



COURSECATALOG





ENGLISH

FIFTH GRADE

The fifth grade English curriculum is designed to help students read critically across genres, engage in thoughtful discussions, annotate texts with purpose, and write clear, well-structured paragraphs that cite specific textual evidence to support their ideas. They engage with different genres of literature that focus on themes, including but not limited to identity, social inequalities, and the power of relationships. Through small group and whole-class discussions, students practice constructive dialogue with their peers while also developing their ability to annotate as they learn how to thoughtfully articulate insights and observations about a literary text. They gain confidence through various modes of expressive, analytical, and imaginative writing assignments that emphasize prewriting, drafting, and revision. The spelling curriculum deepens and expands a word-specific knowledge base that is fundamental to meaningful communication. The primary texts read throughout the year include *Wonder*, by R. J. Palacio; *The Birchbark House*, by Louise Erdrich; *Esperanza Rising*, by Pam Muñoz Ryan; and *The Pants Project*, by Cat Clarke.

SIXTH GRADE

Sixth grade English offers a comprehensive exploration of writing and literature that deepens and extends the fifth grade focus on thoughtful and reflective engagement with a range of literature through guided discussion and written expression. The fall begins with a unit on personal narrative writing where students study mentor texts from *Breakfast on Mars* and *37 Other Delectable Essays*. They develop active reading, discussion, and writing skills through a structured process of drafting, revising, and feedback, while also working on spelling fluency with *Spelling Connections*. In the winter, students dive into *Nowhere Boy* by Katherine Marsh, analyzing themes of belonging and friendship, further expanding their vocabulary, and honing their analytical writing by crafting well-organized paragraphs. The spring term shifts focus to the human experience through the teleplay “Monsters Are Due on Maple Street” and the novel *Inside Out and Back Again* by Thanhha Lai. Students reflect on themes of resilience, compassion, and community, culminating in five-paragraph essays that showcase their critical thinking and literary analysis skills.

SEVENTH GRADE

The seventh grade English curriculum is largely focused on honing students' writing abilities. Students work their way up from a three-paragraph analytical essay to a five-paragraph essay during the course of the year. There is a focus on persuasive writing, daily responses to prompts related to themes emerging from the class readings, and various creative pieces. Throughout the writing process, students synthesize the information they gather in class discussions and daily readings into a coherent argument using concise and intentional language. Students are assessed through discussion boards, writing prompts, reading comprehension assessments, class discussions, writing and grammar exercises, vocabulary practice, and essays. By the end of the school year, students will be well-versed in the structure of a five-paragraph essay, confident in their ability to develop a thesis statement supported with textual evidence, and able to identify key retention strategies implemented while reading our texts or studying vocabulary words. The primary texts read throughout the year include *Animal Farm* by George Orwell, *A Midsummer Night's Dream* by William Shakespeare, and *Piecing Me Together* by Renée Watson.

EIGHTH GRADE

The goal of the eighth grade English curriculum is to develop and nurture critical thinking and writing skills through student-centered discussions and analytical and personal writing. Persuasive writing skills and literary analysis are integrated throughout the various units, alongside creative and visual projects, as well as opportunities for public speaking. Year-long themes of social and individual identities are explored through the course's core texts, which may include: *When the Emperor Was Divine* by Julie Otsuka; *Maus I & II* by Art Spiegelman; *The House on Mango Street* by Sandra Cisneros; and *The Catcher in the Rye* by J.D. Salinger. Units may be supplemented with poems, short stories, video clips, and other forms of media. Students will leave eighth grade with a strong comprehension of critical reading, writing, and the ability to communicate literary concepts effectively.

NINTH GRADE

The ninth grade English curriculum focuses on complex themes and texts that require students to think critically about their place in the world. Using the course texts: *The Odyssey* by Homer translated by Emily Wilson; *Exit West* by Mohsin Hamid; and *Song of Solomon* by Toni Morrison, the course seeks to produce compassionate, informed, articulate, and effective exponents of critical thought and positive change, skills which supplement and parallel the ninth grade capstone Poquonook Solutions Project. This curriculum is meant to emphasize empathy and awareness while imparting a global perspective by considering what it means to seek refuge, to journey, to discover roots, and how home, or the idea of it, drives people.



