

Millennium Charter Academy Upper School

Exploratory Course Descriptions

2020-2021

First Period

Year-long Exploratories

Spanish IA (seventh grade only)—*Sr. Donabo*

This course will cover topics such as grammar, vocabulary, and cultural concepts, providing the students with further language skills in listening, speaking, reading, and writing. Students will begin to develop a wide range of vocabulary and the necessary grammatical structures to support growing Spanish fluency. By the end of the course, they will be able to converse, read, and write in basic, grammatically correct sentences in Spanish. This course is open to seventh grade students. Those who also take Spanish I B in eighth grade will receive one high school credit.

Latin IA (seventh grade only)—*Mr. Allen*

As the precursor of all Romance languages, Latin provides an excellent foundation for all language study. In this course of study, we use a combination of reading and listening to acquire Latin. The focus is on language acquisition — the ability to read Latin — instead of language decoding. This approach to language study focuses on learning in the context of stories and Roman culture rather than memorization of immense vocabulary lists. This course is open to seventh grade students. Those who also take Latin I B in eighth grade will receive one high school credit.

Latin IB (8th graders who have completed Latin IA only)—*Mr. Allen*

For students who have completed Latin IA, Latin IB allows them to complete their introductory study of the Latin language and Roman culture. It will help prepare them for future language studies as well. In conjunction with the completion of Latin IA, those who complete Latin IB will receive high school credit.

Beginning Band, —*Mr. Money*

This course is offered to students with no previous music experience who plan on being in band in high school. Emphasis for this class will be mainly on development of basic technical skills. The students are required to either buy or rent their own instruments and purchase the book “Tradition of Excellence” which can be found in most music stores. Beginning Band students from the 2019-2020 school year may also choose to take this class as a review or even to learn a new instrument.

Quarterly Exploratories

Finding the Facts in Fiction, *first quarter—Maria Kern*

Have you ever read a book and wondered if that can really happen? Is that really true? In this class, we will read various fictional pieces and then research the “alleged truths” to see what the experts say.

Historical Connections in Mathematics, *first quarter — Mary Richardson*

This course is designed to encourage students to explore the connections between history and mathematics. The goal of this course is to stimulate students' curiosity about the people who developed mathematics and how their discoveries impact our lives today. Biographical information, illustrations, skits, anecdotes, activities and puzzles are used to view mathematics from a historical perspective that will have math “come alive” for students

Basic Sports Skills, *first quarter—David Kern*

During this elective you will learn, improve, practice and master the basic skill of many sports such as volleyball, basketball, track, and soccer. By the end of each sport, you will take the skills you learn and apply them to real game situations. This would be a great elective for students who are between playing on MCA sports teams, and still want to stay in shape.

Pottery, *first quarter- Mary Perry-McCormick*

If you are interested in working with ceramic clay, this is the class for you. Following the core knowledge curriculum, students will focus on creating 3-dimensional clay pieces. Fine craft clay vessels, functional ware, and sculpture will be made during this class. Emphasis will be placed on surface decoration and sculptural form. Texture will also be emphasized. Although pottery will be the focus, there will be ample opportunities to work sculpturally.

Introduction to Philosophy (*Grade 8*)--*first and second quarters*)- *Eric Cook*

Building on your 7th grade Art of Argument class, we will explore how to think and think well. The class will explore nine classic areas of philosophy by looking at how various classical philosophers have thought about thinking, friendship and love, power, civic virtue, beauty and art, justice, natural law, and goodness. We will start with the Wisdom Literature of the ancient Near East and work our way through Plato, Aristotle, Xenophon, and select other modern philosophers on the way. We will delve into thinking clearly, not only for the sake of our intellectual life but also for our moral and social lives.

Mysteries of the Body, Part I, *first and second quarters -Amanda Meadows*

One would think doctors and scientists would have charted every aspect of their home turf by now, but they haven't. We've nailed many mysteries down, but there are some shockingly simple questions we don't have very solid answers to yet. If it's a good mystery you are after, look no further than your bathroom mirror. We all know our bodies are magnificent works of art, but the mysteries of the human body still consume the mind as incomprehensible and strange. Join me as we explore the “Mysteries of the Human Body.” You must take part 1 prior to taking part 2.

