



Course Description

© 2020 MATI TALENT INSTITUTE PRIVATE SCHOOL LLC Homeschool, Center for Gifted Education, and Talent Development.





ENGLISH

- English
- English Honors

FINE ARTS

- Art Appreciation
- Music Appreciation

MATHEMATICS

- Geometry
- Geometry Honors

HEALTH

- Health
- Health Opportunities through Physical Education

SCIENCE

- Biology
- Biology Honors
- Chemistry
- Chemistry Honors
- Earth Science
- Earth Science Honors
- Environmental Science

SOCIAL STUDIES

- Geography and World Cultures
- Geography and World Cultures Honors
- World History
- World History Honors

FOREIGN LANGUAGES

- French 1 Spanish 1 Spanish 3
- French 2 Spanish 2



1 credit

Grade 10

ENGLISH

The focus of the English 10 course is the writing process. Three writing applications guide the curriculum: persuasive, expository, and narrative writing. Each lesson culminates in a written assignment that lets students demonstrate their developing skill in one of these applications.

English 10 follows the model of English 9 by including at least one anchor text per lesson, but the essays, articles, stories, poems, and speeches are often presented as models for students to emulate as they practice their own writing. So that these readings may serve as proper examples for students, a high proportion of texts for this course are original pieces.

English 10 also continues to develop students' reading, listening, and speaking skills. Readings include poems, stories, speeches, plays, and a graphic novel, as well as a variety of informational texts. The readings represent a wide variety of purposes and cultural perspectives, ranging from the Indian epic The Ramayana to accounts of Hurricane Katrina told through different media. Audio and video presentations enhance students' awareness and command of rhetorical techniques and increase their understanding of writing for different audiences.

ENGLISH HONORS Grade 10

1 credit

The focus of English 10 Honors is the writing process. Three forms of writing guide the curriculum: persuasive, expository, and narrative writing. A typical lesson culminates in a written assignment that lets students demonstrate their developing skill in one of these forms.

English 10 Honors includes at least one anchor text per lesson focused on a thematic core of the capacity of language to influence others. Readings include poems, stories, speeches, plays, and a graphic novel, as well as a variety of informational texts, and these texts are often presented as models for students to emulate as they practice their own writing. The readings represent a wide variety of purposes and cultural perspectives, ranging from the Indian epic The Ramayana to accounts of Hurricane Katrina told through different media. Audio and video presentations enhance students' awareness and command of rhetorical techniques and increase their understanding of writing for different audiences.

English 10 Honors provides opportunities for self-directed study, including outside readings, open-ended journal entries, and free-form projects, all of which challenge Honors students to use their creativity and critical thinking skills to gain independent mastery of reading and writing.

FINE ARTS

no

ectati

0.5 credits each

Art Appreciation is a survey of the history of Western visual arts, with a primary focus on painting. Students begin with an introduction to the basic principles of painting and learn how to critique and compare works of art. Students then explore prehistoric and early Greek and Roman art before they move on to the Middle Ages. Emphasis is placed on the Renaissance and the principles and masters that emerged in Italy and northern Europe. Students continue their art tour with the United States during the 20th century, a time of great innovation as abstract art took center stage. While Western art is the course's primary focus, students will finish the course by studying artistic traditions from Africa, Asia, Oceania, and the Americas.

Grade 10

Coverage of each artistic movement highlights historical context and introduces students to key artists that represent a variety of geographic locations. Throughout the course, students apply what they have learned about art critique to analyze and evaluate both individual artists and individual works of art.

This course is built to state standards and informed by the Consortium of National Arts Education Associations standards. It encompasses a variety of skills to enable students to critique, compare, and perhaps influence their own works of art.

Music Appreciation introduces students to the history, theory, and genres of music, from the most primitive surviving examples through the classical to the most contemporary in the world at large. The course is offered in a two-semester format. The first semester covers primitive musical forms and classical music. The second semester presents the rich modern traditions, including American jazz, gospel, folk, soul, blues, Latin rhythms, rock and roll, and hip-hop.

