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# 2019 Junior Scholars Course Descriptions Rising Grades 4 - 6 Updated on 12/6/18

Week 1: June 24 - 28

## **Jewelry Design and Wearable Art (AM)**

Teacher: Ailsa Stevenson

Students will work in the woodshop with a variety of materials (i.e., metals, enamel, wood, glass, resin) to create one-of-a-kind art to wear and give as gifts. This will be a hands-on exploration of the creative design process. Mistakes and remakes are encouraged! Bring your right brain.

## Wizardry U. (AM)

Teacher: TBA

Enter a different world and be amazed by the creatures and magic. More information to come.

#### Swimming/ Field Games (AM)

Teacher: Kyle Hagerthey

While students are spending half of this block in the pool (75 minutes), the other half of the time is spent playing fun games out on the fields or in the gym during inclement weather. Depending on interests of children, there will be flexibility in the programming. Activities may include soccer, basketball, dodgeball, volleyball, badminton, ping pong, tennis, lacrosse, wiffle ball, flag football, and more.

#### Intro to Watercolor & Calligraphy (PM)

Teacher: Jessica Durdin

Welcome to the artistic collaboration of watercolor and calligraphy. Together we will share ideas that hold an interest to all in the group, learning through basic flower and leaf formations. We will also dive into calligraphy alphabets, practice our names, and explore other words that hold importance to us. All of this will be combined with our watercolor painting to create a unified

work of art. There will be plenty of time for independent exploration with our paints and pens. Each camper will leave with their own palette of colors and new skills to continue their art at home.

# Computer Animation (AM)

Teacher: TBA

Starting with traditional materials like paper and clay, advancing to green screens, digital image manipulation in Adobe Photoshop, and 3D computer animation using Blender. Students will work in a variety of animation mediums including claymation, paper cut outs, looping gifs, enhanced live action, and Pixar style 3D animation. Combining these styles & tools with your creativity, a camera, and iMovie, and you can learn to animate just about anything! Students who took Animation last summer will move onto more advanced techniques. The week will culminate in an animated film festival, and students will be sent home with a digital reel of their work. Come make your dreams a reality!

### Week 2: July 8 - 12

## Scholar Daily News II (AM)

Teacher: Debra Galler

#breakingnews: Junior Scholars will learn the basics of reporting in a digital world and use those skills to create a blog and record broadcast news programs and videos in the MFS journalism program's new studio. In "covering" life at MFS Summer Scholars, students will get a taste of multiple programs for scholars of all ages. Students in this class will have their fingers on the pulse of all things MFS Summer Programs!

## Forensic Science (AM)

Teacher: Griffin Kidd

Crime Scene Investigation (CSI) and forensic science are two important fiends in law enforcement. In this class, Scholars will use deductive reasoning and evidence to narrow down a list of suspects. They will learn about different types of physical evidence, how to collect evidence and how to examine physical evidence in order to solve a crime.

#### TinkerCAD and 3D Printing (AM)

Teacher: Tony Gore

This course will explore the many possibilities of 3D printing and design. Using TinkerCAD, students will collaborate to design and print their creations. Through the design and printing process, it will be important to consider not only aesthetic, but also critical mathematical and artistic design principles - such as negative space - in order to ensure that the work is structurally sound.

## **Energized! Today's Alternative Power (PM)**

Teacher: Griffin Kidd

Junior Scholars will be exploring how electricity is produced, starting by building a working generator. We will then explore different ways of powering a generator with wind and water. Scholars will build a working model of a wind turbine and experiment to optimize the voltage their model produces and have the opportunity to explore their own creative solutions.

# **Prose and the Palate: Reading and Eating (PM)**

Teacher: TBA

Many literary works lend themselves to fun thoughts of food; it may be a dessert, it may be a full course meal. We will read some popular pieces of fiction and non-fiction and then prepare an interpretation of the food that it represents. The end of the week should be a festival fit for family and friends.

# Swimming/ Field Games (PM)

Teacher: Swim Instructor/Kyle Hagerthey

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## Week 3: July 15 - 19

#### **Escape Room Phase II (AM)**

Teacher: Mike Romea

Over the course of the week, students will use the immersive learning platform of Breakout EDU to hone their code-breaking and puzzle-solving skills. With these skills at their disposal, Junior Scholars will work in teams over the course of the week to develop their very own Escape Room. The week will culminate with students testing out the other team's room. Come join us for some engaging puzzle solving and fun!

# Clean Dirt: Organic Gardening (AM)

Teacher: Nikole Moore-Medley

There is conventional gardening and then there's organic gardening. What is the difference, you ask? Organic gardening refers to a trend that has grown in popularity in the last two decades resulting in healthier produce. Organic gardening relies on more natural methods to keep weeds and pests away. Students will learn about the challenges and benefits. A garden will be started prior to class and work will continue throughout the week. Come grow with us!

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### **Chess with The Knight School (PM)**

Teacher: Coach Luke

Coach Luke invites every player, new to the game or not, to join in as they use super-fun teaching methods such as fast chess clock-slapping games, zany chess videos, a strict bully-free environment, silicone wristbands for tactics mastery, chess puzzlers for treats, driving music, hilarious tactics-lesson videos, and Mardi-Gras beads to learn the game. In this child-centered classroom environment, children are taught every cool trick, strategy, opening, and tactic in the chessdom. Your child will gain academic confidence, analytical ability, personal integrity, chess friends, and a smarter self-identity.

