



# **FLAGSTAFF ACADEMY**

**2019-2020**

**Middle School Course Catalog**

## Table of Contents

|                                   |    |
|-----------------------------------|----|
| Introduction to the Catalog ..... | 2  |
| Sixth Grade Core Classes .....    | 5  |
| Seventh Grade Core Classes .....  | 7  |
| Eighth Grade Core Classes .....   | 9  |
| Art .....                         | 11 |
| Physical Education .....          | 13 |
| World Languages .....             | 14 |
| Music and Theater .....           | 16 |
| STEM .....                        | 18 |
| Advanced Writing .....            | 22 |
| Social Sciences .....             | 24 |
| Enrichment Courses .....          | 26 |
| Looking Ahead .....               | 27 |

## Introduction to the Catalog

The goal of the course catalog is to help Flagstaff families and students understand the academic journey through Middle School. Included are descriptions of required Core classes, as well as descriptions of our enriching Essentials (electives). Students will have up to four Essentials courses per semester, depending on intervention or student support needs. These courses are to be selected by parents and their students to fulfill their Essentials requirements in addition to the Core curricular requirements of Social Studies, Language Arts, Mathematics, and Science. Each Essential is offered as a means for students to explore areas of interest that may lie outside of the required Core classes. However, each Essential will draw upon content and skills learned as well as be an opportunity to apply and extend knowledge gained in those Core subjects.

Parents, as school partners, should consider selections thoughtfully and with a lens of creativity and curiosity, so as to contribute to our school mission:

**“To develop students who are equipped to be well-rounded, ethical leaders in the world community with a foundation based on science and technology”**

In the Table of Contents you will find a listing of the courses offered at Flagstaff Academy Middle School in the 2019-20 school year along with course descriptions. All Core classes are year-long courses. All Essentials courses are semester-long unless otherwise indicated. There are no extra fees for electives. All fees (except instrument rental fees for band) are covered as part of the school activity fees. Thank you for supporting our electives program by paying your school activity fees.

Elective course registration occurs in the Spring each year and includes information, events, and course enrollment forms. If course enrollment forms are not completed by the deadline, course selection will be completed by school staff.

**Please note:** Some Essentials offerings have specific requirements, such as prerequisite courses, or enrollment by application or by invitation. Those requirements are explained in this guide. **Please also be aware that these courses will be offered based on interest and registration.** If a course does not fill to a minimum capacity, it will not be offered.

Flagstaff Academy Middle School operates on a modified block schedule. Students have the opportunity to fill eight class periods each semester. These classes will be dictated by grade level and required Core classes. The other classes may be filled with Essential courses. Three days a week, students will have a regular eight period day, seeing all of their classes. The other two days will hold extended block periods and only half of their classes will meet on each day. The result is each class meets four times a week with one extended block period. The charts below illustrate a typical student course load and weekly schedule.

| Semester 1                 | Semester 2                 |
|----------------------------|----------------------------|
| 4 Core classes             |                            |
| Up to 4 Essentials classes | Up to 4 Essentials classes |

| Typical Week   |  |  |  |  |
|--|--|--|--|--|
| Monday   | Tuesday  | Wednesday  | Thursday   | Friday   |
| <b>A - Day</b><br>- 8 periods<br>- 45 minute classes | <b>A - Day</b><br>- 8 periods<br>- 45 minute classes | <b>B - Day</b><br>- 30 minute Advisory<br>- 4 periods<br>- 90 minute classes | <b>C - Day</b><br>- 30 minute Advisory<br>- 4 periods<br>- 90 minute classes | <b>A - Day</b><br>- 8 periods<br>- 45 minute classes |

With this type of schedule, students and teachers are given the opportunity for longer, uninterrupted collaboration time, project-based lessons and labs, and are able to dig more deeply into course material. Another benefit of this schedule is that students will have more choices as to which Essentials classes they would like to take, thereby supplementing their personal curriculum with exciting and exploratory courses. This schedule also allows teachers more time to collaborate within grade levels and departments to better support and meet the needs of all students. Consideration is also made in the schedule for late start days and other non-contact days with students.

**Grade Level and Honors Courses:**

- Students have two levels of choice when determining which core classes to take: Honors and Grade Level. The differences between these two levels of courses are as follows:
  - The Colorado Academic Standards and Core Knowledge content for each subject will be covered in both the honors and grade level classes.
  - Honors classes will move at a more efficient pace, with an emphasis on independent practice and discovery through inquiry.
  - In addition to the pace, honors students will increase their depth of knowledge and understanding in order to analyze additional texts to draw comparisons, examine themes, and apply concepts. Students in honors level classes will be expected to cover additional content not included, but still relevant to the Core Knowledge sequence.
  - Students in grade level classes will experience more scaffolded and guided instruction in terms of their comprehension, analysis, and application of content.
  - Students enrolled in Honors level courses will be expected to maintain a high level of academic performance and consistency in order to remain in those classes.

**Advisory:**

- Advisory is a mandatory course for all middle schoolers. Advisory is a mixed grade level course that involves and focuses on teacher and peer connections in school. The curriculum covered throughout the year follows the text *7 Habits for Highly Effective Teens*. Through this text students develop personal character and life planning skills. Other topics covered include; personal reflection skills, and navigating social, academic, and cooperative situations. Advisory groups are also used for special programming days and activities such as late starts, community outreach, and capstone projects. Students will remain in the same Advisory group throughout their middle school career.