The course explores the interface of music and social movements and examines how the emergent global society and the Internet bring musical forms together in new ways from all around the world.

MATHEMATICS

Geometry builds upon students' command of geometric relationships and formulating mathematical arguments. Students learn through discovery and application, developing the skills they need to break down complex challenges and demonstrate their knowledge in new situations.

Course topics include reasoning, proof, and the creation of sound mathematical arguments; points, lines, and angles; triangles and trigonometry; quadrilaterals and other polygons; circles; congruence, similarity, transformations, and constructions; coordinate geometry; three-dimensional solids; and applications of probability.

This course supports all students as they develop computational fluency and deepen conceptual understanding. Students begin each lesson by discovering new concepts through guided instruction, and then confirm their understanding in an interactive, feedback-rich environment. Modeling activities equip students with tools for analyzing a variety of real-world scenarios and mathematical ideas. Journaling activities allow students to reason abstractly and quantitatively, construct arguments, critique reasoning, and communicate precisely. Performance tasks prepare students to synthesize their knowledge in novel, real-world scenarios and require that they make sense of multifaceted problems and persevere in solving them. This course is built to state standards.

MATHEMATICS

Grade 10

Honors Geometry builds upon students' command of geometric relationships and formulating mathematical arguments. Students learn through discovery and application, developing the skills they need to break down complex challenges and demonstrate their knowledge in new situations.

Course topics include reasoning, proof, and the creation of sound mathematical arguments; points, lines, and angles; triangles and trigonometry; quadrilaterals and other polygons; circles; congruence, similarity, transformations, and constructions; coordinate geometry; three-dimensional solids; and applications of probability.

This course supports all students as they develop computational fluency, deepen conceptual understanding, and apply mathematical practice skills. Students begin each lesson by discovering new concepts through guided instruction, then confirm their understanding in an interactive, feedback-rich environment. Modeling activities equip students with tools for analyzing a variety of real-world scenarios and mathematical ideas. In these activities, additional items require Honors students to extend their understanding by answering "what if" questions, thinking abstractly about the mathematics involved, and analyzing the strengths and weaknesses of the model as a reflection of the real-world situation. Performance tasks prepare students to synthesize their knowledge in novel, real-world scenarios and require that they make sense of multifaceted problems and persevere in solving them. Honors students are required to go deeper into these investigations; for example, they may be asked to change or validate assumptions, add constraints, or extend the project. Journal activities allow students to reason abstractly and quantitatively, construct arguments, critique reasoning, and communicate precisely. Throughout the course, students are evaluated through a diversity of assessments specifically designed to prepare them for the content, form, and depth of the high-stakes assessments.



Health

Grade 10

0.5 credit each

ugh Physica

ation

ealth

Health is a valuable, skills-based health education course designed for general education in grades 9 through 12. Health helps students develop knowledge, attitudes, and essential skills in a variety of health-related subjects, including mental and emotional health, social health, nutrition, physical fitness, substance use and abuse, disease prevention and treatment, and injury prevention and safety. Through use of accessible information and project-based learning, students apply the skills they need to stay healthy. These skills include identifying and accessing valid health information, practicing self-management, identifying internal and external influences, communicating effectively, making healthy decisions, setting goals, and advocating. Students who complete Health build the skills they need to protect, enhance, and promote their own health and the health of others. This course is built to state standards.

Health Opportunities through Physical Education (HOPE) combines instruction in health and physical education in a full-year, integrated course. It focuses on developing skills, habits and attitudes to maintain a healthy lifestyle and applying lessons learned to physical fitness. Through active participation and real-world simulations, the course aims to demonstrate firsthand the value of conscientious lifestyle management.