Conflict Resolution: Within and Without, *first and third quarters--Stephanie Johnson*

Are you tired of drama? Would you like to get along with everyone, even though you may not agree with them? Do you find yourself at times tense and conflicted? If so, this course is for you. In this course we will explore skills and strategies for calming ourselves, achieving inner peace, and resolving conflicts with others.

Introduction to Classical Mythology, *first and third quarters--Jonathan Johnson*

Hitch a ride on Pegasus and meet with the class on Mount Olympus. This introductory course will explore Classical Mythology found in Greek and Roman societies and how the people of this time created these stories to reflect their values. The first half of this course will focus on Greek Mythology while the second half will focus on the Roman world and how many of these stories evolved. The Classical world will come to life as students view these myths through historical and literary lens.

Weightlifting for Girls, *first and third quarters-Kaley Pruitt*

This is an introductory course that is designed to provide students with correct weight training techniques, emphasizing a healthy lifestyle. Students will improve muscular strength and develop a personalized weight training program.

Reading Refuge - *first and third quarters-Dora Mitchell*

Homework, studying, and projects - When will it ever end? Do you wish you had time to just read without having to analyze each chapter? Join Reading Refuge and have time to just read, read, read. Students will read books of their choosing from a variety of genres. At the end of the quarter, we will have a book talk to advertise our favorite books.

Basketball Skills and Drills, *second quarter— David Kern*

This course will not simply be a come and play basketball class, but rather we will focus on skills and running drills. The intent of this class is for students who want to be physically active and who want to increase their abilities specific to basketball. The best way to describe this course is to think of a youth basketball camp.

History & Literature through Film, *2nd quarter - Paul Rezzo*

Film can be a beautiful reflection of history and literature. This class will explore some major events in human history and a selection of great books through the lens of a movie camera. Students will learn to intelligently and thoughtfully critique films, and they will learn the importance of exploring the historical truth or original story that inspired the motion picture.

Fine Art, *second quarter—Mary McCormick*

This course focuses on 2 dimensional design and traditional art media, using drawing, acrylic painting, watercolor painting, printmaking, and zentangling. If you want to get a good basic overview of art skills, this class will get your creative juices jumping.

Speech & Theater Workshop, *second quarter-- Mary Richardson*

The major goal of this course is to introduce students to the basics of performing in theater and to strengthen public-speaking skills. Students explore how theatre is the art of telling stories through live acting. They will learn to work together, build trust, and involve every member in a performance. We will explore how pantomime and behavior help tell a story; how being present, listening and reacting are an important part of being a performer; and to understand the importance of articulation, projection and voice variation.

Co-Ed Weightlifting - *second and fourth quarters-Kaley Pruitt*

This is an introductory course that is designed to provide students with correct weight training techniques, emphasizing a healthy lifestyle. Students will improve muscular strength and develop a personalized weight training program.

Through the Looking Glass, *second and fourth quarters—Jonathan Johnson*

Fantasy is often used as a form of escapism from the modern world, but the fantasy genre has been around for as long as humans could imagine stories. This course will offer an introductory study of the history of the genre as well as look at the themes commonly found in fantasy stories. We will explore classic epics, fairy tales from the middle ages, and some of the modern fantasy stories that have reshaped the genre today. This genre is both transformative and adventurous for the characters present in these stories and students should prepare for a grand adventure as well.

Science Olympiad with Forensic Science, *second quarter & third quarter—Maria Kern*

This exploratory course is a two quarter commitment. 18 students from this elective will prepare to compete in the Science Olympiad tournament in February. Students will collectively participate in over 20 events including bottle rockets, human anatomy, hovercraft, tower building, astronomy, programming, crime busters and more. **Students interested in this competition will need to complete a separate application in order to be considered for the team.** Team members may be expected to provide resources for their build events. My previous **Forensic Science** course will be integrated into this exploratory course as well. After the competition, students will examine physical evidence, study fibers and fingerprints, learn about blood basics, and much more!