## 6th Grade Core

The Core classes for sixth graders are five, year-long courses, focused on growth and mastery of key academic standards aligned with the Core Knowledge sequence and Colorado State Standards for education. All Core classes are offered at grade-level and honors level. Sixth grade students will be able to select up to three Essentials courses per semester.

### ❖ **Math Full Year**

*6th Grade Math*                      *M216 or M226 (honors)*

This mathematics course closely aligns with the Core Knowledge Sequence and the Colorado State Standards. This course follows a spiraling curriculum that builds in-depth concept knowledge across the grade levels. Topics of study include computation, pre-algebra, geometry, statistics, and probability. All students are asked sophisticated mathematical questions and are expected to persevere in their explorations to these questions. This course is available in honors or grade level pacing.

*Pre Algebra*                              *M236*

This accelerated honors mathematics course for 6th grade students closely aligns with the Core Knowledge Sequence and the Colorado State Standards. This course follows a spiraling curriculum that builds in-depth concept knowledge across the grade levels. Topics of study include computation, pre-algebra, geometry, statistics, and probability. All students are asked sophisticated mathematical questions and are expected to persevere in their explorations to these questions. Qualification for this course will be determined based upon classroom performance, teacher recommendation, iReady scores, and CMAS scores.

### ❖ **Science Full Year**                      *M306 or M316 (honors)*

Core Knowledge topics are integrated with Colorado State Science Standards 6th grade science. Plate tectonics will explore the surface of the earth, the earth's layers, crust movements, volcanoes, earthquakes, and evidence of long-term movement of the earth's plates. Students will also delve into astronomy, paying particular attention to the role of gravity in the solar system, stars, star constellations, and galaxies. Following astronomy will be a unit on the oceans of the earth. This unit will include location and physical characteristics of the oceans, composition of seawater, currents, tides, and marine life. The class will then explore physics; specifically heat and energy exchange. Material will cover the various forms of energy and how to generate energy in various ways. The final unit of study will be the human body. Here the focus will be on the circulatory and lymphatic systems, the immune system and how it fights infection, bacterial and viral disease, vaccines, communicable/non-communicable disease, and epidemics.

### ❖ **Language Arts Full Year**                      *M106 or M116 (honors)*

Language Arts follows the Core Knowledge Curriculum which includes the following texts: *The Iliad*, *The Odyssey*, *A Tale of Two Cities*, *Prince and the Pauper*, and the play *Julius Caesar*. Students learn and understand theme, symbolism, point of view, and other literary devices. In regard to writing, students work on friendly and business letters, poetry (both reading and writing), and short constructed responses with some research and Six Traits components.

❖ **Social Studies Full Year**      *M406 or M416 (honors)*

This course follows the curriculum set forth in the Core Knowledge Sequence. Sixth grade Social Studies combines topics from world geography, world religions, world history, U.S. history, and economics. Topics include Ancient Greece and Rome, the Enlightenment, the French Revolution, Immigration in the U.S., and the Industrial Revolution. This course will also incorporate the use of projects that will require students to utilize technology in order to further expand their comprehension and understanding of the curriculum in fun and creative ways. Social Studies also utilizes the Six Traits and constructed response models for writing, aligning with Language Arts in language, expectations, and requirements.

❖ **Compass Full Year**                      *M1505*

All 6th grade students will be required to complete the year-long Compass course that will help them transition to the world of Middle School and support the practice and development of skills and habits that will lead to successes in academia and beyond. Students will rotate through themed curriculum each quarter. The themes and topics include:

*Executive Functions*

This unit is designed to promote organizational habits and decision making skills in regards to executive functions; also including the ability to plan, strategically solve problems, self-regulate behavior, monitor and evaluate performance, and manage time. Through routines, reflections, and community connection circles, students are provided the space and time to give proper attention to their planners, grades, and lockers.

*Technology*

In this unit, sixth graders will learn the appropriate use and basic functions of their school-issued Chromebook. Students will also spend time learning and practicing email and online etiquette. Students in the first quarter will complete required quizzes in which they demonstrate their mastery of the Flagstaff 1:1 Chromebook Guide.

*Health*

In the Health rotation, students will be introduced to a variety of topics. Students will learn and discuss what it means to be healthy and what influences health. This unit will also be covering food and nutrition, growth and development, tobacco, alcohol and drugs, communicable diseases, personal safety and injury prevention. Each topic will be covered over the course of one week and will be taught in the order listed above.

*Character Education*

In the Character Education rotation, students will participate in a book study and connect the major themes to social acceptance, compassion, and anti-bullying. Students will also be exposed to activities and discussions that pull content and ideas from a Peacemakers curriculum, which is based in Restorative Justice practices. Our hope is that students will both internalize and exhibit kindness and good decision making when it comes to how they treat those they come into contact with.





❖ **Social Studies Full Year** M407 or M417 (honors)

This course follows the curriculum set forth in the Core Knowledge Sequence. Seventh grade Social Studies combines topics from world geography, world history, U.S. history, U.S. geography, and economics. Topics include the U.S. Constitution, American Imperialism, World War I, the Roaring Twenties, The Great Depression, and World War II. This course will also incorporate the use of projects that will require students to utilize technology in order to further expand their comprehension and understanding of the curriculum in fun and creative ways. Social Studies also utilizes the Six Traits model for writing, aligning with Language Arts in language, expectations, and requirements.

