

# MIDDLE SCHOOL ELECTIVES

## 2020-21

### Sixth Grade

#### Arts Rotation, Grade 6

**Art** – Students have one quarter of art focusing on two-dimensional work. Students explore self-expression and artistic perception through a variety of media and processes including drawing, painting, and sculpture.

**Acting** – Students learn the fundamentals of the art and craft of acting including age-appropriate scene work, voice study, and nonverbal communication scenarios.

**Movement** – Students become comfortable with movement and control of their bodies through basic dance techniques, Pilates exercises, proper stretching, and combination work. They also learn musicality as related to the process of dance.

**Team Design** – Team design incorporates technology, engineering, art, and math through the principles of making and design thinking. In this interdisciplinary course, the intersection of 3-D design and mathematical art is central to the challenges presented to the students.

#### Information and Digital Literacy, Grade 6

This required course develops critical thinking skills necessary to identify, evaluate, and use diverse information sources effectively. Lessons include topics such as library skills, website evaluation, research, academic databases, multimedia creation, copyright, fair use, and strategic searching techniques, both online and off. The course also coaches students in healthy laptop use through lessons on keyboarding skills, digital organization, file management, and digital citizenship.

### Sixth Grade Music

#### Beginning Instrumental Music for Band Instruments, Grade 6

This class is for students who would like to learn to play the flute, clarinet, trumpet, trombone, or baritone, but have no prior experience. Proper playing technique, posture, tone, and intonation are emphasized. Students are introduced to beginning band literature. This is a fast-paced class, as it prepares students to move into Middle School Concert Winds in Seventh Grade. **Concert attendance at several evening performances is required.**

#### Beginning Instrumental Music for Stringed Instruments, Grade 6

This class is for Sixth Grade students who would like to play the violin, viola, cello, or upright string bass, but have no prior experience with these instruments. Proper playing posture, intonation, and tone are emphasized. Students are introduced to beginning string orchestra literature. This is a fast-paced class, as it prepares students to move into Middle School Orchestra in Seventh Grade. **Concert attendance at several evening performances is required.**

#### Band, Grade 6

Intermediate study of a woodwind, brass, or percussion instruments that includes the study and performance of band literature from a variety of musical styles and time periods, with an emphasis on tone, intonation, balance, blend, and musicality. Students also study elements of jazz. **Concert attendance at several evening performances is required.** Prerequisite: Fifth Grade Band or equivalent.

**Choir, Grade 6**

Students in this choral ensemble study and perform music from various time periods, cultures, and styles. Students work on developing healthy vocal technique and intonation with a focus on ensemble singing. Students study basic music theory, sight-singing, and aural skills. **Concert attendance at several evening performances is required.**

**Strings, Grade 6**

Intermediate study of an orchestral string instrument that includes the study and performance of string orchestra music from a variety of time periods and styles. Students learn to play new notes, master new bowing techniques, and new rhythms. Emphasis is placed on ensemble playing including proper playing posture, balance, blend, intonation, and musicality. **Concert attendance at several evening performances is required.** Prerequisite: Fifth Grade Strings or equivalent.

## Seventh and Eighth Grade Electives

*Most electives are one semester long and meet for one-half of an academic block in either the Fall or Spring semester.*

### Art Electives

#### **Art: One Semester, Grade 7**

Students continue their art study by experimenting with various art media. Students explore two-dimensional and three-dimensional work and are encouraged to find their own unique style.

#### **Art: One Semester, Grade 8**

Students create a variety of two-dimensional and three-dimensional projects using various media such as colored pencil, paint, clay, and found objects. Students are encouraged to find their own artistic voices and to participate in class critiques.

#### **Ceramics: One Semester, Grade 7**

This course introduces the basic ceramic methods of hand-building, pinch, coil, slab, and wheel-throwing. Students learn glazing techniques, and kiln firing. Students work toward completing a body of finished works which represents a variety of techniques. Projects include both functional and decorative arts.

#### **Ceramics: One Semester, Grade 8**

This course introduces the basic ceramic methods of hand-building, pinch, coil, slab, and wheel-throwing. Students learn glazing techniques, and kiln firing. Students work toward completing a body of finished works which represents a variety of techniques. Projects include both functional and decorative arts.

#### **Drawing: One Semester, Grades 7 and 8**

This course focuses on the essential components of good drawing: line, composition, perspective, figure drawing, and value. Through directed lessons and use of a variety of techniques and media, students learn how to create freehand drawings using pencil, and pen and ink. Students are required to complete sketchbook assignments that count toward their grade.