Genre Journey -*second and fourth quarters-Dora Mitchell*

Come take a journey through a variety of genres! You may choose to move from the world of fantasy through science fiction to historical fiction and biography. In this elective, you will have the opportunity to read books of your choosing in various genres. You will discuss with your peers the benefits found by widening the purview of authors and styles.

Art of Argument (Grade 7)--*third and fourth quarters—John Kamer*

During this course, students will learn the importance of critical thinking and reasoning with clarity, relevance and purpose. By examining several informal fallacies, students are able to apply their learning to current social, commercial, and political issues. In addition to inferential reasoning, students will be introduced to formal logic and deductive reasoning.

Mysteries of the Body, Part II -*third and fourth quarters -Amanda Meadows*

Now that you are familiar with our amazing human bodies, it's time to take it to the next level. Spend some time exploring specific conditions, diseases and some fascinating "mysteries" that have yet to be solved by today's brightest medical minds. This course will be action packed with labs and a touch of anatomy...Join me to further explore all the "Mysteries of the Human Body." You must take part 1 prior to taking part 2.

Physical Conditioning, *third quarter— David Kern*

This course is an intense physical education class designed to give you the opportunity to learn fitness concepts and conditioning techniques used for obtaining optimal physical fitness. Students will learn the basic fundamentals of strength training, aerobic training, and overall fitness training and conditioning. Weather permitting each student will be timed in the parkour playground challenge. Students will be

empowered to make wise choices, meet challenges, and develop positive behaviors in fitness, wellness, and movement activity for a lifetime.

Geometric Art, *third quarter—Mary Richardson*

In this course, students will create original works of art through the exploration of geometric drawings with the use of a compass and straightedge. Through the art of geometry, students will learn how to inscribe a hexagon in a circle, create a mystic rose, construct a Koch snowflake, design a tessellation, draw a Fibonacci spiral, build a Sierpinski pyramid, and create beautiful designs with concentric circles, ellipses, cardioids, and more.

Clay Tiles and Plates, *third quarter—Mary McCormick*

This course will focus on creating 2-dimensional and 3-dimensional fine craft ceramic clay tiles and plates. Historical and contemporary artists will be referenced as inspiration. The clay pieces may be functional ware or act as a canvas on which to paint. Emphasis will be placed on relief and surface decoration while using painterly techniques to create unique pieces.

Off the Wall Sports, *fourth quarter— David Kern*

Maybe you are not a sports fanatic but enjoy being active and learning new things? If so, this elective is for you. We will explore and learn many different activities including ultimate frisbee, field hockey, wall ball, and much more! (Basketball is **NOT** part of this course.)

Dollars and Sense, *fourth quarter—Mary Richardson*

Students learn how to handle money matters in a practical way by becoming actively involved in the wise use of money. This course is designed to give students background and practice with the many ways in which we deal with money in our everyday lives. Students will learn about the stock market, basic banking skills, how to earn money, balancing spending and saving through budgeting, and other money matters.

Living Well (grades 7&8), *fourth quarter—Maria Kern*

Get ready to be healthy! Join this elective for an exciting approach to a lifelong healthy lifestyle. This elective introduces students to various forms of fun fitness, such as circuit training, aerobics, and kickboxing. Healthy cooking, label reading, dealing with teenage self-esteem and peer pressure are also among the many things incorporated into this elective.

Visual Journal Portfolio, *fourth quarter—Mary McCormick*

Do you love to experiment with art materials? Then this is the class for you. Following the core knowledge curriculum, the course will focus on combining drawn/painted images and/or photographic collage to create a portfolio of pages that tells a personal story, similar to a scrapbook but with a focus on fine art materials and personal narrative. Artists who create(d) personal artwork will be studied for inspiration.

Conflict Resolution II: Within and Without, *fourth quarter--Stephanie Johnson*

This course is a continuation of skills learned in the first class. It will focus on skills of negotiation and third party mediation. Students will also explore new strategies for reducing stress and achieving calmness. In addition, we may explore peaceful societies and individuals who have been peacemakers.