❖ **Language Arts Full Year** M107 or M117 (honors)

Students in 7th grade Language Arts will continue to build on the skills established in 6th grade. Using the Core Knowledge sequence, students will read and engage with the following texts: *The Strange Case of Dr. Jekyll and Mr. Hyde*, *The Call of the Wild*, and *Anne Frank: The Diary of a Young Girl*. Including the above novels, students will read various short stories by authors such as Edgar Allan Poe, O. Henry, Guy de Maupassant, James Thurber, and several others. Students will study the poetry of Poe, Dickinson, Frost, Hughes, Tennyson, Blake, and many more in order to gain a grasp and understanding of a variety of literary techniques, including figurative language, meter, rhyme, rhythm, irony, and symbolism. 7th grade Language Arts exposes students to a plethora of writing techniques and formats, both narrative and expository, including personal response, reflection, constructed responses, multi-paragraph essays, short stories, and poems. Writing focuses on developing the six traits, while also giving students the opportunity to write in various styles and formats.

## 8th Grade Core

Flagstaff Academy eighth graders are enrolled in four Core classes that are intended to serve as preparation for the transition to high school both in rigor and in content. The Core curriculum classes for eighth graders are year long courses focused on growth and mastery of key academic standards aligned with the Core Knowledge sequence and Colorado State Standards for education. All Core classes are offered at grade-level and at an honors level.

### ❖ **Math Full Year**

#### *8th Grade Math (Algebra 1A)*                      *M203A*

This grade-level mathematics course closely aligns with the Core Knowledge Sequence and the Colorado State Standards. It follows a spiraling curriculum that builds in-depth concept knowledge across the grade levels. Topics of study include algebra, geometry, statistics, and probability. All students are asked sophisticated mathematical questions and are expected to persevere in their explorations to these questions. Students who complete this course will be ready to take Algebra 1 as high school freshmen.

#### *Algebra 1*    *M204*

This accelerated honors course is for 8th grade students who have completed grade-level math through the 7th and 8th grade curriculum (*Honors Pre-Algebra*) or completed Algebra 1, but have not mastered algebra topics as measured by the end of course Algebra 1 exam. It will cover the high school Algebra standards set forth in the Colorado State Standards. Qualification for this course will be determined based upon classroom performance, teacher recommendation, iReady scores, and CMAS scores. Students who successfully complete this course will be ready to take Geometry as high school freshmen.

#### *Geometry*    *M206*

This high school equivalent course is designed for students who have completed grade-level math through Algebra 1 and have demonstrated mastery of Algebra 1 topics as measured by the end of course Algebra 1 exam. It will cover the high school geometry standards set forth in the Colorado State Standards. Qualification for this course will be determined based upon teacher recommendation and passing the proficiency exam for Algebra 1. Students in this class must be in 7th or 8th grade. Eighth grade students who successfully complete this course have the option to choose to move on to Algebra 2 or take an Honors Geometry course as high school freshmen.

### ❖ **Science Full Year**                              *M308 or M318 (honors)*

The focus of 8th grade science is a broad overview of the physical laws controlling the universe. Topics that are covered over the course of the year include: forces, Newton's laws of motion, buoyancy, work, power, energy, electricity, magnetism, electromagnetic radiation, and sound. As the year progresses students build upon their understanding of physics to explore increasingly complex problems. Students apply their math skills to explain phenomena of the physical world. During the last quarter students will learn how all life on earth depends on energy. Material explores photosynthesis

and cellular respiration while still referring back to the physics principles that underlie all other disciplines of science.

❖ **Social Studies Full Year** M408 or M418 (honors)

This course follows the curriculum set forth in the Core Knowledge Sequence. Eighth grade Social Studies combines topics from world geography, post World War II. Curriculum is divided into seven major themes following the Core Knowledge Sequence including: the British Empire & India, China, the Cold War, the Vietnam War, and the Civil Rights Movement. Several units studied in 8th grade social studies align with curriculum and literature taught in 8th grade language arts. This connection reinforces content, as well as gives students the opportunity for various application of that same content. Social Studies also utilizes the Six Traits model for writing, aligning with Language Arts in language, expectations, and requirements.

❖ **Language Arts Full Year** M108 or M118 (honors)

Students will read selections from a wide variety of writers and time periods. The 8th grade Core Knowledge texts include the novels *Animal Farm* and *The Good Earth*, the Shakespeare play *Twelfth Night*, speeches by Martin Luther King, Jr., and excerpts from the works of Maya Angelou and Zora Neale Hurston. In addition to the Core Knowledge texts, students will also read *To Kill a Mockingbird*, *Search and Destroy/The Things They Carried*, and *October Sky/The Crucible*. This curriculum aligns with several units that 8th graders will study in history, creating very cohesive, and relevant cross-curricular content. Writing is a critical part of the language arts curriculum, both narrative and expository. Students will engage in various writing styles, including personal response, reflection, constructed responses, multi-paragraph essays, short stories, and poems. Vocabulary (meaning and usage), elements of literature, and grammar are integral components of the curriculum. By the end of their eighth grade year, students will be well acquainted with the skills and knowledge needed to be successful in high school English and beyond, namely: identifying and writing about literary elements (such as theme and characterization), determining meaning and usage of vocabulary from the text, completing timed writes, and constructing a well-written, academic essay.

