



Innovations International Charter School of Nevada
Middle School Curriculum Plan
2024 – 2025

Middle School Course Progression

Throughout the middle school years, Innovations International Charter School of Nevada values and emphasizes a well-balanced educational program. The middle school course progression is provided in the table below.

Grade 6	
• Mathematics • Science • Physical Education (P.E.)	• English Language Arts (ELA) • Reading • Elective
Grade 7	
• Mathematics • Science • ELA • Reading	• History and Geography 7 • Elective • P.E.
Grade 8	
• Mathematics • Science • Computer Science and Applications (one semester for high school credit) • P.E./Health	• ELA • History and Geography 8 • Elective

Grade 6

English Language Arts

Below is a sample of content your student should know and be able to do by the end of Grade 6.

READING – LITERATURE AND INFORMATIONAL TEXT

- Read various texts for various audiences and purposes to examine how authors use evidence from the text to support their arguments and analyze the strength of the author's argument.
- Read to determine a theme or central idea of a literary text and how it is conveyed through specific details used by the author.

WRITING

- Write arguments to support claims with clear reasons and relevant evidence. Students will form an opinion, create a claim to support that opinion, research information to support it, and create essays that demonstrate their research.

- Write narratives that develop real or imagined experiences or events using an event sequence that unfolds naturally and logically.
- Compare and contrast thematically-based texts in different genres (e.g. poems, historical novels, and fantasy stories).
- Write routinely over short and extended time frames for various tasks, purposes, and audiences.

LANGUAGE

Recognize variations from standard English in their own and others' writing and speaking and apply that knowledge to their own writing and speaking. To learn more about the Nevada Academic Content Standards (NVACS) for ELA, refer to <https://doe.nv.gov/offices/office-of-teaching-and-learning/english-language-arts>.

NVACS for ELA reflects a shift to college and career readiness to better prepare students for opportunities after high school in the following areas:

- Complexity: practice regularly with complex text and its academic language.
- Evidence: ground reading, writing, and speaking in evidence from text, both literary and informational.
- Knowledge: build knowledge through content-rich nonfiction.

Mathematics

Below is a sample of content your student should know and be able to do by the end of Grade 6.

RATIOS AND PROPORTIONAL RELATIONSHIPS

- Understand ratio concepts and use ratio reasoning to solve problems (e.g. unit rates involving such topics as pricing and speed).

THE NUMBER SYSTEM

- Apply and extend understandings of multiplication and division to dividing fractions by fractions.
- Compute fluently with multi-digit numbers.
- Apply and extend number understanding to include the rational number system (positive number, negative numbers, decimals, and fractions).

EXPRESSIONS AND EQUATIONS

- Apply and extend previous understandings of arithmetic to expressions with variables.
- Reason about and solve one-variable equations and inequalities (e.g. solve for x if $2x = 6$, since $2 \times 3 = 6$, the $x = 3$).

- Represent and analyze quantitative relationships between dependent and independent variables (e.g. distance and time).

GEOMETRY

Solve real-world and mathematical problems involving area, surface area, and volume.

STATISTICS AND PROBABILITY

- Develop an understanding of statistical variability.
- Summarize and describe distributions based on various attributes, such as measures of center (median and mean) and measures of variability (interquartile range and mean absolute deviation).

Science

Below are the phenomena-driven science units your student will learn by the end of Grade 6.

- Microbiome
- Metabolism
- Metabolism: Engineering Internship
- Traits and Reproduction
- Thermal Energy
- Ocean, Atmosphere, and Climate
- Weather Patterns
- Earth's Changing Climate
- Earth's Changing Climate: Engineering Internship

NVACS for Science identify eight practices of science and engineering and seven crosscutting concepts that are essential for every student to use. Their purpose is to help students deepen their understanding of science content and develop a coherent, scientifically-based view of the world.

Science and Engineering Practices

- Asking questions (for science) and defining problems (for engineering)
- Developing and using models
- Planning and carrying out investigations
- Analyzing and interpreting data
- Using mathematics and computational thinking
- Constructing explanations (for science) and designing solutions (for engineering)
- Engaging in argument from evidence
- Obtaining, evaluating, and communicating information

Crosscutting Concepts

- Pattern
- Cause and Effect: Mechanism and Explanation
- Scale, Proportion, and Quantity
- Systems and System Models
- Energy and Matter: Flows, Cycles, and Conservation
- Structure and Function
- Stability and Change

Grade 7

English Language Arts

Below is a sample of content your student should know and be able to do by the end of Grade 7.