Seventh Period

Year-long Exploratories

Spanish IB (eighth grade)—*Sr. Donabo*

This class is a continuation of Spanish IA and introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students will be able to comprehend basic vocabulary and grammatical structures through listening and reading in Spanish. Students will be able to communicate orally using basic phrases in Spanish. Students will be able to respond in writing to common elementary level questions in Spanish. Students will be able to demonstrate a cultural awareness of the many Spanish speaking countries and peoples. Students will be able to engage in critical thinking through actively using the Spanish language and through analyzing various cultural topics related to Spanish speaking countries. Students who successfully complete this course will receive one high school credit and will qualify to take Spanish II in high school.

Choir—*Danielle Davis*

Choir elective is for those with basic singing experience. A light audition/placement will be required. This course will be excellent preparation for participating in high school choir. Throughout this course, we will be exploring eclectic musical genres, advancing performance skills, creating harmonies with part-singing, advancing sight-singing, learning proper vocal-health practices, and learning to develop a deep love of singing and performing. Students are required to perform in winter concerts, spring concerts, and after school activities. Students may also get an opportunity to travel outside of MCA to share their talents with the community, as well as compete in a competition choir setting.

Advanced Music—*Rodney Money*

This year-long, high-level course focuses on performance. Students must be self-motivated, able to work well with others, and able to count eighth-note rhythms. Students are required to perform in at least two Christmas concerts, two spring concerts and other events, possibly outside regular school hours. Students may have the opportunity to travel as well. Students interested in Advanced Music are required to do a light, non-threatening audition to make sure the student understands the basic concepts of reading and counting music.

Quarterly Exploratories

Art of Argument (Grade 7), *first and second quarters—John Kamer*

During this course, students will learn the importance of critical thinking and reasoning with clarity, relevance and purpose. By examining several informal fallacies, students are able to apply their learning to current social, commercial, and political issues. In addition to inferential reasoning, students will be introduced to formal logic and deductive reasoning.

Ukulele, *first and second quarters—Travis Snyder*

Have you wanted to learn to play an instrument? Have you tried already but felt overwhelmed by the complexity of it all? Do you currently play an instrument but want to learn another? If you answered yes to any of these questions, it is time for you to try ukulele! During this course, you will learn about the ukulele's origins, how to tune one, and best of all, how to play one! Learning to play the ukulele is a relatively easy and rewarding experience, and no prior music knowledge is necessary to take the course. What could be better than that?

Living in a Digital World, first quarter—Sally Reece

In this class, we will address timely topics and prepare students to take ownership of their digital lives. We will answer questions such as: How can we act with empathy and positivity when we're online? What is a digital footprint, and what does yours convey? How does digital media try to hook you, and what can you do about it? What is your strategy for finding media balance? How can you protect your safety and privacy online?

Research Methods, first quarter—Bethany Shepherd

Get a head start on your science project. This class provides dedicated time to work on your science project. Students will explore the scientific process of inquiry-based research and experimentation. The class begins with small group investigations and culminates in individually designed investigations based on authentic inquiry (your science project). This class is for those who desire to take their science investigation skills and research to a higher level.

Public Speaking, first quarter—Neal Dawes

Everyone will at some point in their life be called upon to speak in front of others. In this elective, students will have the opportunity to learn and practice how to effectively speak in front of an audience and how to give different kinds of speeches, providing them with an important skill that will last a lifetime.

Robotics, first quarter—Charlie Sealey

This course provides an introduction to robotics using LEGO Mindstorm EV3 kits and the LEGO Mindstorm software. Students will be involved in the development, building, and programming of a Lego Mindstorm robot. Students will work hands-on in teams to design, build, program and document their progress. Student-designed robots will be programmed to compete in various courses as developed by First Lego League

Introduction to Psychology part 1, first and third quarters—Susan Gunter

Have you ever wondered why people act the way they do? Psychology - the scientific study of the mind and behavior - looks deeper than intuitions and feelings to search for the true roots of behavior. This course will introduce topics including the history of psychology, research methods, biological basis of behavior, development across the lifespan, learning, memory, personality, and professions in the field. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology.

Animal Advocacy first and third quarters —Kelly Cummings

This elective is designed for the civic-minded animal enthusiast. In this elective, we will focus on issues that animals face in our community, in our country, and around the globe. We will learn about subjects such as community cats, humane education and encouraging the adoption of pets from shelters, endangered species conservation efforts, wildlife rehabilitation and sanctuaries, invasive species and much more. We will then design and implement an animal-related service project to benefit a local animal welfare organization.