## Art

*Art classes are offered on a three year rotation. These classes are offered to all middle school students.*

### ❖ **Art - Application of Art (Skills and Techniques) (Fall 2019) Semester** M1232

In all disciplines, like reading, math, sports, music and programming it is important to develop a strong foundation of skills and techniques in order to progress in the discipline. Students also progress in this manner in the field of artistic expression. This class is designed to provide the fundamental skills and techniques used in the visual arts. By the end of the semester students will be able to identify all the elements of art and principles of design in many varieties of artwork and in their own works. Students will be well practiced in a variety of media which includes drawing, painting, sculpture, mixed media, and more. This class will focus on Impressionism to Modern Art.

### ❖ **Art - Studio Practices (Spring 2020) Semester** M1520

This class provides students the opportunity to apply their skills and techniques from the Fall art class and offer them a chance to strengthen their artistic abilities in a studio setting. This class is for self motivated art students who want to explore the visual arts and showcase their skills. Students will have a mix of teacher assigned projects and student specific projects that they propose and design by creating SMART goals. These projects will allow students the freedom to experiment by taking artistic risks and creating art they want to create! This class will focus on ancient Impressionism and Modern Art.

### ❖ **Photography Semester** M1263

A picture is worth a thousand words. Photographs play an important role in our culture. We use photography to preserve memories, document events, and create artistic works. This course introduces students to the basics of photography, including camera functions and photo composition. Students will learn what it takes to create a good photograph and how they can improve photographs of animals, people, and landscapes. They will also practice using photo-editing software on their photographs. Through a variety of assigned projects, students will engage their creativity by photographing a range of subjects and learning to see the world through the lens of their camera.

### ❖ **Advanced Photography Semester** M1263B

*Requirements: Introduction to Photography*

“There are always two people in every picture: the photographer and the viewer.” — Ansel Adams  
Like any skill, there is room to grow and improve. That is the focus of Advanced Photography. The purpose of this course is to provide students an opportunity to expand on their previous knowledge from Photography. Students will practice and refine their skill with new engaging projects, new terminology, technology and experimentation. As a result, students will find their voice and vision as a photographer, as well as connect their skills to other disciplines.

❖ **Art - Intro to Animation Semester**

*M1506*

This class is designed to give students the opportunity to explore the world of animation. Students will practice various methods of animation, including stop-motion, cell animation, and claymation. During these practices, students will develop and apply the twelve basic principles of animation. Many projects will require students to collaborate and work as a team. This class will incorporate important skills which will transfer to other disciplines, such as problem solving, critical thinking, planning, and collaboration.

## Physical Education

*Physical Education courses are offered on a three year rotation. These classes are offered to all middle school students.*

### ❖ **Invasion Games 1 (Fall 2019) Semester**

*M1270*

This course will focus on invasion games. An invasion game is when teams attempt to invade another team's territory to successfully attack their goal/target area. Students will learn tactical skills and strategies that will aid their improvement as an individual and as a team member. Games and sports in this class include; lacrosse, team handball, and basketball. Students will learn training principles along with the requirements for maintaining and building fitness levels along with participation in the following fitness tests: pacer, curl-ups, push-ups, modified pull-ups, 50 yd. sprint test, vertical jump test, and sit and reach.

### ❖ **Net/Fielding/Target Sports 1 (Spring 2020) Semester**

*M1271*

This course is designed to teach fielding games in which the batting team attempts to strike an object and run between set markers before the fielding team can recuperate the object. It also includes net games in which players/teams score by hitting an object into court space so an opponent cannot return back within the allowed number of hits. Also, this class includes target games in which players score when an object is thrown or struck lands closest to a predetermined target. Games and sports in this class include; badminton, volleyball and softball. Students will learn training principles along with the requirements for maintaining and building fitness levels along with participation in the following fitness tests: pacer, curl-ups, push-ups, modified pull-ups, 50 yd. sprint test, vertical jump test, and sit and reach.

## World Languages

*For students enrolled in the honors level Language Arts courses, a world language class is a required Essential course.*

### ❖ **French 1A Full Year**

*M912A*

This course will provide an introduction to the French language and culture. With a strong base in not only vocabulary acquisition but also conversation and proficiency, students will explore the language through interactive and engaging lessons. Upon completion of this class, students will be able to hold basic conversations to introduce themselves and others, explain which classes they have and when, and share likes and dislikes with classmates. This, as well as the following French courses, align with the SVVSD District high school French curriculum.

### ❖ **French 1B Full Year**

*M912B*

*Requirements: French 1A or a previous full year of French*

French 1B is a continuation of French 1A. Completion of French 1A and B will be the equivalent of 1 year of High School French. In this course the students will focus conversation points on what they like to do in their spare time and on vacation, as well as holidays and occasions they celebrate at home. The past and imperfect tense, as well as direct and indirect object pronouns will be the highlighted structures.

### ❖ **French 2 Full Year**

*M913*

*Requirements: Through French 1B*

This course continues to focus on mastering reading, writing, listening, and speaking in French. Students will expand upon the material learned in French 1A and 1B and will be introduced to more complex grammatical structures, vocabulary and cultural topics. Students will engage with the language through dialogues and conversations and will read authentic texts that help students see the language in context. Students will expand their writing skills by writing about more complex topics using a variety of tenses. Students will be asked to think critically about cultural issues and voice their opinions in French. By the end of the year students will be able to talk about topics such as health, the environment, and memories from childhood. In addition to the curriculum, students take the ACTFL Assessment of Performance towards Proficiency in Language (AAPPL) which measures their proficiency level using national standards. This course aligns with district high school French 2 courses.