HOPE lays a foundation for making healthy decisions by building seven skills: accessing valid health information; analyzing internal and external influences; self-management; interpersonal communication; decision-making; goal setting; and advocacy. Students apply these skills to a variety of topics throughout the course, including mental and emotional health, social health, nutrition, physical fitness, substance use and abuse, disease prevention and treatment, and injury prevention and safety. Successful completion of this course will require parent/legal guardian sign-off on student-selected physical activities on weekly participation reports to verify the student is meeting his or her requirements and responsibilities. This course is built to the Florida Next Generation Sunshine State Standards for health and physical education and informed by the National Health Standards (SHAPE).

Biology

Grade 10

1 credit

Biology focuses on the mastery of basic biological concepts and models while building scientific inquiry skills and exploring the connections between living things and their environment. The course begins with an introduction to the nature of science and biology, including the major themes of structure and function, matter and energy flow, systems, and the interconnectedness of life. Students then apply those themes to the structure and function of the cell, cellular metabolism, and biogeochemical cycles. Building on this foundation, students explore the connections and interactions between living things by studying genetics, ecosystems and natural selection, and evolution. The course ends with an applied look at human biology.

Scientific inquiry skills are embedded in the direct instruction, wherein students learn to ask scientific questions, form and test hypotheses, and use logic and evidence to draw conclusions about the concepts. Lab activities reinforce critical thinking, writing, and communication skills and help students develop a deeper understanding of the nature of science.

This course is built to state standards and informed by the National Science Education Standards (NSES).

Grade 10

1 credit

Biology is an in-depth course that furthers mastery of scientific skills, fosters a deep understanding of key concepts, and promotes the application of the scientific method to biological topics. The course begins with an introduction to the nature of science and biology, including the major themes of structure and function, matter and energy flow, systems, and the interconnectedness of life. Students then apply those themes to the structure and function of the cell, cellular metabolism, and biogeochemical cycles. Building on this foundation, students explore the connections and interactions between living things by studying genetics, ecosystems and natural selection, and evolution. The course ends with an applied look at human biology. Lab activities reinforce critical thinking, writing, and communication skills and help students develop a deeper understanding of the nature of science.

Biology students are frequently asked to respond to scientific problems and issues via written assignments. Exploration activities challenge Honors students to deconstruct scientific claims, analyze scientific articles, and suggest follow-up experiments or topics for further research. Finally, Project and Checkup activities allow Honors students to use scientific process skills to delve deeper into topics. This course is built to state standards and the National Science Education Standards (NSES).

Chemistry

Grade 10

Chemistry offers a curriculum that emphasizes students' understanding of fundamental chemistry concepts while helping them acquire tools to be conversant in a society highly influenced by science and technology.

The course provides students with opportunities to learn and practice critical scientific skills within the context of relevant scientific questions. Topics include the nature of science, the importance of chemistry to society, atomic structure, bonding in matter, chemical reactions, redox reactions, electrochemistry, phases of matter, equilibrium and kinetics, acids and bases, thermodynamics, quantum mechanics, nuclear reactions, organic chemistry, and alternative energy.

Scientific inquiry skills are embedded in the direct instruction, wherein students learn to ask scientific questions, form and test hypotheses, and use logic and evidence to draw conclusions about concepts. Lab activities reinforce critical thinking, writing, and communication skills and help students develop a deeper understanding of the nature of science.

Throughout this course, students are given an opportunity to understand how chemistry concepts are applied in technology and engineering. Journal and Practice activities provide additional opportunities for students to apply learned concepts and practice their writing skills. This course is built to state standards.



1 credit

Grade 10

1 credit

Chemistry offers a curriculum that emphasizes students' understanding of fundamental chemistry concepts while helping them acquire tools to be conversant in a society highly influenced by science and technology.

The course provides students with opportunities to learn and practice critical scientific skills within the context of relevant scientific questions. Topics include the nature of science, the importance of chemistry to society, atomic structure, bonding in matter, chemical reactions, redox reactions, electrochemistry, phases of matter, equilibrium and kinetics, acids and bases, thermodynamics, quantum mechanics, nuclear reactions, organic chemistry, and alternative energy.