#### **Multicultural Art: One Semester, Grades 7 and 8**

This course acquaints students with various art forms from different cultures around the world. They work in two-dimensional and three-dimensional forms, use a variety of materials, and receive art appreciation lessons in conjunction with each culturally-themed art project.

#### **Mural Painting: One Semester, Grade 8**

This course provides students with an experience in creating public art by completing a hand-painted mural on campus. Students work collaboratively to create a concept, scale model drawing, and grid for a hand-painted mural. Each student is responsible for a portion of the entire process including concept, preparation, execution, and clean up. Students are introduced to the history of wall paintings, public art, contemporary murals, and muralists. Students take a field trip to the downtown arts district to get a first-hand look at public art and contemporary murals. Students are required to write reflective essays on the field trip and their experience in creating the mural.

#### **Painting: One Semester, Grade 7**

This course explores a variety of painting media, methods, and techniques to create paintings inspired by various painters and art movements throughout art history. Projects involve traditional and contemporary subject matter. Emphasis is on value, texture, color, and composition.

**Painting: One Semester, Grade 8**

This course begins with an in-depth examination of the methods and techniques involved in Painting. Students explore a variety of painting media: watercolor, acrylic, and oil. Projects involve traditional and contemporary subject matter. Emphasis is on value, texture, color, and composition.

**Photography: One Semester, Grade 7**

Photography students learn through hands-on experience how to visualize and process pictures from the camera to the final print. Students learn how to operate a 35mm DSLR, use mono and strobe lights, and edit their work using Photoshop CC. Final output utilizes the Epson Stylus Pro 4880, 7900, and 9000. Students learn how to “see” through assignments designed toward self-expression, articulation, and problem solving. Students also learn to cut mats, mount their work, and install an exhibition. When a project is complete, the students hold a critique session so they may learn how to evaluate artwork with sensitivity.

**Photography: One Semester, Grade 8**

Photography students learn through hands-on experience how to visualize and process pictures from the camera to the final print. Students learn how to operate a 35mm DSLR, use mono and strobe lights, and edit their work using Photoshop CC. Final output utilizes the Epson Stylus Pro 4880, 7900, and 9000. Students learn how to “see” through assignments designed toward self-expression, articulation, and problem solving. Students also learn to cut mats, mount their work, and install an exhibition. When a project is complete, the students hold a critique so they may learn how to evaluate artwork with sensitivity.

**Computer Science and Design Electives****Creative Computing I: One Semester, Grades 7 and 8**

This course provides the fundamentals of computer programming for artists and designers who want to create visual and interactive media in creative ways. Using the Processing programming language (Java), students receive visual feedback in real time as they design unique and artistic compositions of images, motion, and sound.

**Creative Computing II: One Semester, Grades 7 and 8**

This course builds on student understanding of the fundamentals of computer programming through the context of design, media, and visual arts using the Processing (Java) programming language. Students build more complicated programs, incorporating sound synthesis, and dynamic interactivity of visually generative art. Prerequisite: Creative Computing I

**Computer Animation: One Semester, Grades 7 and 8**

This elective teaches the underlying principles of two-dimensional animation and motion graphics employing software that provides an industry-standard authoring environment. Topics may include the principles of frame-by-frame animation, motion tweening, parallax and other classic animation lessons. Students storyboard a simple idea, and break it apart into scenes. These techniques are combined into a final project to tell a story.

**Computer Science 0: One Semester, Grades 7 and 8**

The fundamentals of computer programming are presented in a fun, interactive and engaging programming environment through the study of the Python programming language. Students learn how to develop programs using functions, conditionals, and iteration to solve problems and accomplish goals. No prerequisite is necessary to take this course, and no prior knowledge of programming is necessary.

**Computer Science 1: One Semester, Grades 7 and 8**

This course continues to build understanding of the fundamentals of computer science through the study of the Python programming language. Students learn how to write more complicated programs by breaking down the problem at hand. This course demonstrates the broad applicability of computer science and programming through an examination of how computer science is used in the real world. Students practice their new skills by working on larger and larger projects. Prerequisite: Computer Science 0.

**Design Challenge: One Semester, Grades 7 and 8**

This course is designed to promote and integrate design thinking into our daily thought patterns. Students are challenged to build bridges, elevate textbooks, design labyrinths, balance nails, and redesign their morning routine. Each challenge serves to develop the ideas of prototyping and logical problem solving. Teamwork, flexible thinking, and a growth mindset are required.

**Engineering and Art: One Semester, Grade 8**

This project-based, hands-on electronics course encourages students to play, prototype, and solder as they tinker with electronics and build circuits, gadgets, and gizmos using basic electronic components such as resistors, LEDs, logic gates, and transistors. Students then program microcontrollers to make their unusual contraptions come to life using lights, sensors, and motors.