❖ **Spanish 1A Full Year**

M906

This course is designed to bring students to a beginning level of proficiency through the use of a high school level curriculum called Descubre. Its intent is to expose students to the four basic language skills--listening, speaking, reading, and writing--and to cultures different from their own. This Descubre-based course includes grammar concepts, vocabulary, culture, and speaking activities. By the end of the year, students should be proficient enough to carry on simple conversations about hobbies, sports, school, and other basic topics of everyday life. Through skits and stories and other engaging activities to build upon their writing and speaking skills, students build the fluency they will need to move through the Spanish curriculum and enter high school with two full years of Spanish completed. This, as well as the following Spanish courses, align with the SVVSD District high school Spanish courses.

❖ **Spanish 1B Full Year**

M907

*Requirements: Spanish 1A or a previous full year of Spanish*

This course is a continuation of Spanish 1A Descubre program, similarly focusing on grammar and the four basic language skills. The course includes grammar concepts, vocabulary, culture, and speaking activities. The preterite and imperfect tenses are introduced and applied to past tense contexts. By the end of the year, students should be proficient enough to plan a vacation, to make purchases, describe the importance of routines, order food in a restaurant, and navigating a typical urban area. Students prepare and present original skits, oral presentations, written paragraphs and other engaging activities to build upon their writing and speaking skills. With the completion of this course, students have moved through high school Spanish 1.

❖ **Spanish 2 Full Year**

M908

*Requirements: Through Spanish 1B or satisfactory placement test score*

This advanced language course reinforces basic language skills and further develops the ability to communicate in Spanish. The course includes an expansion of material covered in Spanish 1A and 1B and introduces new vocabulary, grammatical structures, and cultural aspects. Emphasis is placed on communication and fluency. Students will be asked to think critically about cultural and social issues and voice their opinions in Spanish. Grammar, expansion of oral and listening skills, and development of reading and writing skills are also addressed. By the end of the year, students are proficient enough to navigate a doctor's office and discuss their health, ask for and give directions, discuss the benefits of technological advances, and talk about their childhood. Students prepare and present original skits, oral presentations and other engaging activities to build upon their writing and speaking skills. In addition to the curriculum, students take the ACTFL Assessment of Performance towards Proficiency in Language (AAPPL) which measures their proficiency level using national standards. This course aligns with district high school Spanish 2 courses.

## Music & Theater

### ❖ **Choir Full Year**

M1290

Middle School Choir is a beginning to intermediate class for students who have a desire and interest in singing, harmony, and choral music. The class will provide an exciting hands on opportunity for students to develop the fundamentals of good vocal production, pitch recognition, harmony singing, and overall musicianship as it relates to singing within a choral ensemble.

### ❖ **Beginning Band Full Year**

M1292

*Required Equipment: Students need to supply their own instrument. Selecting an instrument will be facilitated through "Instrument Tryout Sessions" where students will have a hands-on experience with the instruments. A rental/purchase instrument from one of the local music stores is suggested.*

Beginning Band is for the student who has the desire and motivation to learn to play a band instrument. This course will start from square one and launch an adventure into the incredible world of making music. The instruments in Beginning Band are: flute, clarinet, alto saxophone, trumpet, trombone, baritone and percussion. Percussion instruction is a "classical" approach which includes snare drum and mallet instruments (bells, xylophone, etc.). Though the drum set is not a part of beginning band, the fundamentals and techniques acquired through this class will apply to all types of drumming. This is an elective class and will meet daily with the expectation that students will participate for the entire school year (both semesters). Each semester will culminate with a concert performance.

### ❖ **Intermediate Band Full Year**

M1293

*Requirements: A minimum of one year of instruction on a band instrument and completion of the first level instruction book. Students new to Flagstaff will be required to play for the band director to assess their level of preparation for Intermediate Band.*

This ensemble is for the Middle School student who is ready for an advanced music track. Higher-level music in a variety of styles and genres will be played as well as continued instruction and reinforcement of music fundamentals and playing techniques. Each semester will culminate in a concert performance.

### ❖ **Advanced Band Full Year**

M1294

*Requirements: Advanced Band is an audition only ensemble. In addition to the audition, students should have had a minimum of two years of instruction on a band instrument prior to the current school year. Students new to Flagstaff will be required to play for the band director to assess their level of preparation for Advanced Band.*

A variety of challenging music will be performed in several styles and genres as well as continued instruction and reinforcement of music fundamentals and playing techniques. Students will perform at least three concerts during the school year.

❖ **Jazz Band Full Year**

M1291

**Requirements: To be eligible to join Jazz Band, students must have auditioned in the Advanced Band class. This means Jazz Band students will have two band classes... and it will be awesome!** Rhythm section instruments (piano, guitar, bass, drum set) should have a minimum of one year of private lessons and/or experience. Students new to Flagstaff will be required to play for the band director to assess their level of preparation for Jazz Band.

Any band instrument can be in Jazz Band. In addition to woodwinds and brass, a jazz band also includes the Rhythm Section: Piano, Guitar, Bass and Drum Set. The Jazz Band Class will concentrate on learning the ins and outs of this true American art form: Jazz. Through exercises in articulation and rhythmic interpretation students will develop the techniques to play this unique style on their instrument. Students will do lots of playing as well as listening to examples of master jazz performers to develop a concept of tone, style and inflection. Students will also explore the art of improvisation which is the root of this genre of music.