Scientific inquiry skills are embedded in the direct instruction, wherein students learn to ask scientific questions, form and test hypotheses, and use logic and evidence to draw conclusions about the concepts. Lab activities reinforce critical thinking, writing, and communication skills and help students develop a deeper understanding of the nature of science.

Throughout this course, students are given opportunities to understand how chemistry concepts are applied in technology and engineering. Practice activities provide additional opportunities for students to apply learned concepts and practice their writing skills. Exploration activities challenge Honors students to deconstruct scientific claims, analyze scientific articles, and suggest follow-up experiments or topics for further research. Finally, Project activities allow Honors students to use scientific process skills to delve deeper into topics. This course is built to state standards, the American Association for the Advancement of Science (AAAS) Project 2061 benchmarks, and the National Science Education Standards (NSES).

Earth Science

Grade 10

Earth Science offers a focused curriculum that explores Earth's composition, structure, processes, and history; its atmosphere, freshwater, and oceans; and its environment in space. Course topics include an exploration of the major cycles that affect every aspect of life, including weather, climate, air movement, tectonics, volcanic eruptions, rocks, minerals, geologic history, Earth's environment, sustainability, and energy resources. Optional teacher-scored labs encourage students to apply the scientific method. This course is built to state standards and informed by the National Science Teachers Association (NSTA).

Earth Science is a robust course that explores Earth's composition, structure, processes, and history; its atmosphere, freshwater, and oceans; and its environment in space. Students are encouraged to look at Earth science from both personal and worldly perspectives and to analyze the societal implications of the topics covered. Laboratory experiments introduce students to different lab techniques while building their skills in critical thinking, inquiry, and observation.

Course topics include an exploration of the major cycles that affect every aspect of life, including weather, climate, air movement, tectonics, volcanic eruptions, rocks, minerals, geologic history, Earth's environment, sustainability, and energy resources. This course is built to state standards and the National Science Teachers Association (NSTA).

1 credit

nvironmental Science

Grade 10

1 credit

Environmental Science explores the biological, physical, and sociological principles related to the environment in which organisms live on Earth, the biosphere. Course topics include natural systems on Earth, biogeochemical cycles, the nature of matter and energy, the flow of matter and energy through living systems, populations, communities, ecosystems, ecological pyramids, renewable and non-renewable natural resources, land use, biodiversity, pollution, conservation, sustainability, and human impacts on the environment.

The course provides students with opportunities to learn and practice scientific skills within the context of relevant scientific questions. Scientific inquiry skills are embedded in the direct instruction, wherein students learn to ask scientific questions, deconstruct claims, form and test hypotheses, and use logic and evidence to draw conclusions about the concepts. Case studies of current environmental challenges introduce each content lesson and acquaint students with real-life environmental issues, debates, and solutions. Lab activities reinforce critical thinking, writing, and communication skills and help students develop a deeper understanding of the nature of science. Virtual Lab activities enable students to engage in investigations that require long periods of observation at remote locations and to explore simulations that enable environmental scientists to test predictions. Throughout this course, students are given an opportunity to understand how biology, earth science, and physical science are applied to the study of the environment and how technology and engineering are contributing solutions for studying and creating a sustainable biosphere. This course is built to state standards.



SOCIAL STUDIES

Grade 10

0.5 credit each

Geography and World Cultures

TALENT INS

Geography and World Cultures offers a tightly focused and scaffolded curriculum that enables students to explore how geographic features, human relationships, political and social structures, economics, science and technology, and the arts have developed and influenced life in countries around the world. Along the way, students are given rigorous instruction on how to read maps, charts, and graphs, and how to create them.

