor explores the world of atoms and chemical reactions by using various food and non-food items we can find at home. Students will create and demonstrate an experiment to demonstrate their learning at the end of the semester. Will they make something we can eat, or something we can only watch with amazement? (HAND, LAB)

SCI 231 - CREATING MONSTERS

Genetics can be a tricky subject, but this class will explore it by creating various monsters! Students will apply the skills they learn as they create and run various simulations to see how their monster's genes are passed on and whether or not they survive long term. Will students discover the winning combination of traits or watch as their creation is slowly erased? (COOP, TECH)

SOCIAL STUDIES

CURRICULUM MAP



MS US HISTORY I	MS US HISTORY II	MS US HISTORY III	MS US HISTORY IV
SOC 200	SOC 210	SOC 220	SOC 230

MS WORLD HISTORY I	MS WORLD HISTORY II	MS WORLD HISTORY II	MS WORLD HISTORY IV
SOC 100	SOC 110	SOC 120	SOC 130

SEMINAR	COURSE	SEMINAR VERSIONS/FLAVORS
MS World History I	SOC 100	SOC 101 - If I Were In Charge!
MS World History II	SOC 110	SOC 111 - Catastrophe!
MS World History III	SOC 120	SOC 121 - Clash of the Titans
MS World History IV	SOC 130	SOC 131 - Crisis in the Classical World
MS US History I	SOC 200	SOC 201 - Dawn of Man
MS US History II	SOC 210	SOC 211 - Gods and Monsters
MS US History III	SOC 220	SOC 221 - How the U.S. Began
MS US History IV	SOC 230	SOC 231 - Revolution and the New Nation

SOCIAL STUDIES



COURSE DESCRIPTIONS

SOC 101 - IF I WERE IN CHARGE! - GOVERNMENT OR GEOGRAPHY

Have you wondered what it would be like to run your own country? Well, wonder no longer. In this seminar, students will play the role of world leaders and make strategic decisions for their people based on a wide array of political, economic, and military considerations, or students may choose to research and analyze a contemporary nation and present their findings. (PBL, COOP)

SOC 111 - CATASTROPHE! - CURRENT EVENTS OR ECONOMICS

Albert Einstein once said, "In the midst of every crisis, lies great opportunity." This seminar will put that saying to the test as students explore a wide range of global crises, their impact, humanity's response, and how we can do better in the future. Students will finish the seminar by addressing a special fictional crisis, or by presenting a national budget portfolio. (READ, PBL)

SOC 121 - CLASH OF THE TITANS

Will you fight or take flight through the emerging civilizations of Africa and Eurasia? Students will interact with and act as major historical players while studying world religions and emerging empires. Where will trade, war, new ideas, and influences take you? (WRIT, READ)

SOC 131 - CRISIS IN THE CLASSICAL WORLD

Students will learn by examining case studies from three continents. Competition will fuel this action-packed course that winds through places and conflicts of the Classical World. (READ, PROJ)

SOC 201 - DAWN OF MAN - PREHISTORY OR EARLY CIVILIZATIONS

How did humans come to dominate the planet? What were the secrets of our success as a species? Why did we form civilizations? The answers to these questions and others about the origins of humanity can be found in this seminar. Students will create a project exploring prehistory or other early civilizations presented in class. (INQ, PROJ)

SOC 211 - GODS AND MONSTERS - GREECE OR ROME

The Greco-Roman era was full of superstition and magic. For example, minotaurs, titans, and three-headed dogs were thought to inhabit the world alongside a pantheon of gods. In this seminar, students will learn how our ancestor's belief in these beings shaped their understanding of the world. Students will create a choose-your-own-adventure story or a project focusing on a chosen mythological aspect from the period. (WRIT, COOP)

SOC 221 - HOW THE U.S. BEGAN

Find out how the United States of America as we know it started. Study our country's beginnings to 1620 while imagining the life of those who first invaded this land we now call home. (PROJ, WRIT)

SOC 231 - REVOLUTION AND THE NEW NATION

“The British are coming! The British are coming!” Ever wondered what that means or how long our country has been around? Learn the who, what, why, when, and how of the U.S. colonists’ epic battle to create The United States of America. (READ, PROJ)

ELECTIVE CONTENT AREAS

Curriculum Maps Course Descriptions



MINI MAJORS

CURRICULUM MAP AND COURSE DESCRIPTIONS



Mini Majors are electives open to all middle school students. They count as elective credit.