Lettering, first quarter—Ann Moore

Writing in fancy letters is all the rage! People even make money from writing words, phrases, and even just letters on objects such as wood or tile. In this elective, we will explore some of the hand-lettering fonts and old-world calligraphy. We will even create our own stationery to send to people for birthdays, anniversaries, holidays, etc. Come and help beautify the world! Students will need to purchase a set of dual-tipped markers with beveled edges.

Introduction to Psychology part 2, second and fourth quarters - Susan Gunter

Now that you are familiar with basic psychological concepts, we will delve even deeper in the psyche in part 2. We will touch back on a few of the concepts in part 1 and take them a step further, as well as cover new topics such as intelligence, sleep and dreams, emotion, stress, the role of diet on mental health, psychological disorders and treatment methods, and other relevant topics. Introduction to Psychology part 1 is a prerequisite to taking this class.

Leadership Academy, second quarter—Kelly Cummings

The topics range as follows: Citizenship, communication, ethics, conflict resolution, goal setting, leadership styles, respect for others and self as well as team building. You will spend time with a notable leader of history throughout the quarter and report what you have learned in a slide presentation.

Photography and Graphic Design, second quarter—Bethany Shepherd

Learn the basics of graphic design and photography as we explore this visual world. You will learn new terms as you lay out a page in a balanced manner that is pleasing and easy to understand. In photography we will explore the rule of thirds, foreground, background, and more. Best photographs will be submitted for use in the yearbook.

History of War, second quarter—Neal Dawes

We will study how early types of warfare developed, the advancement of the weapons of war, and key strategies that have been effective throughout the ages in war. We will also look at important generals and the keys to their success and reasons for their failures as well as women and war, spies in war, health conditions and treatment of the injured in warfare, and how wars have been presented in art and media over time.

Women in Science, second quarter—Sally Reece

This course is designed to encourage interest and participation in the fields of science and technology. The course will begin with a discussion and research highlighting the accomplishments of women scientists. We will also explore many scientific fields of study as well as career pathways. This class will include both projects and labs.

Creative Writing, second quarter—Ann Moore

Do you just wish there was a time set aside when you could write a good story? Come to creative writing and have the time to write your very own novella your way. A charged computer is a must for this elective. Come, write, and let those creative juices flow!

Yearbook, second and third quarter—Charlie Sealey

Document your 2020-2021 school year in photos. This class will be privileged and responsible for the creation of MCA's yearbook. From page layout to electronic design, we will capture classes (K-12), sports teams, important events and much more. Students new to this class will learn design basics and how to utilize the web-based yearbook site. Graphic design and photography experience are a plus but not required. New and returning students are all welcome.

Poetry Place, third quarter—Ann Moore

How many types of poetry can you write? There are many different types just waiting for you to explore. Come and discover your favorite type. It may be one you have never heard of before! We will share our original poetry with each other and create a book that will amaze your family and friends.

Basic Songwriting, *third quarter--Travis Snyder*

Each of us has a story or sentiment to share. Poetry and song bring us together in ways that transcend social and cultural boundaries. They have the ability to tap into who we are as individuals and remind us that we are part of something bigger than ourselves. Unfortunately, for many people, making music or writing songs can feel out of reach. Where do you even start? In this course we will learn the fundamentals of song structure, how to convey your own sentiment in lyrics, and how to use instruments such as keyboard, guitar, and ukulele to create music to support those lyrics. No prior musical experience required for this course.

Envirothon, *third quarter—Bethany Shepherd*

Students work in cooperative groups to employ critical thinking as they develop scientific knowledge of environmental stewardship, helping them make decisions regarding the protection, use and management of natural resources. This is a competition team with a March competition date. Class maximum: 15 students (3 five person teams). Team dedication and strong work ethic are necessities. Competition is required and included in final grade.