SCIENCE

FIFTH GRADE

The fifth grade science classroom is centered around the exploration of the world around us through hands-on experiences, cultivating a love of the outdoors and scientific discovery. Students begin the year with an introduction to the scientific method. They further develop their skills of observation in a year-long field study of Indian Mountain and the organisms that live on and around campus. Through their study of the local ecosystem, students make connections between what they are learning in the classroom and what they observe in the natural environment. Students learn about human interactions with the physical world while studying biomes and regions of Earth.

SIXTH GRADE

In sixth grade science, the main area of study is human biology and health through the lens of human body systems. Students investigate each of the systems of the body, their function and form, and their interactions with other systems. Students also explore other facets of human anatomy, like the five senses. They learn how to integrate vocabulary, take notes, discuss as groups, perform laboratory experiments, and write scientifically. Formal laboratory reports of class experiments are introduced in this class. Note-taking skills from fifth grade are also reinforced as students develop group study guides and long-answer prompts needed for quizzes and for reference throughout the year.

SCIENCE

In seventh grade science, students embark on an exploration of Sustainability Science, integrating traditional Earth and Space Science with important modern-day issues of global warming, climate change, and Earth stewardship. By incorporating innovative and culturally diverse perspectives, the course goes beyond mere memorization of content, encouraging students to question, reflect, and deepen their understanding of what science truly means in today's world. Through interactive discussions and activities hosted both inside and outside of the classroom, including readings from a wide range of academic texts, lab work, and forest walks, students will cultivate a personal connection with nature whilst honing their foundational skills for scientific inquiry.

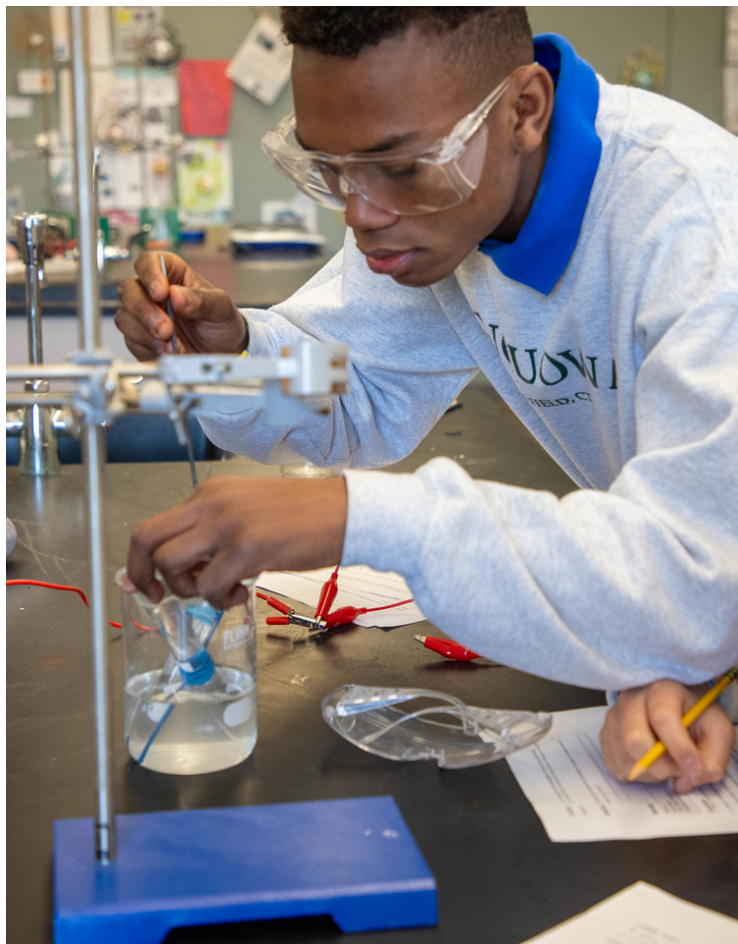


EIGHTH GRADE

Students study Lab Science in eighth grade. This course focuses on teaching lab skills through the basic concepts of chemistry and physics. Students first focus on matter and its physical and chemical properties, engaging in lab work and experimentation that reinforces the concepts presented in class. Utilizing the data generated by their lab work, students practice analyzing results, graphing, and drawing conclusions. Additionally, writing scientifically, which is detailed yet concise, is emphasized. Lab Science aims to give students a window through which to see the possibilities of further application of these fields of science as well as a mirror with which to see themselves engaged in scientific work.