#### Yoga and Mindful Practice (PM)

Teacher: Paige Bloom

Dive into the journey of the yogic path through this weeklong seminar. Students will be exposed to the many positive impacts of a yoga practice as they move and challenge their bodies, minds and souls through asana, meditation, and collaborative mat chats. Students will be provided with opportunities to deepen their sense of self, learn stress relieving strategies, and continue to develop a healthy body image all in a fun, supportive, non-competitive environment.

# Week 4: July 22 - 26

#### **Minecraft Architecture (AM)**

Teacher: TBA

Using the wildly popular game Minecraft, learn how buildings are imagined, designed, and assembled. You will draft and design physical blueprints which are then used to create structures in the Minecraft world. Learn about resource management by gathering the natural resources available in the game in order to actualize your designs. By the end of the class, Minecraft Architects have a better appreciation for the critical thinking skills necessary in visualizing architecture and design.

## **Designing Greeting Cards (AM)**

Teacher: Sharon Uibel

Become the gift giver of the best greeting cards. When you make one by hand, it's that much more personal. Students will use stamping products and a variety of papers and textures to infuse color to embellish their unique sentiment.

# **Vets In Training: "Interns" (PM)**

Teacher: HousePaws Educator

By embracing the human-animal bond through interaction and education, the HousePaws Vets in Training Program provides hands-on, experience-based veterinary education to each student. The "Interns" course for our Junior Scholars will include Pet CPR, Anesthesia 101,

Ophthalmology, the Skeletal System, and Cardiology, all at a level which is appropriate for this age group. Come explore the science behind how we care for our animal friends.

### The Nature of Clay (PM)

Teacher: David Gamber

Clay is the only material found in nature that is moldable at room temperature. We will use clays origins in nature as inspiration for personal discovery and expression. Our week together will include some time exploring nature for inspiration. A little science (the nature of clay and glazes), and lots of time making both functional and sculptural clay pieces. Artist should come prepared to explore, make messes, and create.

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#### Week 5: July 29- August 2

## **LEGO BattleBots (AM)**

Teacher: Griffin Kidd

During the week campers will work in teams to design and construct an NXT robot that will stay in a ring on its own and respond to another robot in the ring. Students will learn about design, construction, and programming of their robot. Once they have constructed their prototype they will test it, make adjustments to their design and retest. This may occur several times so the students can optimize their design. Each group will then bring their robot to the battle arena where the robots will attempt to knock the other robot out of the ring. Battle day is the best day!

#### We Are! Girl Power (AM)

Teacher: Nikole Moore-Medley

This hands-on and historical look at powerful female figures in history will be a transformative class for any child ready to feel inspired. A look at role models, leadership, and moments that triggered greatness will take us through short videos and documentaries, role playing, and some artistic rendering. Characters in real life as well as fiction will provide critical discussion

surrounding themes such as peer influencers, leadership qualities, self-talk, coping skills, motivation and more.

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# **Sew Tech Circuitry (PM)**

Teacher: The Handwork Studio Educator

Join us this summer for our exciting STEAM based Sew-Tech Camp! This program invites campers to tinker with technology, science, and fibers to develop interactive creations. Our innovative curriculum blends art and science so that each child will be able to create smart accessories, interactive toys, and light up wearables. Projects will involve the use of LED lights, motors, sewing machines, thread, fabric and more! The possibilities are endless--whether you are a boy or girl, scientist or artist, this program is designed to boost the appetite of both the left and right brain thinker. All supplies are included, no experience necessary, and projects will change from week to week and year to year so that campers are sure to love continuing to work in Sew Tech Camp's Craft Lab!

## Rockets and Racecars (PM)

Teacher: Griffin Kidd

During the week campers will work in teams to design and construct solar-powered race cars with balsa wood and water powered rockets. Students will learn about solar panels and their power output, gear ratios, and hydraulic thrust. By the end of the week, their rockets will be flying three stories in the air and their race cars will be racing each other! This is one week where no one is looking forward to the weekend!

## Week 6: August 5 - 9

# **Building Bridges - Engineering, Architecture and Design (AM)**

Teacher: Griffin Kidd

During the week campers will work in teams to design and construct a bridge made out of balsa wood. We will begin by going over the engineering design process, learn about drawing scaled blueprints, and examine how truss distributes a load. Students will then produce their own blueprint to work from and construct a bridge that will be tested. Your goal is to build a bridge out of balsa wood strong enough to hold your weight!

## Design and Develop Your Own App - Phase II (AM)

Teacher: Matt Wartenberg

Apps are complex things. From idea to code, there are many layers of thinking and design which come together to create the apps that we use every day. This course will explore the processes involved in app creation, from identifying a concept through writing the app into code. Through collaborative work, students will spend time identifying the ways in which apps are designed to solve problems, as well as principles of graphic design and layout. While we will not be able to code our own app, we will use a proxy program to explore how these learning principles work in real time.

# The Art and Science of Filmmaking (PM)

Teacher: TBA

Students learn basic levels of every aspect of the industry from directing and operating the camera, to editing and production. Script writing, storyboarding will also be introduced. They will work on some individual and group projects such as vignettes, PSAs (public service announcements), commercials, and music videos. Individual interests will allow for customization in the curriculum and direction of the course.

## **Survival Science in the Forest (PM)**

Teacher: Griffin Kidd

We will be exploring the forest environment to identify the dangers that exist so they can be avoided as well as all of the natural resources that can be used to help you survive. We will be identifying different plants and animals, looking for possible sources of food and water, and learning how to construct a shelter just with materials we find in the forest. Come with an adventurous spirit (and maybe some bug spray)!

## **Swimming/ Field Games (PM)**

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