1960-1974, Part I, *third quarter—Neal Dawes*

This is the first half of a two-part course dealing with the time period from 1960-1974. Taking both part one and part two of the course is suggested, but not required. The first part of the course will look at key developments that happened following World War II that would shape the United States during the 1960's. We will also look at events that occurred during the presidency of John F. Kennedy and learn about his tragic assassination. The Civil Rights Movement will also be a major focal point during this part of the course and students will conduct research and write about two of the significant Civil Rights events. We will listen to different musical genres of the time period and students will create a presentation on a popular musical genre, artist, or group from the time period.

Structural Integrity, *third quarter—Sally Reece*

This elective will first examine the forces involved in building and maintaining bridges. We will then look at internal and external forces acting on the different parts of a bridge including stress and strain. Some of the methods that engineers use to design strong bridges will be explored. Students will investigate how to make strong structures and then examine the many different types of bridges. We will explore to find all the different types of bridges and throughout this process, students will build various types of bridges, both physically and virtually.

Introduction to Philosophy (*Grade 8*), *third and fourth quarters--Eric Cook*

Building on your 7th grade Art of Argument class, we will explore how to think and think well. The class will explore nine classic areas of philosophy by looking at how various classical philosophers have thought about thinking, friendship and love, power, civic virtue, beauty and art, justice, natural law, and goodness. We will start with the Wisdom Literature of the ancient Near East and work our way through Plato, Aristotle, Xenophon, and selected other modern philosophers on the way. We will delve into thinking clearly, not only for the sake of our intellectual life but also for our moral and social lives.

Sustain a Lion, *fourth quarter--Sally Reece*

Calling all Lions! This elective is meant to learn about pressing environmental issues ranging from single-use plastics to pollution to mindful energy consumption. We will be building a "Green Team" to develop art, awareness campaigns, and ways to help encourage sustainability and environmentally friendly practices at MCA and in the community.

Marine Science, fourth quarter—Travis Snyder

It is a commonly held notion that we know more about the surface of the moon than we know about the depths of our oceans. This is quite startling when you consider that oceans make up the majority of our planet's surface and control virtually all climate events. Have you ever wondered why tropical storms and hurricanes hit the North Carolina coast so frequently? What is really happening as the polar ice caps melt? Why is there a large patch of garbage in the middle of the Pacific ocean? What is a whale fall? What types of sharks live off the North Carolina coast? We will find the answers to these questions and many more as we explore the oceans.

Green Thumb, fourth quarter - Kelly Cummings

Come work in the dirt and share my passion for gardening. Learn the basics of organic gardening. You will learn how to germinate seeds of all kinds and grow plants from cuttings. You will learn which flowers attract our bee pollinators. We will taste as many exotic fruits and vegetables as we can find. We will also work in the greenhouse and so some container gardening.

Lettering, fourth quarter - Ann Moore

We will explore various lettering techniques, including calligraphy and modern calligraphy. Students will need to purchase a set of calligraphy markers (Walmart, Staples, etc.)(thinner markers with a beveled edge will work). Find your favorite personal style to use on stationary or posters!

Journaling through Nature, fourth quarter—Bethany Shepherd

See and draw a caterpillar's spiracles. Learn how to distinguish a moth from a butterfly and record in your journal along with other fascinating facts based on intense observation. This class uses in-depth daily observations and research to create individual nature journals from blank books. Daily outdoor excursions on our school's campus provide an abundance of nature-based observation experiences. The grade based on highly detailed recordings of observations and not on artistic skills.

1960-1974, Part II, fourth quarter—Neal Dawes

This is the second part of the course covering the years 1960-1974. It is not a requirement to have taken Part One of the course to be in this class. This section of the course will focus on the Vietnam War and the peace protests that were conducted in response to the war. We will also study the emergence of the US space program and race to the moon. We will discuss the Presidency of Richard Nixon and examine the Watergate scandal that led to his downfall. Key changes that occurred in other regions of the world, particularly in China and Africa, will be discussed at the end of the course. On a cultural note, students will learn about the popular television programs, movies, and plays that impacted society during the time period from 1960-1974.

Computer Programming, fourth quarter—Charlie Sealey

Students will take an in depth look at Scratch, an online programming tool. Various animations and games will be created using Scratch. We will use other online programming resources such as Code.org and Codecombat to also learn different coding languages.

