D3 My Way Middle School Course Descriptions

• 6th Grade

Language Arts 600

Semester 1:

Through a study of myths, fables, and folk tales from different cultures—as well as novels and other modern forms of narrative, students learn the elements common to all forms of literature and also the elements that are unique to each form. In lessons focused on writing and language study, students craft essays in several different modes and learn how to create the more formal style expected for school writing assignments. Lessons in this semester guide students to recognize and reproduce text structures and organizational patterns that work for different types of essays. The writing lessons also demonstrate the kinds of changes that students should make during the revising and editing stages of the writing process. Opportunities for teacher feedback are frequent, detailed, and varied.

Semester 2:

The second semester of Language Arts 6 builds on the skills and concepts introduced in the first semester. Students tackle more difficult texts in Semester B and apply more advanced analysis skills to reading and writing tasks. They also study some of the more subtle aspects of language, such as the role of connotation and nuance in an author's word choices and how those choices affect readers. Reading assignments are selected, in part, to provide models for students' own writing in specific modes, forms, or genres. Several lessons demonstrate methods of sharing and publishing writing using 21st century technology.

Math 600

Semester 1:

Students begin the first semester of this course with a review of basic addition, subtraction, multiplication and division of whole numbers. More complex concepts are built on these basics. Students learn how to add, subtract multiply and divide integers, decimals and fractions. The course also includes lessons on ratios and proportions.

Semester 2:

The second semester of Math 6 introduces students to the order of operations and how to use them in solving application problems. Building on these concepts, students are then introduced to the basics of algebra and

algebraic expressions. Students then learn how to apply these problem-solving skills to percentages, and solving single and multiple step equations. An exploration of Geometry, probability and statistics concludes the second semester.

• <u>Science 600</u>

Semester 1:

Science 6 is an integrated course in which the fields of science are not compartmentalized. Instead, earth and space science, life science, and physical science are integrated within each semester. Semester A begins with instruction on the nature of science. The course focuses on both the understanding and application of science topics. It includes a variety of assignments that help students apply their knowledge of science concepts. Throughout each module, there are multiple opportunities for formative assessment.

Semester 2:

Semester 2 builds on the concepts learned in the first semester and prepares the learners with the building blocks needed to dive deeper into earth and space science, life science, and physical science.

• Social Studies 600

Semester 1:

The first semester of Social Studies 6 introduces students to the beginnings of ancient civilization. We will trace the path of human origins in Africa and follow the path of migration around the Earth. This course will help students understand why we study history and the process in which we form conclusions about events in the past. Students will begin to learn about the major ancient civilization around the world and their cultures. Modern civilizations can trace their foundations to these ancient civilizations, and their cultures and histories teach us much about ourselves and the modern world in which we live.

Semester 2:

In the second semester of Social Studies 6, students will continue to examine ancient civilizations and their cultures. In this semester we will continue to trace the path of human civilization from the Mediterranean through the Eastern world. An emphasis will be placed on critical thinking and connecting themes in history to our modern world.

• 7th Grade

Language Arts 700

Semester 1:

Through analysis of written, spoken, and multimedia texts, students will become more critical consumers of information and of various forms of media. They will also synthesize and organize ideas to prepare structured essays in several different modes, including narrative, persuasive, and expository. Each lesson will guide students in learning and applying specific strategies for reading and writing different types of texts. A review of basic English mechanics is included in many of the writing lessons, along with a discussion of levels of formality required for different purposes and audiences. This course provides instruction in many modalities, including audiovisual presentations and videos, interactive activities, projects, and discussions. Opportunities for teacher feedback are frequent, detailed, and varied.