READING - LITERATURE AND INFORMATIONAL TEXT

- Read to determine an author's point of view or purpose in a nonfiction work; analyze how the author takes a position different from other authors.
- Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period to understand how authors of fiction use or alter history.

WRITING

- Organize writing, including supporting statements and conclusions, focus on evidence, and show that the evidence is accurate and reliable.
- Write narratives that use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events.
- Conduct short research projects using multiple sources to answer and generate additional related questions for further investigation.
- Develop arguments with clear reasons and relevant evidence.

LANGUAGE

Determine the meaning of unknown and multiple-meaning words and phrases based on Grade 7 reading and content by choosing from a range of strategies, such as using context clues, applying Greek or Latin affixes (e.g. replace, replaceable, irreplaceable) or consulting reference materials, such as dictionaries and glossaries.

To learn more about NVACS for English Language Arts (ELA) refer to <https://doe.nv.gov/offices/office-of-teaching-and-learning/english-language-arts>.

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- Evidence: ground reading, writing, and speaking in evidence from text, both literary and informational.
- Knowledge: build knowledge through content-rich nonfiction.

Mathematics

Below is a sample of content your student should know and be able to do by the end of Grade 7.

RATIOS AND PROPORTIONAL RELATIONSHIPS

Solve real-world problems using fractions, decimals, percents, and rates.

THE NUMBER SYSTEM

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers (fractions, decimals, and positive and negative whole numbers).

EXPRESSTIONS AND EQUATIONS

- Use properties of operations to generate equivalent expressions (e.g. Using the following, since $3 \times 21 = 3(20 + 1) + (3 \times 1) = 60 + 3$).
- Solve problems involving rational numbers (positive, negative, fractions, decimals) and algebraic expressions and equations.

GEOMETRY

- Draw, construct, and describe geometric figures (angles, triangles, prisms, pyramids, etc.) and describe the relationships between them.
- Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

STATISTICS AND PROBABILITY

- Use random sampling to draw inferences about a population.
- Draw inferences about populations based on samples.
- Compute the theoretical probability of chance events and compare this with experimental results.

Science

Below are the phenomena-driven science units your student will learn by the end of Grade 7.

- Geology on Mars
- Plate Motion

- Plate Motion: Engineering Internship
- Rock Transformations
- Phase Change
- Phase Change: Engineering Internship
- Chemical Reactions
- Populations and Resources
- Matter and Energy in Ecosystems

NVACS for Science identify eight practices of science and engineering and seven crosscutting concepts that are essential for every student to use. The purpose is to help students deepen their understanding of science content and develop a coherent, scientifically-based view of the world.

Science and Engineering Practices

- Asking questions (for science) and defining problems (for engineering)
- Developing and using models
- Planning and carrying out investigations
- Analyzing and interpreting data
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- Constructing explanations (for science) and designing solutions (for engineering)
- Engaging in argument from evidence
- Obtaining, evaluating, and communicating information

Crosscutting Concepts Pattern

- Cause and Effect: Mechanism and Explanation
- Scale, Proportion, and Quantity
- Systems and System Models
- Energy and Matter: Flows, cycles, and Conservation
- Structure and Function
- Stability and Change

Social Studies

History and Geography 7 examines the development of the Western Hemisphere with an emphasis on the Americas. Using appropriate technology, students develop an understanding of current world issues and relate them to geographical, historical, political, economic, and cultural contexts.

Students will develop, research, and answer compelling questions using various cross-disciplinary sources. Students will construct organized arguments using researched evidence and reasoning for various audiences and purposes.

Students will participate in rigorous academic discussions, emphasizing multiple viewpoints in which claims and evidence are acknowledged and critiqued.

Students will take action on local, regional, and global problems at various times and places.

NVACS for Social Studies identifies six disciplinary skills and six key social studies disciplines essential for students to understand the world around them. Their purpose is to create lifelong learners with the skills and knowledge to shape our nation and respond to future challenges.

Disciplinary Skills

- Constructing compelling questions
- Creating supporting questions
- Gathering and evaluating sources
- Developing claims and using evidence
- Communicating and critiquing conclusions
- Taking informed action

Key Disciplines of Social Studies

- History
- Multicultural
- Civics
- Geography
- Economics
- Financial Literacy

Grade 8

English Language Arts

Below is a sample of content your student should know and be able to do by the end of Grade 8.