Battle of the Beasts	ENG 281
Zombie Logic 101	ENG 282
S.T.E.A.M.	MTH 281
Math Game Zone	MTH 282
Let's Have A Cookout	SCI 281
The Art of Science	SCI 282
Age of Strife I	SOC 281
Age of Strife II	SOC 282

ENG 281 - BATTLE OF THE BEASTS

Will it be Cyclops or Medusa? Dracula or the Werewolf? In this English elective, students will discover the most fearsome creatures ever imagined. After reading about the beasts of mythology and sci-fi, students will create their own beasts and participate in tournament-style battles to decide supremacy. (READ, COOP)

ENG 282 - ZOMBIE LOGIC 101

What is the definition of a zombie? Why don't all zombies act the same? Students will conduct Zombie Research to study the different types of Zombies. As a final project students will create either a comic book to describe their Ultimate Zombie or a Zombie Handbook. (READ, PRO)

MTH 281 - S.T.E.A.M.

Let's build and create! This class combines math, science, and art in order to explore topics such as ancient history, architecture, and how things work all through the lens of math. Students will even get the chance to create a science and math-based project and show off their work to their classmates. (PROJ, SELF)

MTH 282 - MATH GAME ZONE

Who says math can't be fun? This class will teach students a variety of math-intensive games to help them learn and sharpen their math skills. Students will even get to create their own original games and teach their classmates how to play. (COOP, HAND)

SCI 281 - LET'S HAVE A COOKOUT

Have you ever been to the park and gotten a sunburn? Why did your ice cream cone melt on a sunny day? Students will study solar energy in order to find the answers. Students will collect data on the best ways to harness the energy of the sun and attempt to cook in their own solar-powered ovens. (HAND, PROJ)

SCI 282 - THE ART OF SCIENCE

Let's capture the beauty of the world. Take a new look at nature and space. Through original art projects, students will recognize the creative and mysterious side of science. (HAND, PROJ)

SOC 281 - AGE OF STRIFE I

War...war never changes - or does it? To answer that question, and many others about human conflict is the purpose of this seminar. Age of Strife I will explore some of the most pivotal military campaigns and technological innovations from 10000 BCE through the seventeenth century. Students will create a project depicting a battle or logistical situation covered in class, or they may choose to create a project examining innovations in military technology over the millennia. (ANA, PBL)

SOC 282 - AGE OF STRIFE II

War... war never changes - or does it? To answer that question, and many others about human conflict is the purpose of this seminar. Age of Strife II will explore some of the most pivotal military campaigns and technological innovations from the 1700s to the present. Students will create a project depicting a battle or logistical situation covered in class, or they may choose to create a project examining innovations in military technology over the millennia. (ANA, PBL)

PHYSICAL EDUCATION / HEALTH



CURRICULUM MAP

Students need to be prepared to participate in PE courses. Time to get your body moving! Fitness testing is incorporated throughout all seminars for PE. Dressing out in PE attire is REQUIRED DAILY rain or shine! Lockers are provided for students to use for their PE attire. Please see the instructor prior to the course regarding medical documentation if accommodations are required to participate in PE safely.

Space Invaders! - Personal Space or Open Space	GYM 201
Call Of Duty: Self Ops I! - General Or Soldier	GYM 202
Tailgate Time	GYM 205
Something Old, Something New	GYM 206

GYM 201 - SPACE INVADERS! -PERSONAL SPACE OR OPEN SPACE

Students will learn to be aware of their personal space while moving around their fellow aliens. In this fast-paced class, students will escape the dangers of an unhealthy lifestyle. Surviving the mission will include tactics such as aerobics, gymnastics, and group games. (COOP, SELF)

GYM 202 - CALL OF DUTY: SELF OPS I! - SOLDIER OR GENERAL

Gather your squad and conquer your health goals by working with your unit. Command and control your mind and body in an effort to build endurance and meet objectives. Learn game protocol and tactics while engaging your opponents and battle buddies in healthy competition. (COOP, SELF)

GYM 205 - TAILGATE TIME

Tailgating is one of the most popular social activities held in the United States and generally occurs in parking lots outside major stadiums and arenas. In this course, students will learn about the concept of movement through actively participating in various tailgate games and communicating with each other in a fun-filled and spirited manner. (SELF, COOP)

GYM 206 - SOMETHING OLD, SOMETHING NEW

While building lifelong physical fitness skills and promoting a healthy lifestyle, students will engage in sports that Americans have enjoyed for years along with new innovative and fun new games. (SELF, COOP)