Semester 2:

The second semester of Language Arts 7 builds on the skills and concepts introduced in the first semester. Students tackle more difficult texts and themes in Semester B, and the level of analysis demonstrated and required is more in-depth. In this part of the course, students study the English language closely—both its history and evolution, and the less obvious ways it can be used to convey meaning. The reading assignments are selected to guide students in understanding how language can be used to convey broader themes in poetry, drama, and humorous or satirical texts. Students continue to develop their writing skills through multi-draft assignments and projects. Emphasis in this semester is on recognizing the multiple levels of meaning that any word or phase might convey, and in writing one's own texts with these concepts in mind.

Math 700

Semester 1:

In this first semester, students work with problem-solving skills, beginning algebra skills, geometry, decimals, fractions, data analysis, number theory and patterns, percents, and integer use. Projects measure the student's ability to integrate and apply the course objectives.

Semester 2:

In this continuation of the first semester, students work with fractions; unit conversions; proportions and rates; percents; geometry topics including lines,

angles, polygons, polyhedrons, perimeter, area, surface area, volume, and transformations; squares and square roots; permutations and combinations; and probability. Real-life application of concepts is emphasized in all units.

• <u>Science 700</u>

Semester 1:

Science 7 is an integrated course in which the fields of science are not compartmentalized. Instead, earth and space science, life science, and physical science are integrated within each semester. Semester A begins with instruction on the nature of science. The course focuses on both the understanding and application of science topics. It includes a variety of assignments that help students apply their knowledge of science concepts. Throughout each module, there are multiple opportunities for formative assessment.

Semester 2:

Semester 2 builds on the concepts learned in the first semester and prepares the learners with the building blocks needed to dive deeper into earth and space science, life science, and physical science.

Social Studies 700

Semester 1:

This study of the history of the United States emphasizes how ideas, events, and philosophies have shaped the nation. Students will learn about America's past while mastering the skills of historical interpretation. Study begins with the earliest arrivals of people and ends with the conclusion of the Civil War.

Semester 2:

This course is a continuation of the first semester with an emphasis on how historical ideas, events, and philosophies have shaped the United States. Beginning with Reconstruction, this course uses the same skill development approach to guide students through U.S. history to the present.

8th Grade

Language Arts 800

Semester 1:

During the first semester of this year-long course, students will read and analyze various kinds of written texts, including novels and short fiction, informational texts representing a wide range of topics and forms, and several one-act plays. Lessons in Semester A will also guide students in writing their own narratives and essays, using the readings in the course as

both examples and sources of ideas for reflection, analysis, and argument. Students will learn better ways to discuss their thoughts and perceptions with others—they will practice their skills in collaborative discussions as well as informal journal entries, presentations, and speeches. Writing assignments include personal narratives, analytical and persuasive essays, and an original one-act play. Special emphasis is placed on reading in certain content areas, such as science and history, as well as understanding and thinking critically about news and media sources.

Semester 2:

In Semester 2, students will examine the role of historical autobiographies and diaries in our understanding of history. In the process, they'll study the impact of point of view on nonfiction texts. Students will be given opportunities to write autobiographical narratives of their own and then asked to connect their experiences to universal themes or philosophical positions, which they explore through writing about them. In the second half of the semester, students will study the relationship between poetic expression and several conventions of language, including syntax, voice, sentence types, and punctuation. Next, they will explore the nature of creativity, the processes that tend to produce good literature, and the features of experimental and multi-genre forms of fiction. Near the end of the semester, students will reflect on their own growth and development throughout the year, compiling a portfolio that illustrates the progress they've made. Finally, students will consider what high school will ask of them and how they might fulfill those expectations, having gained a better understanding of their strengths as well as areas ripe for continued learning and progress.

Math 800

Math 800 curriculum is currently under review. A description will be provided as it is available.

Algebra 1

Semester 1:

Algebra 1 Semester 1introduces students to the world of Algebra through expressions and equations. Students will evaluate algebraic expressions, solve linear equations and graph them. This course also steers students through various real-world scenarios with the emphasis on using basic statistics to interpret the information given and found. Students learn through online lesson materials, videos and interactive activities. The end of each unit tests students' understanding with a self-check guiz with feedback. Also

included is a unit exam and project for students to apply what they have learned. Teacher feedback is provided throughout the semester.