READING – LITERATURE AND INFORMATIONAL TEXT

- Cite evidence from text that most strongly supports an analysis of that is explicitly stated and/or implied from a book, article, poem, or play.
- Analyze how differences in the points of view of characters and the audience or reader create such effects as suspense or irony.

WRITING

- Plan and conduct research projects that include several steps, use many credible and documented print and/or digital sources, progress through multiple drafts, and produce a written report or multi-media presentation.

- Write narratives that engage the reader by establishing a clear point of view, introducing a narrator and characters, and organizing a sequence of events that unfolds logically and naturally.
- Write arguments using a formal style to support claims with clear reasons and relevant evidence.
- Draw evidence from literary or informational texts to support analysis and research.

LANGUAGE

Form and use verbs in the active and passive voice by selecting verbs that best fit the purpose and mood of sentences that make up a written composition.

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<https://doe.nv.gov/offices/office-of-teaching-and-learning/english-language-arts>.

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- Complexity: practice regularly with complex text and its academic language.
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- Knowledge: build knowledge through content-rich nonfiction.

Mathematics

Below is a sample of content your student should know and be able to do by the end of Grade 8.

THE NUMBER SYSTEM

- Know that there are numbers that cannot be written as fractions. These numbers are called irrational number (e.g. π and $\sqrt{2}$).
- Compare irrational numbers, locate them on a number line approximately, and estimate the value of expressions (e.g. 2π).

EXPRESSIONS AND EQUATIONS

- Use exponents and square roots (e.g. $\sqrt{36} = 6$ and $\sqrt{20} = 2\sqrt{5}$) and cube roots (e.g. $\sqrt[3]{27} = 3$) to represent and solve equations (e.g. $x^2 = 64$, $\sqrt{x^2} = \sqrt{64}$, $x = \pm 8$).
- Understand slope and graph linear equations.
- Analyze and solve linear equations and systems of linear equations (e.g. solve for x , $3x + 2 = 23$).

FUNCTIONS

- Define, evaluate, and compare functions.

- Use functions to model relationships between quantities.

GEMOETRY

- Understand congruence and similarity.
- Use the Pythagorean Theorem to compute the lengths of sides of right triangles.
- Solve real-world and mathematical problems involving the volume of cylinders, cones, and spheres.

STATISTICS AND PROBABILITY

Find patterns between two characteristics of a set of objects (e.g. car weight and miles per gallon).

Science

Below are the phenomena-driven science units your student will learn by the end of Grade 8.

- Harnessing Human Energy
- Force and Motion
- Force and Motion: Engineering Internship
- Magnetic Fields
- Light Waves
- Earth, Moon, and Sun
- Natural Selection
- Natural Selection: Engineering Internship
- Evolutionary History

NVACS for Science identify eight practices of science and engineering and seven crosscutting concepts that are essential for every student to use. The purpose is to help students deepen their understanding of science content and develop a coherent, scientifically-based view of the world.

Science and Engineering Practices

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Crosscutting Concepts

- Pattern
- Cause and Effect: Mechanism and Explanation
- Scale, Proportion, and Quantity
- Systems and System Models
- Energy and Matter: Flows, Cycles, and Conservation
- Structure and Function
- Stability and Change

Social Studies

History and Geography 8 examines the development of the eastern hemisphere with an emphasis on global studies. Using appropriate technology, students develop an understanding of current world issues and relate them to geographical, historical, political, economic, and cultural contexts.

Students will develop, research, and answer compelling questions using various cross-disciplinary sources. Students will construct organized arguments for various audiences and purposes.

Students will participate in rigorous academic discussions, emphasizing multiple viewpoints in which claims and evidence are acknowledged and critiqued. Students will take action on local, regional, and global problems at various times and places.

NVACS for Social Studies identifies six disciplinary skills and six key disciplines of social studies that are essential for every student to understand the world around them. The purpose is to create lifelong learners with the skills and knowledge to shape our nation and respond to future challenges.

Disciplinary Skills

- Constructing compelling questions
- Creating supporting questions
- Gathering and evaluating sources
- Developing claims and using evidence
- Communicating and critiquing conclusions
- Taking informed action

Key Disciplines of Social Studies

- History
- Multicultural
- Civics
- Geography

- Economics
- Financial Literacy

Learning Beyond the Core

The library promotes lifelong learning through:

INFORMATION LITERACY

Students access information to solve an information problem or question using various digital and printed resources. They recognize accurate, relevant, and comprehensive information in stating both broad and specific questions. They develop a plan to use various sources and can explain the kinds of information found in each, distinguishing between fact, point of view, and opinion.