NINTH GRADE

Ninth graders at Indian Mountain engage in Applied Biology, a year-long exploration of the biological sciences, designed to foster an understanding of the fundamental processes that shape living systems and their interaction with the world around them. Structured around key themes — balance, change over time, form and function, and information transport — this course provides students with a comprehensive foundation in biological principles, while encouraging them to apply their knowledge to real-world challenges. Running parallel to the course is the year-long “Book of Biology” project, where students explore the intersection of historical milestones, ethical considerations, and contemporary applications of biology. By the end of the year, students emerge with a deep understanding of biological systems and a toolkit of critical thinking and communication skills that prepare them to address the challenges of tomorrow.



SOCIAL STUDIES/HISTORY

FIFTH GRADE

Fifth grade social studies begins the year by inviting fifth graders into the world of the Upper Campus and orienting them to the skills and tools required to understand themselves as learners. Students develop and master the skill of creating and presenting slideshows on Google Slides. One recurring project that draws on these skills is the “Newscaster” project, in which students pick a current event and create a slideshow to educate their peers about the event. This project recurs four times over the course of the year, and requires students to work on becoming researchers and presenters, using images for storytelling. Students also focus on using models like Howard Gardner's Theory of Multiple Intelligences to understand their strengths and advocate for their own learning. As the year progresses, fifth graders shift their focus to world geography, building a foundation of map skills and focusing on the five themes of geography: location, place, region, movement, and human-environment interaction. Progress is measured through group and individual projects, as well as map quizzes and tests.

SIXTH GRADE

The sixth grade Social Studies curriculum covers ancient cultures spanning the Fertile Crescent to the Roman Republic, and explores themes of systems of control and governance, inventions and discoveries, and varying examples of human expression. The central question, “What human-made systems or structures led to the rise of civilization?” is a focus throughout the year. In the fall, students look at the rise of the first great civilizations, while the focus of the winter is an interactive exploration of the development and significance of the City-States of Classical Greece. Students end the year studying Shakespeare's *Julius Caesar* as part of their study of the founding of Rome as well as writing their first academic historical essay with a clear thesis, supporting arguments, and evidence.

SEVENTH GRADE

Seventh grade history begins with an in-depth exploration of the diverse Native American cultures in the United States, focusing on life before and after European contact. Students then examine the interactions between European nations and indigenous peoples in North America. The next unit centers on Jamestown and Plymouth Plantation and their pivotal roles in laying the foundation for what would become the United States. As the course moves into the winter term, students study life in Colonial North America during the 16th and 17th centuries. This period leads into an exploration of the events surrounding the American Revolution, culminating in a comprehensive examination of the United States Constitution. In the spring term, the focus shifts to the Antebellum period, setting the stage for the Civil War. Students begin by exploring the impact of enslaved labor on the nation's economy and society, followed by a study of resistance to slavery. The course then covers the key factors that led to the Civil War, with the final unit dedicated to an in-depth study of the war itself.



EIGHTH GRADE

In eighth grade, students study Modern United States and World History, building upon the skills introduced in seventh grade to examine the twentieth century. Students investigate the domestic and international issues that shaped the world at that time, giving the class a perspective from which to better understand the present-day United States and its place in the world. Supplementing the course are map studies, documentary videos, first-hand accounts, and related current event articles. This course also emphasizes the development of research and writing techniques through note-taking, tests, essays, and a culminating year-end term paper.