**Graphic Design: One Semester, Grades 7 and 8**

This course introduces students to the fundamentals of graphic design and the principles of communication arts. Students are introduced to a variety of 2D imaging concepts, including illustration, image editing and motion graphics. The significance of sound synthesis, image resolution, and file formats is also covered. Software and design tools include Adobe Photoshop, Illustrator, and After Effects. Students maintain a portfolio of their completed work and examine the many ways imagery communicates with others.

**Invent!: One Semester, Grades 7 and 8**

This project-based course is designed to immerse students in design thinking, computational thinking, and physical computing with tools developed by UC Berkeley and Carnegie Mellon. Students work in teams to collaborate and invent a kinetic sculpture, a basic robot or an animatronic using Arduino-based microcontrollers. Through ideation, tinkering, and building, students engineer and code designs that respond to sensors that control lights, motors, servos, sounds, and graphical displays. This course emphasizes student-centered learning, creative problem solving, and fun.

**Pre-Engineering and Robotics: One Semester, Grades 7 and 8**

This course provides an introductory study of engineering concepts and requires students to apply their knowledge to design, build, and program a robot. The goal of the course is to allow students to experience the application of physical science and to expose them to an area rich with career opportunities in science, technology, engineering, and math (STEM). The process requires the student to understand the basics of Mechanical Engineering using the Vex Robotics platform.

**Web Page Design: One Semester, Grades 7 and 8**

Students use the design thinking process to plan and design attractive and informative web pages while considering such factors as web graphics, layout, color, typography, and navigation. Students learn Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS) and use other web graphics software as they manage their workflow.

## English Electives

### **Creative Writing: One Semester, Grade 7**

Students experiment with the creation of various modes of imaginative writing: poetry, short stories, short plays, and novellas. This class offers students a chance to develop their creative writing voice and to compose in a variety of genres. Students also enjoy the experience of sharing ideas, offering feedback, and presenting their work to their peers. This course includes writing assignments as homework. Students may take the course in either semester.

### **Creative Writing: One Semester, Grade 8**

Students experiment with the creation of various genres of imaginative writing, including poetry, short stories, short plays, and novellas. This class offers students a chance to develop their creative writing voice and to compose in a variety of styles and perspectives. Students study the craft of familiar authors through in-class readings in order to learn new techniques of writing. Students also have the experience of sharing their ideas, offering feedback to their peers, presenting their work to their peers, and submitting polished works for publication. This course includes short creative writing assignments as homework. Students may take the course in either semester. Students who took Creative Writing in seventh grade may also take this class.

### **Debate: One Semester, Grades 7 and 8**

This introductory course teaches the basics of public speaking, debate, and argumentation. Students practice with both prepared and impromptu forms of speaking, focusing on the attributes that make an excellent oral presentation. Students learn presentation, research, organization, and critical thinking skills, as well as the core argumentation and refutation skills that are common to all of the competitive debate formats. This course does not include participation in competitive events outside the School, but prepares students for such opportunities in the eighth grade elective, Competitive Debate, and in Upper School.

### **Competitive Debate: Full Year, Grade 8**

This course reinforces the concepts of public speaking, debate, and argumentation taught in Debate. Students practice with both prepared and impromptu forms of speaking, focusing on the attributes that make an excellent oral presentation. Students practice presentation, research, organization, and critical thinking skills, as well as the core argumentation and refutation skills that are common to all of the competitive debate formats. This course includes participation in the local debate league and its competitions. This will include at least four out of school commitments on weekends.

### **Journalism: One Semester, Grades 7 and 8**

Students in this course learn journalism skills to produce an online newspaper. The class provides students with training and practice in collaborative writing, use of multimedia forms such as videos and photographs to transmit information, and integration of writing and technology. The class also allows students to learn and apply important principles of journalistic ethics. Students may take Journalism in both Seventh and Eighth Grade years. They may also take the course more than once for elective credit.

### **Service and Advocacy: One Semester, Grades 7 and 8 Elective**

Students who seek leadership opportunities and community service involvement develop their skills through structured class lessons, research, and collaborative group work. Students work together to organize and plan a community service project.

## Film and Video Electives

### **Media Production: One Semester, Grade 8**

Media Production allows students hands-on experience with a range of contemporary audio-visual production tools and techniques, and opens up a space for students to reflect on the role of media and communication arts in their lives and in the wider world. Students gain a range of creative and technical media production and online publication skills, including camera operation, microphone handling, scripting & storyboarding, interview technique, video editing in Final Cut Pro, and online publishing. Students will be encouraged to develop a critical approach to their own media consumption and production activities, and will be introduced to concepts and frameworks designed to help make sense of a rapidly shifting media landscape.