Semester 2:

Algebra 1 Semester 2 builds on the concepts learned in the first semester by providing a strong foundation in solving problems. Students will work with problems and applications that involve exponents, quadratic equations, polynomials and factoring methods, rational and radical equations, data analysis and probability. Students will interact with course materials through online lessons, videos, interactive questions and real-world applications. Each unit ends with a self-check quiz to confirm knowledge of the concepts learned. There is also a unit exam and project. Teacher feedback is given throughout the course.

**Algebra I is considered an advanced math placement for 8th grade students. Students are placed in this option at teacher and/or counselor recommendation based on performance in 7th grade math.

• Science 800

Semester 1:

Science 8 is an integrated course in which the fields of science are not compartmentalized. Instead, earth and space science, life science, and physical science are integrated within each semester. Semester A begins with instruction on the nature of science. The course focuses on both the understanding and application of science topics. It includes a variety of assignments that help students apply their knowledge of science concepts. Throughout each module, there are multiple opportunities for formative assessment.

Semester 2:

Semester 2 builds on the concepts learned in the first semester and prepares the learners with the building blocks needed to dive deeper into earth and space science, life science, and physical science.

• Social Studies 800

Semester 1:

In this course students will understand the significance of government, law, and politics. They will examine the United States foundational documents and how they shaped the United States government. Students will examine the purposes and functions of federal and state government, law, and political systems. Learners will evaluate their role and civic responsibility to their families, communities, and country including voting and being a productive

member of society. Learners will follow a step-by-step approach for successfully completing each lesson, which includes textbook reading, interactive activities, supplemental reading, lecture, video clips, and PowerPoint presentations to enhance and reinforce learning. Learners receive frequent feedback from teachers and peers through discussions.

Semester 2:

This course takes a more individualistic approach as students closely examine topics such as the justice system, local government, the environment, and the economy. Learners will understand the role that they play in each of these topics and the differences that they can make. Students will get to know leaders and influential people that have championed many causes including civil rights and the environment. Learners will also learn proper ways to interact in society including interpersonal skills and respecting differences in others including disabilities. By the end of semester B students will have a deeper understanding of their civic responsibilities as well as the difference one individual can make in society.

Additional Courses/Electives Offered

• Earth and Space Science

Semester 1:

In the first semester students will learn about the scientific method and hone their understanding of using scientific measurements to Earth and Space Science. Also included are lessons on Earth maps and globes including detailed instruction on how to find specific locations using latitude and longitude. Much of the first semester focuses on space science. Students will learn about Earth movements, seasons, the Moon, tides, solar and lunar eclipses, the Sun and its role as the main source of light and energy in the solar system. They will learn about planets, asteroids, meteors, comets and their orbits and how force gravity holds it all together. Outside the solar system there are lessons on stars, constellations, nebulae, the Milky Way and galaxies beyond. There have been many recent discoveries in space science. Accordingly, careful attention has been given to presenting the most updated information available in areas of discovery such as stars with planets and the latest methods of detecting them as well as a look at NASA's most recent Curiosity landing on the Martian surface.

Semester 2:

In the second semester, study zeroes closer to home: Earth science. Yet, the coursework is uniquely integrated and applied to disciplines of study outside of Earth science. Starting with the Earth's interior students study rocks and minerals, volcanoes, earthquakes, undersea ridges, trenches and mountains and how the study of Earth's geologic history helps explain these phenomena. On the Earth's surface students study weathering, soil and erosion as well as water in all its forms the water cycle, oceans and ocean currents. Above the Earth they will study the atmosphere: its composition, air pressure and air movement. This knowledge is then applied to lessons on how human populations are affected by natural resources, renewable and non-renewable, both on and inside the Earth. These lessons are integrated with lessons that discuss how humans and living organisms are affected by air and water pollution, acid rain, changes in the ozone layer and how these conditions influence biodiversity, habitat loss and species survival. The course is capped off by lessons that take an in-depth look at the process of technology design giving students a look at how scientists and technical designers work together to achieve common goals. Lastly, students are taught about the kinds of professions that currently exist in the science and technology fields and learn about the necessary academic preparation needed to gain employment in these branches of study.

