



## Middle School Course Descriptions

All middle school courses offered through the Online Academy @ North Hills Middle School are listed below and arranged by grade level. The following pages provide a more detailed course description for each course. Additional courses may be offered based on course requests. Please see the last page for a list of additional potential course offerings based on overall student course demand.

### Grade 8

English 8  
<sup>1</sup> Math 8  
<sup>1</sup> Algebra 1  
<sup>1</sup> Geometry  
Physical Science 8  
Social Studies 8  
Health (semester)  
Physical Education (semester)  
<sup>2</sup> Spanish 1  
<sup>2</sup> German 1  
<sup>2</sup> Literacy Arts

### Grade 7

English 7  
Literacy Arts 7 (semester)  
<sup>1</sup> Math 7  
<sup>1</sup> Algebra 1  
Earth and Space Science 7  
Social Studies 7  
Introduction to Computers (semester)  
Physical Education (semester)

### Grade 6

English Language Arts 6  
Math 6  
Life Science 6  
Social Studies 6  
Introduction to Computers (semester)  
Physical Education (semester)

#### Notes:

<sup>1</sup> Select one mathematics course

<sup>2</sup> Select one language or literacy arts

## 8<sup>th</sup> Grade Required Courses

### English 8

In this course, students will master the subtle and complex art of the Standard American English writing style, allowing them to express their ideas more clearly and effectively than ever before. Students will analyze poetry, practice effective research techniques, and prepare complete and polished reports and essays. Entertaining videos and diverse reading selections provide a wealth of information. Peer discussions and teacher feedback also contribute to help students learn the processes needed to become more effective writers. In addition, the student will outline, draft and revise a polished research paper, while learning the importance of avoiding plagiarism, citing sources, and organizing arguments. This ability to craft a strong thesis and prove it with evidence will equip students for creative and logical writing in high school and beyond.

### Math 8

(Students should enroll in one mathematics course)

This Math 8 is a Pre-Algebra on grade level course that will help students move from the world of simple mathematics to the exciting world of Algebra and Geometry. They will develop skills that will be necessary throughout their life by learning to solve real world problems. Each concept is presented using examples of the skills, concepts, and strategies students will need. Scaffolding of ideas is provided to ensure student learning. With numerous hands on activities and demonstration videos, they will have multiple opportunities to enhance their process solving skills. Students will be given different assessment opportunities to demonstrate mastery of each skill.

### Algebra 1

(Students should enroll in one mathematics course)

Algebra 1 introduces students to the world of algebra through expressions and equations. Students will evaluate algebraic expressions, solve linear equations and graph them. Students will work with problems and applications that involve exponents, quadratic equations, polynomials and factoring methods, rational and radical equations, data analysis and probability. 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 quiz with feedback. Also included is a unit exam and project for students to apply what they have learned.

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## Geometry

(Students should enroll in one mathematics course)

Geometry is the study of the measurement of the world. Through practical applications, the student sees how geometric reasoning provides insight into everyday life. The course begins with the tools needed in geometry. From these foundations, the student explores the measure of line segments, angles, and two-dimensional figures. Students will learn about similarity, triangles and trigonometric ratios. Students explore quadrilaterals and circles, and learn how an object is transformed, as well as how to represent that transformation algebraically and geometrically.

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## Physical Science 8

This is an introduction to the Physical Sciences and scientific methodology. The objectives are to impart a basic knowledge of the physical properties and chemistry of matter. Skills are developed in the classroom, and reinforced through homework reading, and interesting labs that relate to everyday life.

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## Social Studies 8

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 follow a step-by-step approach for successfully completing each lesson, which includes textbook reading, interactive activities, supplemental reading, lecture, video clips, and Power Point presentations to enhance and reinforce learning. By the end of the course, students will have a deeper understanding of their civic responsibilities as well as the difference one individual can make in society.

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## Health

(semester)

This course will help the student understand the importance of making decisions that will affect his or her physical, emotional, mental and social health. This course will provide students with the knowledge and resources they will need to make responsible informed decisions about their health. Students will have an opportunity to evaluate their own values, opinions and attitudes about health.

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## Physical Education

(semester)

Physical Education encompasses learning how to live and maintain a healthy lifestyle. This course covers physical fitness, why it is important, how to have a healthy attitude, and how to stick with a healthy game plan. In this ever-changing world, physical fitness becomes more important and more difficult to find the time for. This course is designed for anyone, ranging from the beginner to advanced abilities.