### **Screenwriting and Movie Adaptations: One Semester, Grades 7 and 8**

This course explores the relationship between literature and visual storytelling by studying short stories, excerpts of novels, and comic books that have been adapted into films. Students compare the literary text with the script and film versions to analyze how adaptations can be successful. Students also explore their own ideas on adaptation as they write and revise their own screenplays based on pieces of literature that resonate with them. Literary and cinematic selections may include: *The Hunger Games* by Suzanne Collins/dir. Gary Ross; *The Lottery* by Shirley Jackson/dir. Daniel Sackheim; *Legally Blonde* by Amanda Brown/dir. Robert Luketic, and a selection of Pixar animations and Marvel comics and films.

### **Screenwriting and Movie Adaptations II: One Semester, Grade 8**

Picking up where Screenwriting and Movie Adaptations leaves off, the class analyzes award-winning and produced scripts for successful techniques and stylistic choices. Students view the films and then write and revise longer and more complex scenes based on either the film or screenplay. Students also engage in “pitch meetings,” table reads, and peer critique of scripts written in class. Literary and cinematic selections may include: *Hidden Figures* by Margot Shetterly/dir. Theodore Melfi; *Story of Your Life* by Ted Chiang/*Arrival*, dir. Denis Villeneuve; *Ratatouille* dir. Brad Bird, and a selection of Pixar and Marvel films.

### **Stop Motion Animation: One Semester, Grades 7 and 8**

Students will create characters (Lego, paper & cardboard cutouts, clay, articulated action figures, etc.) and then a setting to animate original story ideas. Using Stop Motion Studio Pro software, students can add voice overs, sound effects and/or music to produce short films for class screenings, self-reflections, and possibly screenings to the Viewpoint community. Finally, the class will watch and analyze classic stop motion animation shorts and films from, for example, Pes and the Wallace and Gromit studios.

## Mathematics Electives

### **Strategy Games and Classic Puzzles: One Semester, Grades 7 and 8**

Students learn rules and strategies for Chess, Mancala, Yahtzee and Othello. Strategy games are an excellent platform to develop logical thinking, patience, persistence, and foresight. The students are required to contrast long and short-term goals, calculate odds and see an event from another player's perspective. Students also spend time working on number and word puzzles, toothpick puzzles, balance puzzles and Rubik's cube. In addition, students sharpen their hand-eye coordination with an introduction to juggling.

### **Stock Market: One Semester, Grade 8**

In this course students learn about corporations, stock market exchanges, investments, and financial planning. Students use various financial websites to gain insight on the latest economic news; they analyze charts, quarterly statements, and historical trends from various companies and sectors. Students gain hands-on experience by participating in several online stock market simulation competitions that provide the opportunity to invest in stocks, bonds, and mutual funds.



## Music Electives

### **Beginning Instrumental Music for Band Instruments, Grade 7**

Beginning study of a wind or percussion instrument (trumpet, trombone, baritone, tuba, flute, clarinet, and saxophone) includes the study and performance of band literature with an emphasis on proper playing technique, tone, intonation, and musicality. Students are introduced to beginning band literature and also study the basic elements of jazz. This fast-paced class prepares students to join Concert Winds in Eighth Grade.

**Concert attendance at several evening performances is required.**

### **Beginning Instrumental Music for String Instruments, Grade 7**

This class is for Seventh Grade students who would like to play the violin, viola, cello or upright string bass, but have no prior experience with these instruments. Proper playing posture, intonation, and tone are emphasized. Students are introduced to beginning string orchestra literature in a variety of styles. This is a fast-paced class that requires regular at-home practicing, as it prepares students to move into Middle School Orchestra in Eighth Grade. **Concert attendance at several evening performances is required.**

### **Concert Winds: Full year, Grades 7 and 8**

Students increase their musical knowledge through the advanced level study of a woodwind, brass, or percussion instrument. Students study and perform a variety of standard band literature, while continuing to develop their musicianship and creativity. **Concert attendance at several evening performances is required.**

Prerequisite: Sixth Grade Band, Beginning Instrumental Music for Band Instruments, or permission of instructor.