NINTH GRADE

Ninth grade history is a survey of political philosophy, ethics, sociology, and economics, and how these fields of study each inform human solutions for the modern world. The syllabus is designed to provide a historical foundation on which to build a contemporary and empathetic understanding of sustainability in political, socioeconomic, and environmental contexts. Using pre-civilization, antiquity, and the current geopolitical landscape as vehicles for these conversations, the course seeks to develop individual and collaborative compassion, a capacity for analysis and persuasion, and a solutions-driven mindset to serve students in ninth grade and beyond. Students first investigate early man and the Neolithic Revolution, exploring the economic and sociological factors that led to the first permanent settlements and civilizations, as well as the effects of permanent human settlement. Then Greece and Rome provide the underpinnings of the second half of the year, where students will use extensive primary source material and comparative analytics to learn how and why people are governed. The Harkness-style discussion model is used extensively in each term, and students write persuasive essays and complete summative group projects in debate and summit formats to assess skill development and understanding of material.



MATH

FIFTH GRADE

The goal of the fifth grade math program is to solidify, through review, the basic operations with whole numbers and decimals. Students are then introduced to the four operations with fractions. Units on geometry and measurement conclude the year's work. A clear and thorough record of student achievement is maintained in each student's notebook. Math games and brainteasers are also employed to improve the student's ability to think mathematically, notice patterns and solve problems logically.

FOUNDATIONS OF MATHEMATICS I (GRADE 6)

Foundations of Mathematics I seeks to provide a variety of successful learning experiences for each student to encourage growth and a positive attitude towards mathematics. Students start with a review of whole numbers, operations and place values. They then learn about measurement, including customary and metric systems, and measurement of time. Measurement is connected to the study of geometry as students learn area, perimeter, surface area, and volume. Students also explore ratios, proportions and percents, probability and statistics, and beginning algebraic equations.

FOUNDATIONS OF MATHEMATICS II (GRADE 7)

Foundations of Mathematics II focuses on the development of sound critical thinking and flexible problem-solving skills. It is a course that begins the shift from the concrete realm of arithmetic into the abstract area of algebra. Topics covered include operations with fractions, proportional reasoning, percent problems, algebraic expressions and equations, probability, and the measurements of geometric shapes and solids. Most students who complete this course will take Foundations of Mathematics III in the fall, although a student may be ready for Algebra I at the recommendation of the teacher.

HONORS FOUNDATIONS OF MATHEMATICS II (GRADES 6/7)

This honors-level course is for students who are mathematically and intellectually ready for a faster-paced class. Honors: Foundations of Mathematics II focuses on the development of sound critical thinking and flexible problem-solving skills. In this course, students will begin shifting from the concrete realm of arithmetic into the abstract area of algebra. Because of the faster pace, students will study properties of exponents, linear equations, congruence and similarity of geometric figures, the Pythagorean theorem, and surface area and volume of geometric solids, in addition to all of the topics found in the regular section of this course. The successful completion of this course will provide students with the mathematical foundation needed to take Algebra I.

FOUNDATIONS OF MATHEMATICS III (GRADE 8)

Foundations of Mathematics III offers a bridge between Foundations of Mathematics II and Algebra I for those students who are still transitioning between the concrete realm of arithmetic and the abstract concepts of algebra. The focus of this course is to develop genuine understanding through a blend of problem-based learning and explicit instruction, where an emphasis is placed on making connections between old and new concepts. Topics covered include properties of exponents, linear equations, functions, data analysis, systems of equations, congruence and similarity of geometric figures, the Pythagorean theorem, and surface area and volume of geometric solids. The successful completion of this course provides students with the mathematical foundation needed to take Algebra I.

ALGEBRA I (GRADES 7/8/9)

The goal of the Algebra I curriculum is to develop sound critical thinking and flexible problem-solving skills while best preparing students for the rigors of their next math course. This course is designed to be completed in one year. It focuses on developing competency in reading, writing, and manipulating algebraic notations. The topics of study include the use of variables and exponents, evaluating and solving algebraic expressions, equations and inequalities, operations with polynomials, graphing linear equations, solving quadratic equations, and working with algebraic fractions. This approach to education puts an emphasis on discovery, independence, freedom of choice, and cooperative learning.

HONORS ALGEBRA I (GRADES 7/8/9)

This course is designed as a fast-paced, one-year algebra program. The students in this course work both independently and cooperatively to master and apply the foundational skills necessary to find success in future math courses. Students will work through functions using rational numbers, make connections with both algebraic and graphical representations of the work, solve second-degree (quadratics) equations, and use introductory trigonometry.