❖ **Drama Semester**

M1252

This elective course introduces students to the skills and disciplines needed to be a focused and successful actor. Our studies in acting will be based on group games, memorized scene work, monologues, improvisation, and imagination. This course will provide opportunities for students to express themselves creatively in an un-intimidating and accepting class environment as students will be free to try and fail, and will be challenged to try again! Some focus topics that we will explore include improvisation, pantomime, storytelling, oral interpretation pieces, and selected plays. Throughout the semester there will be opportunities for students to showcase their talents both in and out of the classroom.

## STEM

### Science, Technology, Engineering, Math

SCALABLE  
GAME DESIGN



Engineering  
Everywhere™



#### ❖ Algebra 2 Full Year

M211

*Requirements: Successful completion of Algebra 1 and Geometry with a grade of A; score of 80% or better on the end of year Algebra 1 assessment; or concurrent enrollment in Geometry.*

This class is for the advanced 8th grade math student. The curriculum will follow the standards for Colorado high school Algebra 2. As such, students will be expected to work at a brisk pace, complete nightly homework, adhere to the mathematical habits of mind of a productive problem solver, and maintain a positive attitude when work becomes challenging. Students must have a TI 84 or similar graphing calculator.

#### ❖ Fun with Games and Puzzles Semester

M1285

This course is designed to provide students an opportunity to solve problems and practice cooperation and collaboration by playing a variety of board (not computer) games and solving logic puzzles that will be fun! *Blokus, Checkers, Backgammon, Yahtzee, Clue, Racko, and card games* are just some of the games that might be available for this elective. Students will solve logic puzzles such as Sudoku, Ken-Ken, Perplexors, and crosswords. This class will also discuss and add some games and puzzles based on student interest. It will be an old-fashioned, non-electronic **BLAST** playing games and solving puzzles!

#### ❖ Pre-Engineering: Architecture/Energy Systems(Fall 2019) Semester M1588

While it may seem like magic, it's really just technology and physics at work powering and activating the devices and sensors around us. Students that choose this elective will engage in hands-on projects to investigate how electricity, light and sound work. Students will explore the fundamental behavior of electrons, photons, and the electromagnetic spectrum through hands-on experiments and demonstrations. Students will acquire practical knowledge and skills in basic circuit design, multimeter and oscilloscope use and soldering. Students will also learn how basic sensors (photodetectors, ultrasound, CCD cameras) operate. (Renewable/Green Energy)

❖ **Pre-Engineering: Mechanical Engineering (Spring 2020) Semester** M1589

Students will learn about ancient civilizations and the mechanical problems they faced while learning how to use simple machines such as gears, levers, and pulleys and understand the importance of strength of materials. Students will then use mechanical engineering skills to design their own timekeeping technology. Students will practice numerical and scientific processes in order to expand their problem solving skills.

❖ **Computer Science: Programming 1 Full Year** M1282

In this elective, students will be introduced to age-appropriate programming applications. Students will be using AgentCubes to program games such as Frogger and Pacman. Students will also use the Processing programming language which builds on the Java language, but uses a simplified syntax and a graphics user interface. In addition, students will learn computational thinking skills and computer science concepts. Students will be exposed to HTML/CSS.

❖ **Computer Science: Cybersecurity and Networking Full Year** M1286

*Requirements: Programming I*

In this course, students will learn about the major computer operating systems: Windows, Linux, and Mac and their different versions. Using virtual machines, students will get a hands on experience of being a system administrator, finding and fixing flaws in system security. In addition to operating systems, we will also learn about computer networking and network security.

Eligible students enrolled in this course will have the opportunity to apply and if accepted, join the Flagstaff Academy Cyberpatriots team. In Cyberpatriots, students compete with other middle schools to find and fix vulnerabilities in systems and networks. Students who continue Cyberpatriots in high school may earn national recognition and scholarship money! To learn more about the Cyberpatriot program, please visit the link: <https://goo.gl/LWtPWf>.

❖ **Computer Science: Robotics/Physical Computing (Fall 2019) Semester** M1287

*Requirements: Programming I*

In this course students will continue their learning of programming in Processing from Programming I. Students will then move on to robotics where they will use Cubelets, Dash and Dot, Lego Mindstorms etc for robotics. Physical computing will include the use of Raspberry Pi, Breadboard Kits for Logic Circuits, and fashion/textile technology. From the inputs of sensors to environment to outputting light, sound, and/or motion, interaction becomes possible, and through coding, endlessly customizable.

❖ **Computer Science: Drones (Spring 2020) Semester** M1288

*Requirements: Programming I*

This course will unlock the magic of drone technology. Students will learn the laws, regulations, and registrations of drones. They will also have opportunities to use flight simulators, fly drones, and even build basic drones from the ground up. This course will conclude with drone races through obstacle courses.

❖ **MythBusters Semester**

*M1500*

Ever wondered if double-dipping really spreads germs? Does toast really always land butter-side down? Can you make a glow stick out of Mountain Dew, vinegar, and baking soda as claimed on the internet? Separating truth from fiction can be tough! In this elective students will endeavor to find the truth as we investigate claims using research and the scientific method. Throughout this course students will also watch episodes of *MythBusters* as inspiration and to analyze and critique the investigative methods demonstrated on the show.