INDEPENDENT LEARNING

Students explore a range of sources to find information of personal interest or wellbeing and apply the information to real-life purposes. They read various genres of literature, including mythology, short stories, drama, poetry, fiction, and non-fiction. They evaluate the information-seeking process at each stage as it occurs and make adjustments as necessary to improve the process and the product. They revise, improve, and update their own work.

SOCIAL RESPONSIBILITY

Students organize information into formats for presentation, whether working individually or in groups. They help to organize and integrate the contributions of all group members into an informational product. Students use ethical behavior in regard to information and information technologies, plagiarism, and citation of sources. Students explore a range of sources to find information of personal interest or wellbeing and apply the information to real-life purposes. Other areas of learning beyond the core areas of reading and writing, mathematics, science, and social studies include:

COMPUTER SCIENCE AND APPLICATIONS (GRADE 8)

This one-semester course provides students with skills in computer science and applications. Areas of emphasis include computer science, computational thinking, productivity applications, digital citizenship, and integrated technology. Instructional practices incorporate integration of diversity awareness, including appreciation of all cultures and their important contributions to society. This course is appropriate for Grades 8-12. This course fulfills the one-half computer science credit required for high school graduation.

HEALTH (GRADE 8)

Students focus on human wellness's mental, physical, social, emotional, and environmental aspects. They learn lifelong skills to enhance overall health and wellbeing, including

communications, decision-making, and goal-setting. Students examine the following health education topics: wellness, nutrition and physical activity, body systems, substance use and abuse, communicable and non-communicable diseases, violence prevention, safety, and environmental and consumer health.

Students receive instruction on human immunodeficiency virus, human reproductive system, related communicable diseases, and sexual responsibility. This one-semester course fulfills the health requirement for Grade 8.

Note: A signed parent/guardian permission slip for the sex education unit of instruction is required.

PHYSICAL EDUCATION (GRADES 6-8)

Students focus on developing a health-enhancing level of physical fitness while participating in various physical activities. They develop motor skills, manipulative skills, and movement patterns while focusing on safety. Health-enhancing fitness concepts will be explored through personal goal-setting and self-evaluation.

Students are moderately to vigorously physically active for fifty percent of the instructional time. One semester of physical education is required in Grades 6-8.

COMPUTER SCIENCE (GRADES 6-8)

- Design meaningful solutions for others, incorporating data from collaborative team members and the end user, to meet the end user's needs.
- Systematically identify and fix problems with computing devices and their components.
- Collect data using computational tools and transform the data to make it more meaningful and useful.
- Identify risks associated with sharing information digitally (e.g. phishing, identity theft, hacking).
- Explain how physical and digital security measures protect electronic information.

MULTI-TIERED SYSTEM OF SUPPORTS

The Multi-Tiered System of Supports (MTSS) is an educational framework designed to provide a structured approach to addressing the diverse academic and behavioral needs of students in Kindergarten-Grade 12. Comparable to constructing a robust educational foundation, MTSS operates on three tiers:

Tier I (Universal Level): At this foundational level, all students receive high-quality, standards-based instruction, employing evidence-based teaching practices and engaging activities.

Tier II (Targeted Level): Recognizing that some students may require additional support, Tier II interventions involve targeted strategies such as small group instruction or specialized activities to address student-specific learning needs.

Tier III (Intensive Level): This tier assists students who need additional time and instruction to demonstrate adequate progress or growth, necessitating intensified interventions. This level may involve smaller groups or individualized attention tailored to the student's needs.

Within the MTSS Framework, the school uses Positive Behavioral Interventions and Supports (PBIS) to improve all students' social, emotional, behavioral, and academic outcomes. Social and emotional learning also empowers students to manage emotions, set and achieve goals, demonstrate empathy, form positive relationships, and make responsible decisions.

MTSS is a systematic approach to ensure that every student receives the necessary resources and support to thrive academically, fostering an inclusive environment that accommodates various learning profiles and promotes overall student success.

COMPREHENSIVE SCHOOL COUNSELING PROGRAM OVERVIEW

As part of the instructional team, school counselors play an integral role in all students' academic, career, and social/emotional development. Through classroom lessons, small groups, and individual interventions, school counselors implement strategies and activities to support and maximize each student's learning ability and help prepare students to make informed choices regarding post-secondary options to complete future career goals. School counselors assist in providing resources to minimize barriers for students. The school counseling program also provides the foundation for personal social-emotional growth as students progress through school and into adulthood.