# 8<sup>th</sup> Grade Elective Courses

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## Spanish 1

(Students in 8<sup>th</sup> grade should enroll in one language or the literacy arts course)

Spanish 1 is designed to develop an authentic and practical understanding of the Spanish language and culture. Students will have the ability to express their thoughts, feelings, and opinions in the target language within basic, real-life situations and learning scenarios. All new concepts, grammatical concepts, and cultural information will be introduced in context while incorporating various listening, speaking and writing activities.

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## German 1

(Students in 8<sup>th</sup> grade should enroll in one language or the literacy arts course)

German 1 course is an introductory course teaching basic comprehension and communication in German. It coordinates the study of language with culture through the use of video, audio and mass media production. This course assumes prior or no knowledge of the German language. It introduces the fundamentals of conversational and grammatical patterns of the German language with presentations to present the material. Students who complete the course successfully will begin to develop a

functional competency in the four primary language areas: speaking, reading, listening and writing, while establishing a solid grammatical base and exploration into German culture.

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## Literacy Arts

(Students in 8<sup>th</sup> grade should enroll in one language or the literacy arts course)

The Literacy Arts 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, 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.

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## 7<sup>th</sup> Grade Required Courses

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### English 7

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. Students also study the English language closely- both its history and evolution, and the less obvious ways it can be used to convey meaning. This course provides instruction in many modalities, including audiovisual presentations and videos, interactive activities, projects, and discussions..

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### Literacy Arts

(semester)

The Literacy Arts 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, 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.

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### Math 7

(Students should enroll in one mathematics course)

In Math 7, students work with problem-solving skills, beginning algebra skills, geometry, decimals, fractions, data analysis, number theory and patterns, percents, and integer use. As the course moves forward, 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. Projects measure the student's ability to integrate and apply the course objectives. Real-life application of concepts is emphasized in all units.

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### Algebra 1

(Students should enroll in one mathematics course)

Algebra 1 introduces students to the world of algebra through expressions and equations. Students will evaluate algebraic expressions, solve linear equations and graph them. Students will work with problems and applications that involve exponents, quadratic equations, polynomials and factoring methods, rational and radical equations, data analysis and probability. 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 quiz with feedback. Also included is a unit exam and project for students to apply what they have learned.

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## Earth and Space Science 7

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Students will learn about the scientific method and hone their understanding of using scientific measurements in Earth and Space Science. Also included are lessons on maps and globes including detailed instruction on how to find specific locations using latitude and longitude. 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. 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. 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 of 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.

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## Social Studies 7

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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. 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.

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## Introduction to Computers

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(semester)

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.

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## Physical Education

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(semester)

Students consider the importance of word play exercises in improving their facility with language while building a compelling and creative writing style. Focusing on word nuances and precision, students write in a variety of modes, including poetry, song lyrics, prose poetry, short stories, and creative nonfiction. There are several opportunities for peer review in this semester, during which students learn best practices for participating in writing workshops, and then revise their work using feedback from their peers.

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## 6<sup>th</sup> Grade Required Courses

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### English Language Arts 6

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English 6 is divided into four main categories: Storytelling, Heroes, Myths, and Poetry. Assignments include writing a narrative essay and completing a book report. Student assignments include writing an original fairy tale and composing a poem.

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### Math 6

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Students begin 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. 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 percents and solving single and multiple step equations. An exploration of Geometry, probability and statistics concludes the course.

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### Life Science 6

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Life Science is the study of cells, heredity, biological populations and their changes over time. It includes human biology, ecology, diversity of organisms and the history and nature of science. In this course, students will have the opportunity to conduct and design experiments, identify and classify organisms. Students will work on developing skills in data recording, classifying, measuring, observing, hypothesizing, analyzing, evaluation and inferring.

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## Social Studies 6

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. An emphasis will be placed on critical thinking and connecting themes in history to our modern world.

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## Introduction to Computers

(semester)

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.

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## Physical Education

(semester)

Physical Education encompasses learning how to live and maintain a healthy lifestyle. This course covers physical fitness, why it is important, how to have a healthy attitude, and how to stick with a healthy game plan. In this ever-changing world, physical fitness becomes more important and more difficult to find the time for. This course is designed for anyone, ranging from the beginner to advanced abilities.

## Potential Course Offerings

Based on the number of course requests, the following courses may be offered during 2020-2021. For more information, please contact Dr. Jessica Sapsara, Assistant Principal, at 412-318-1454 or [SapsaraJ@nhsd.net](mailto:SapsaraJ@nhsd.net).

### World Languages

French 1

Latin 1