❖ **The Science of Science Fiction Semester**

*M1516*

Are you a fan of science fiction? Did you ever wonder if any of the things in sci-fi books and movies could actually exist? Then this is the class for you. We will be reading science fiction novels and short stories as well as watching science fiction movies. While doing this students will examine the ways in which science fiction reflects popular culture and the concerns of society today. We will also examine, demonstrate, and test the scientific feasibility of concepts proposed in these novels.

❖ **Aristotle Leads the Way Semester**

*M1521*

In this class we will be traveling back in time to ancient Babylonia, Egypt, and Greece. Students will meet the world's first astronomers, mathematicians, and physicists and explore the lives and ideas of such famous people as Pythagoras, Archimedes, Brahmagupta, al-Khwarizmi, Fibonacci, Ptolemy, St. Augustine, St. Thomas Aquinas, and Aristotle—one of the greatest philosophers of all time—whose scientific ideas dominated much of the world for eighteen centuries. This class will blend history, science, engineering, and art to paint a picture of how modern science developed.

❖ **Anatomy Semester**

*M1502*

A hands on science lab studying the anatomical structures of fish such as sharks, amphibians such as frogs, small mammals such as pigs, and humans. There will be a brain anatomy unit with a brain dissection. This class will include anatomical terminology, building models, and dissection of various animals. The class will culminate in comparative anatomy of the different animal kingdoms over time.

❖ **Forensic Science: Crime Scene Science Semester**

*M1503*

Comprised of independent hands-on laboratory kits, Lyle and Louise introduce your students to a broad range of techniques in forensic analysis, including DNA Typing, Questioned Document Examination, Forensic Entomology, Bite Mark Analysis, Blood Spatter Analysis, and Hair and Fiber Analysis.

❖ **Food Science Semester**

*M1504*

This course is an introductory exploration of cooking and food chemistry. Students will examine kitchen safety, nutrition, cooking, and chemical reactions in our food. The focus of the course is healthy eating, the science behind our food and cooking food.

❖ **Planes, Trains, and Automobiles Semester**

*M1518*

This is a project based course that will focus on research and discussions about the evolution of transportation in the United States. The wacky, weird, and innovating ideas of the past are too interesting and too much fun to be forgotten.

❖ **Life on Earth Semester**

*M1517*

Life! It's everywhere on Earth; you can find living organisms from the poles to the equator, from the bottom of the sea to several miles in the air, from freezing waters to dry valleys to undersea thermal vents to groundwater thousands of feet below the Earth's surface. Over the last 3.7 billion years or so, living organisms on the Earth have diversified and adapted to almost every environment imaginable. The diversity of life is truly amazing, but all living organisms do share certain similarities. Come learn the history of life on earth!

## Advanced Writing

### ❖ **Creative Writing Semester**

M1507

Creative Writing is an opportunity for students to discover and develop their inner writer! This elective combines grammar and mechanics needed for effective writing with the wonderful world of storytelling. Grammar mini-lessons accompany larger writing projects that delve into different genres such as fiction, perspective, flash fiction, memoirs, instruction, children’s literature, and more. Creative Writing provides students with the chance to write their stories and practice their skills through writing. Smaller class sizes allow for meaningful collaboration and more focused instruction to help students improve as writers. At the end of each semester, students will edit and refine pieces of their writing to be published in a Creative Writing Anthology or entered in various writing contests. This course is repeatable by design.

### ❖ **Journalism Full Year**

M905

*Requirements: By application only; open to 7th and 8th graders only*

[Click here to access the application](#) (due February 8, 2019)

The Spectrum staff creates and produces a newspaper every 3-4 weeks highlighting everything unique and endearing about Flagstaff. Prospective staff members are required to complete an application that demonstrates their skills in writing, editing, and layout. Spectrum staff members are expected to maintain a “B” or better grade average in language arts, and must have a signed recommendation by their language arts teacher. Students must demonstrate the ability to work independently, meet deadlines, and collaborate, both with other members of the staff, as well as members of the Flagstaff community. Self-initiative and motivation are pillars of a successful Spectrum staff.

### ❖ **Yearbook Full Year**

99309

*Requirements: By application only*

*\*Preference will be given to those students who have previous yearbook experience.*

[Click here to access the application](#) (due February 8, 2018)

Yearbook is an opportunity for students to explore their creative passions, as well as a chance to write, interview, photograph, draw, and compile the aspects that make Flagstaff Academy a special and unique place to be. This elective is available to 6th, 7th, and 8th graders. It utilizes photography, layout, caption writing skills, interviewing skills, time management, teamwork, and diligence with deadlines. In Yearbook, students will develop and apply basic journalism skills, demonstrate effective communication skills; oral and written, create and manipulate photography equipment and photographs, and meet deadlines!

❖ **Speech and Debate Semester**

*M1212*

This course will develop and improve public speaking, argumentative and critical thinking skills, and communication skills in a variety of settings. Students will engage in delivering speeches, as well as participating in formal and informal in class debates. In addition, students will have the necessary skills to critique, analyze and question speeches and debates delivered by others. Students will prepare and deliver speeches and participate in several in class debates and forums on current topics. Techniques will be taught to control speech anxiety, and structure and organize information to present to a variety of audiences. As such, the fundamentals of physical and vocal delivery skills, use of language and gesturing, as well as listening skills will be learned.