Study Skills

The Study Skills and Strategies course equips students with skills and understandings critical to effective learning. Using a unique approach to the traditional topic of study skills, this course weaves understanding regarding the role of the brain in learning into the instruction of discrete learning skills and strategies. Moving beyond a list of good tips and ideas, the Study Skills and Strategies course will challenge students to develop intentional approaches to learning. They will be required to make connections between the strategies and skills they learn in this course and the implementation of those strategies and skills in their other coursework. Upon completion of the course, students will have learned a variety of specific learning skills and strategies, gained greater understanding of their own learning preferences, and become prepared to develop and implement specific learning and study plans for any academic course or other learning needs.

Character Education

This course teaches students practical skills for understanding and managing their emotions, setting goals and getting organized, understanding and getting along with others in our diverse world, and making good decisions. Research shows that people who practice these skills have greater academic achievement as students and experience more success and satisfaction as adults.

Individual and Team Sports/PE

To improve and maintain optimum health, it is necessary for people of all ages to participate in physical exercise. There is little doubt that, in addition to students in schools, the number of adults participating in sports and recreational activities in the United States has increased in recent years. Physical education is much more than just fitness and exercise. A well-planned program will cause you to think and express your emotions about different situations. In addition, a good program can make a valuable contribution to your education. These experiences will help you develop a sense of wellness. Emphasis in this course is placed on the value of these sports as possible lifetime activities and on creating a clear explanation of the rules and basic principles of a variety of sports. The sports covered in this course are archery, bicycling, golf, skiing, tennis, volleyball, baseball, basketball, football, hockey, and soccer. Information about the playing area and equipment, basic rules, safety considerations, and terminology for each sport are included in the discussions. For the most part, the information presented in each lesson applies to sports programs throughout most sections of the United States.

• Computer Basics

In this course you will learn how to use productivity and collaboration tools, such as G Suite by Google Cloud to create word processing documents, spreadsheets, surveys and forms such as personal budgets and invitations.

Art

Students will experiment with several different art materials and tools to see what each tool can do best. Students will explore ordinary things around them to become more observant of the structures and meanings of things which can be seen in their home and community. Your work will be your own study of the forms, textures, movements, and patterns of the things that you see everyday. Each project and each lesson is based on the one before it; so

always do the lessons in the order they are given. Be sure to follow the directions exactly regarding which materials, sizes, and subject matter to use for each project. Each lesson will be a study of a new way of drawing. The examples given will show only the method and materials to be used, never the same subject or size as the project assigned. The examples are never to be copied. An example will only show one way of using the technique described. By becoming more observant, by experimenting with new materials, and by exploring a variety of methods, students will continue to grow in artistic skill and enjoyment. Beyond fundamental skills are various levels of creativity. Each lesson provides room for expressing the technical skill learned in a unique, creative way.

Leadership

Leadership class is an opportunity for students to learn to collaborate with their peers to support the D3 My Way learning community and to learn what skills it takes to be an effective leader.

STEAM

• Scratch Coding

Scratch is a program developed by MIT teaching students the basics on how computers think! This program will introduce students to real coding programs and allow them to drag and drop coding blocks creating a fully functional program. The simple user interface and tutorials allow students to quickly create and run their code to see its results! This course assumes no prior computer coding knowledge and includes self-graded multiple-choice tests and quizzes.

• World Languages and Culture

Guitar

In this semester long course, students learn guitar basics including technique, chords, and performance skills.

Reader's Theater