GEOMETRY (GRADES 8/9)

Students must have completed an approved Algebra I program to place into Geometry. This course is covered in one academic year. A strong emphasis is placed on the importance of step-by-step proofs and other topics, such as parallel and perpendicular lines, relationships with triangles, polygons and quadrilaterals, right triangles and trigonometry, area, surface area and volume. Students are encouraged to become independent learners through challenging homework questions and in-class collaborative activities.



HONORS GEOMETRY (GRADES 8/9)

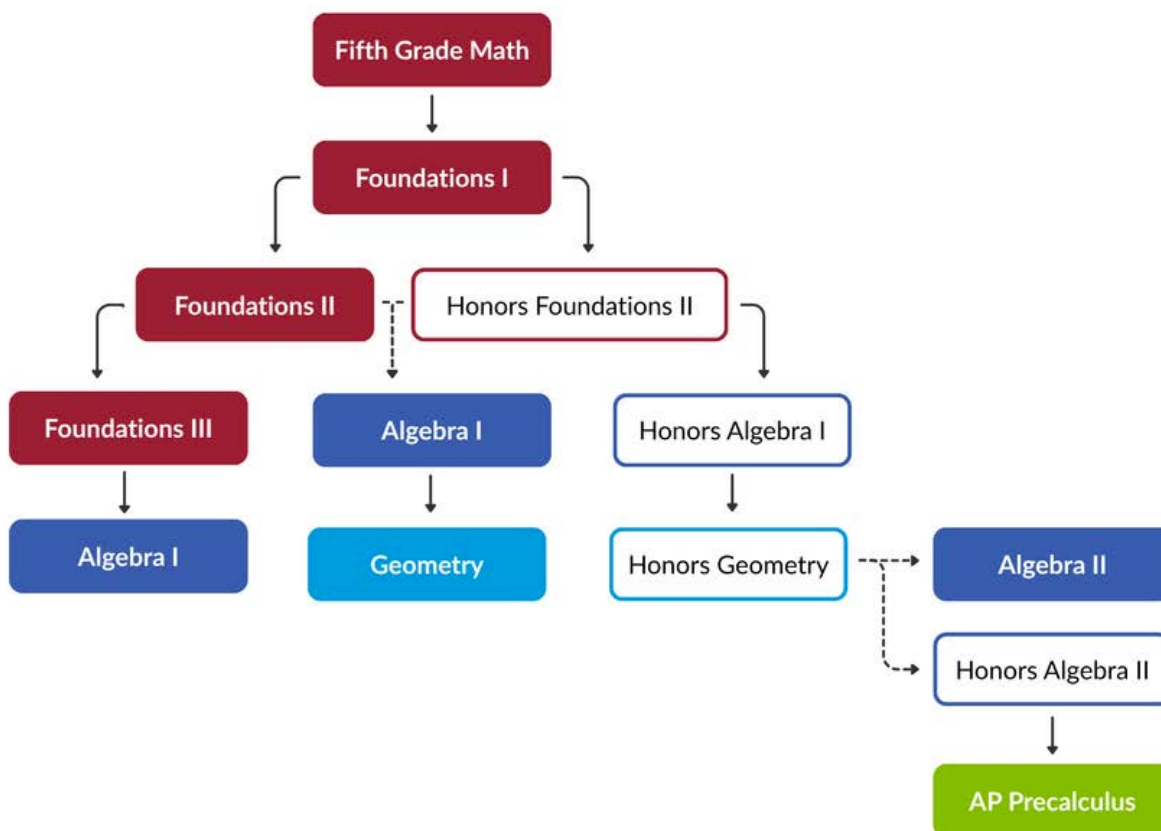
Students must have completed an approved Algebra I program to place into Honors Geometry. This course is taught in one academic year. Emphasis is placed on the importance of step-by-step proofs and other topics, such as parallel and perpendicular lines, relationships with triangles, polygons and quadrilaterals, right triangles and trigonometry, area, surface area and volume. The Honors section explores these topics in greater depth, often involving more complex proofs and the detailed relationship between geometry and trigonometry. Honors students have skills that allow them to learn both independently and collaboratively.