❖ **Battle of the Books Semester**

*M1515*

This course is designed for students who love to read and are interested in a class that explores a variety of different types of literature. This elective is devoted to reading a variety of different books with a focus on reading enjoyment and artistic interpretation along with diverse written applications including digital publishing and student driven blogs. Students will independently study books as well as work in book clubs to collaborate and discuss with like minded peers the importance and effects of stories. Student interpretations of literature will be both written and artistic in nature with an emphasis on small and whole group discussion and collaboration.

## Social Sciences

### ❖ **Personal Finance Semester**

*M1509*

This course will inform students how individual choices directly influence occupational goals and future earnings potential. Real world topics covered will include income, money management, spending and credit, as well as saving and investing. Students will design personal and household budgets utilizing checking and saving accounts, gain knowledge in finance, debt and credit management, and evaluate and understand insurance and taxes. This course will provide a foundational understanding for making informed personal financial decisions leading to financial independence. Learn what makes the stock market tick. Students will invest "money" in real companies of their choice, watching their fortunes rise or fall with the actual market. Strategize and speculate on risk vs. reward while investigating the history and function of the stock market in our economy. Will you go for broke or end up broke? Anything can happen when you play the market.

### ❖ **Future Problem Solvers Semester**

*M1511*

Do you enjoy problem solving? Do you have a vision for the future? If you answered yes to either question, the **semester** long Future Problem Solvers class is for you. The Future Problem Solvers course fosters critical and creative thinking skills through the examination of real-world topics such as infectious diseases, 3D printing, Space, etc. Each week, you will be given the opportunity to think outside of the box to identify a problem, generate futuristic solutions and participate in fun team building activities. During the semester class, we will study one topic in detail and learn about the six step problem solving process.

### ❖ **Future Problem Solvers 2 Full Year**

*M1512*

Drones, social media and coral reefs, oh my! In the **year long** Future Problem Solvers class, you will have the opportunity to compete in Global Issues Problem Solving (GIPS), Community Issues Problem Solving (CmPS) and/or Scenario Writing competition. For GIPS, we will research global topics and you will generate creative solutions to futuristic problems using the six-step problem solving process. For those interested in CmPs, you will address problem in our school and/or community as individuals or as a team by taking action. For those interested in Scenario Writing, you will write a 1,500 word fiction story on one of the four topics we study throughout the year. If you are ready to spend a year engaged in projects, skits and research, look no further as this class is perfect for you.

### ❖ **Psychology Semester**

*M1247*

Psychology is a multifaceted scientific discipline that studies human behavior. It is the study of biological, physiological and genetic factors that influence behavior taking into account emotional, social and developmental factors as well. Overall psychology is concerned with how we think, feel and behave. Come join us and learn about why people behave the way they do. You might even find some answers about your own behavior as well!

❖ **Comparative Government Semester**

*Requirements: Open to 7th and 8th grade students.*

*M1522*

This course is designed as an introduction to the Advanced Placement (AP) Comparative Government class students can take in high school. This course will examine six different political systems, the differences in the process of policy, and global political and economic changes. This course will give students an in depth look at how different political systems operate, create policy, and communicate globally. Students will also gain an understanding of how global politics impacts the global economy (macroeconomics), as well as the impact on local economy (microeconomics). Students will also study global governing bodies and partake in a Model United Nations simulation where they will make policy, and engage in diplomacy and negotiation.

❖ **Mythology Semester**

*M1501*

Calling all heroes and heroines! This course is designed for students who desire an experience with a variety of mythology. Its intent is to acquaint students with the influence of Greek, Roman, Norse, Asian and/or Native American mythology in literature, the arts, and everyday life. The course includes a study of the similarities and differences among the myths of various cultures, their place in literature, and their value as universal symbols.

## Enrichment Courses

### ❖ **Student Assistant Semester**

*M1303*

*Students who choose this course will be interviewed before being selected.*

This Student Assistant position offers instruction for school office skills and public relations. Students will work with the Receptionist, Administrative Assistant, and other office personnel to attain these skills during a scheduled period of the day. Students may also work in classrooms to assist teachers. Students assist the school staff by performing a variety of supportive tasks including clerical (non-confidential) duties. Students who are interviewed and selected will serve as valuable resources for teachers and office personnel. Students are expected to be dependable and industrious. The ability to relate well with other students, adults, and visitors is very important.

### ❖ **Study Hall (Fall only) Semester**

*M1301*

This is an opportunity for students to work independently on classroom work and homework under supervision at school. Homework assistance is not available during study hall and students are expected to utilize time appropriately during class. This class is available for the fall semester only.

### ❖ **Study Hall Spring (Spring only) Semester**

*M1304*

This is an opportunity for students to work independently on classroom work and homework under supervision at school. Homework assistance is not available during study hall and students are expected to utilize time appropriately during class. This course is available for the spring semester only.

## Looking Ahead

Some of our courses are offered on a rotation schedule, allowing for students to progress through a curriculum during their middle school career without repetition of content. Please take a look at what we have planned for the upcoming academic years in the following disciplines. These courses are subject to change.

❖ **Art courses offered in 2020-21:**

Modern Art to Contemporary Art

Art: Skills and Techniques (*Fall*)

Art: Studio Practices (*Spring*)

❖ **Physical Education courses offered in 2020-21:**

Invasion Games 2 (*Fall*)

Cooperative/Adventure Games (*Spring*)

❖ **Pre-Engineering courses offered in 2020-21:**

Production Engineering (*Fall*)

Design & Computer Modeling (*Spring*)

**We are so fortunate to have wonderful teachers who continually improve themselves and our courses for the benefit of your students!**