### **Introduction to Digital Music Composition and Production: One Semester, Grades 7 and 8**

This course introduces students to the place where the creation of music and technology meet. Students learn the basics of creating projects using digital audio workstations (DAWs) and music notation software. Subjects covered in the class include basic drum programming; basic MIDI sequencing (recording with virtual instruments); basic synth programming and sampling; basics of digital audio recording and editing; basic mixing and bouncing. Students have hands-on experience using state-of-the-art technology and music software including Garage Band, MuseScore, and Ableton in our Digital Audio/MIDI Lab. Upon completion of the class students are able to create their own musical composition and produce a high-quality recording of it on their own computers. Previous musical experience is recommended, but not required, for this class.

### **Middle School Vocal Ensemble: Full Year, Grades 7 and 8**

Students study all aspects of singing and choral music as well as the physical and aesthetic elements of musical theater and popular music. Emphasis is placed on rhythm, melody, harmony, dynamics, tone color, and style. The Vocal Ensemble studies a varied repertoire while developing a foundation for healthy singing. Students perfect timing, rhythm, blocking, and choreography to create dynamic performances. This class performs as a traditional choir during the first semester and as a show choir during the second semester. Students have the option of participating in a spring show choir competition. **Concert attendance at several evening performances is required.**

### **Middle School Orchestra: Full Year, Grades 7 and 8**

Students increase their musical knowledge through the advanced-level study of a stringed instrument. Students learn how to shift, vibrate, and tune their own instruments while continuing to develop their musicianship. Performances present a variety of standard string orchestra literature. **Concert attendance at several evening performances is required.** Prerequisite: Sixth Grade Strings, Beginning Instrumental Music for Stringed Instruments, or permission of instructor.



**Jazz Laboratory: Full Year, Grades 7 and 8**

This select group gives young musicians a chance to study a variety of jazz styles in a more focused ensemble. In addition to fostering ensemble skills, students also study the fundamentals of improvisation. **The group rehearses on Tuesday and Thursday mornings at 7 a.m. Concert attendance at several evening performances is required.** Students concurrently enrolled in Concert Winds, Middle School Vocal Ensemble, or Middle School Orchestra qualify to audition for this ensemble.

**Science Electives****Outer Space: One Semester, Grades 7 and 8 Elective**

Students explore the night sky in this science elective. The course opens the students' eyes to our Earth-Moon system, our solar system, the Milky Way, neighboring galaxies, and the universe as a whole. This introductory astronomy course focuses learning both inside Earth's orbit and light years away. During the final unit of the course, students connect what they have learned throughout the semester with material from their seventh grade life science course as they delve into the new and exciting field of Astrobiology.

**Pre-Engineering and Robotics: One Semester, Grades 7 and 8 Elective**

This course provides an introductory study of engineering concepts and requires students to apply their knowledge to design, build, and program a robot. The goal of the course is to allow students to experience the application of physical science and to expose them to an area rich with career opportunities in science, technology, engineering, and math (STEM). The process requires the student to understand the basics of Mechanical Engineering using the Vex IQ Robotics platform.

**Theater Arts Electives****Acting: One Semester, Grade 7**

This course introduces students to the basic elements of theater arts and acting. These include theater games/exercises, mime, vocal technique, improvisation, and scene study. Emphasis is on participation, increasing awareness of self (mind, body, and voice), improving clarity and creativity in communication of verbal and non-verbal ideas. Students deepen their understanding of human behavior.

**Acting: One Semester, Grade 8**

The purpose of this class is to train young students in the art and craft of acting in a nurturing and progressive environment. Utilizing the Sanford Meisner method of scene study, students learn how to analyze text, how to work moment to moment, how to put attention on the other person, and how to be truthful in an imaginary situation. Age-appropriate scenes are the vehicles for this class which culminates in a works-in-progress performance for peers.

**Introduction to Technical Theater: One Semester, Grades 7 and 8**

Introduction to Technical Theater is an opportunity for students to explore the theater arts through beginning stage craft techniques. This is an introductory course on the basic technical theater skills used in pre, post, and running phases of theatrical productions. Lessons may include topics such as: script analysis, theater architecture and instrumentation, stage safety, make-up, jobs in the theater, small prop construction, costume research and design, history of stage lighting and lighting design for the stage, and the basics of sound design.

**Middle School Vocal Ensemble: Full Year, Grades 7 and 8**

Students study all aspects of singing and choral music as well as the physical and aesthetic elements of musical theater and popular music. Emphasis is placed on rhythm, melody, harmony, dynamics, tone color, and style. The Vocal Ensemble studies a varied repertoire while developing a foundation for healthy singing. Students perfect timing, rhythm, blocking, and choreography to create dynamic performances. This class performs as a traditional choir during the first semester and as a show choir during the second semester. Students have the option of participating in a spring show choir competition. **Concert attendance at several evening performances is required.**