ALGEBRA II/HONORS ALGEBRA II (GRADE 9)

Students must have fully completed Algebra I and Geometry and need a teacher recommendation to be placed in Algebra II. This is a rigorous and competitive course that contains some of our top math students. The focus is on polynomials, operations, and simplifying rational expressions, working with the graphing calculator and other graphing devices to explore functions and transformations. Students engage with radians and degrees, connecting the unit circle and the graphs of periodic functions to one another. Working both independently and cooperatively, students seek to solve word problems and other challenging material. An honors section of Algebra II exists only with sufficient student enrollment and covers the same material as Algebra II with more in-depth problem-solving as appropriate.

AP PRECALCULUS (GRADE 9)

In AP Precalculus, students build a deep understanding of functions, modeling, and rate of change to prepare for higher-level mathematics. The course is aligned with the College Board's AP Precalculus framework and covers polynomial and rational functions, exponential and logarithmic functions, trigonometric and polar functions, and the applications of functions in modeling real-world scenarios.



WORLD LANGUAGES

The World Language Department at IMS is designed for students in Grades 6-9 to find joy in creative expression and cultural exploration beyond their native language. Emphasis is placed on communication, interpretation, and meaning-making, with students developing the courage to speak, experiment, and make mistakes in a new language. Language study is offered in the following world languages: **Latin, Mandarin, and Spanish.**

The program is designed as a carefully sequenced progression that moves students from foundational communication skills to confident, nuanced, and culturally informed use of the language. Across four courses—Level 1A, Level 1B, Level 2, and Level 3—students develop increasing control over grammar, vocabulary, and structure while deepening their ability to communicate meaningfully and interpret the world with cultural awareness.

PROGRAM PROGRESSION

Taken together, these four courses reflect a clear scope and sequence:

- **Spanish 1A / Latin 1A / Mandarin 1A** establishes confidence and foundational communication.
- **Spanish 1B / Latin 1B / Mandarin 1B** expands functional language and narrative ability.
- **Español 2 / Latin II / Mandarin II** introduces complexity, perspective, and temporal nuance.
- **Español 3 / Latin III / Mandarin III** emphasizes fluency, synthesis, and authentic expression.

Across the program, students develop not only linguistic proficiency but also habits of listening, interpretation, and cultural curiosity that support lifelong language learning.

LANGUAGE ANALYSIS AND DEVELOPMENT

Courses in Language Analysis and Development (LAD) are designed for students in Grades 6-8 who benefit from additional class time in developing English Language Arts Skills instead of studying another world language. Students who complete the program through eighth grade often enter Intro to Latin in ninth grade, which is designed to acquaint students with study habits that they can take with them into high school, whether they choose Latin or a different language.



ENGLISH LANGUAGE LEARNING

ELL WRITING

ELL Writing is intended for second language learners who are attending IMS for the first time. Students learn and practice intermediate/advanced grammatical structures and apply them in their speaking and writing. They progress from writing grammatically correct sentences to structured paragraphs, to three-paragraph essays. In addition, students write poetry, narrative fiction, and reading responses. They are expected to participate in class discussions and improve their listening skills. It is the goal of this class to prepare students for English class or Bridge class the following year. Evaluations include regular quizzes and tests, as well as placement and cumulative testing.

ELL READING

First-year international students take ELL Reading in addition to ELL Writing. In ELL Reading, students begin the year by reading brief passages, while building confidence in their English grammar, speaking, and writing skills. They advance to reading a graphic novel, short stories, and biographies at an accessible instructional reading level. They learn vocabulary from their reading and build comprehension and discussion skills. It is the goal of this class to provide ELL students with the practice and skills they will need to comprehend mainstream reading materials and transition to English class or Bridge class the following year. Evaluations include regular quizzes, collaborative projects, and class presentations.

ELL BRIDGE

Bridge class is intended for second language learners who need an additional year of ELL instruction after taking the ELL Reading and ELL Writing classes, and for incoming eighth grade international students who are still building a solid foundation of English reading, writing, speaking, and comprehension. During the course of this year, students will read a variety of genres, such as personal narratives, informative articles, and opinion pieces. They will learn to write five-paragraph essays and will learn to write in a variety of genres. Students will practice presenting and giving positive and helpful feedback to their peers.