Geography and World Cultures is built to state standards and informed by standards from the National Council for History Education, the National Center for History in the Schools, and the National Council for Social Studies. Geography and World Cultures is designed as the first course in the social studies sequence. It develops note-taking skills, teaches the basic elements of analytic writing, and introduces students to the close examination of primary documents.

Geography and World Cultures is a robust, one-semester course that explores how geographic features, human relationships, political and social structures, economics, science and technology, and the arts have developed and influenced life in countries around the world. Along the way, students are given rigorous instruction on how to read maps, charts, and graphs, and how to create them. At the intersection of culture and geography, students learn about art, science, individuals and communities, and history and current events. Students discover how a mountain in the distance can inspire a Sufi poet, how a river blocking a passage occupies a civil engineer and a ship builder alike, and how the sound of a busy Cairo street inspires a musician. Human history is all about cultures meeting — how they influence and inspire each other; what sets one apart from the next; and how they battle each other for land, natural resources, religious dominance, and more.

Geography and World Cultures is designed as the first course in the social studies sequence. It develops note-taking skills, teaches analytic writing, and introduces students to the close examination of primary documents. This course is built to state standards and standards from the National Council for History Education (1997), the National Center for History in the Schools (1996), and the National Council for Social Studies (1994).

L + CU=

SOCIAL STUDIES

Grade 10

In World History, students learn to see the world today as a product of a process that began thousands of years ago when humans became a speaking, travelling, and trading species. Through historical analysis grounded in primary sources, case studies, and research, students investigate the continuity and change of human culture, governments, economic systems, and social structures.

Students build and practice historical thinking skills, learning to connect specific people, places, events and ideas to the larger trends of world history. In critical reading activities, feedback-rich instruction, and application-oriented assignments, students develop their capacity to reason chronologically, interpret and synthesize sources, identify connections between ideas, and develop well-supported historical arguments. Students write throughout the course, responding to primary sources and historical narratives through journal entries, essays and visual presentations of social studies content. In discussion activities, students respond to the position of others while staking and defending their own claim. The course's rigorous instruction is supported with relevant materials and active learning opportunities to ensure students at all levels can master the key historical thinking skills. This course is built to state standards



SOCIAL STUDIES

Grade 10

World History Honors

In World History Honors, students learn to see the world today as the product of a process that began thousands of years ago, when humans became a speaking, traveling, and trading species. Through historical analysis grounded in primary sources, case studies, and research, students investigate the continuity and change of human culture, governments, economic systems, and social structures.

Students build and practice historical thinking skills, learning to connect specific people, places, events, and ideas to the larger trends of world history. In critical reading activities, feedback-rich instruction, and application-oriented assignments, students develop their capacity to reason chronologically, interpret and synthesize sources, identify connections between ideas, and develop well-supported historical arguments.

Students write throughout the course, responding to primary sources and historical narratives through journal entries, essays, and visual presentations of social studies content. In discussion activities, students respond to the positions of others while staking and defending their own claims. Honors students also complete two independent research projects focused on historical periods of their choosing. This course is built to state standards.



FOREIGN LANGUAGES

French

Grade 10

1 credit

French II

French I teaches students to greet people, describe family and friends, talk about hobbies, and communicate about other topics, such as sports, travel, and medicine. Each lesson presents vocabulary, grammar, and culture in context, followed by explanations and exercises. Vocabulary includes terms to describe school subjects, parts of the body, and people, as well as idiomatic phrases. Instruction in language structure and grammar includes the verb system, adjective agreement, formal and informal address, reflexive verbs, and past tense. Students also gain an understanding of the cultures of French-speaking countries and regions within and outside Europe, as well as insight into Francophone culture and people. The material in this course is presented at a moderate pace. This course is built to the American Council on the Teaching of Foreign Languages (ACTFL) standards.

French II teaches students to communicate more confidently about themselves, as well as about topics beyond their own lives – both in formal and informal address. Each lesson presents vocabulary, grammar, and culture in context, followed by explanations and exercises. Vocabulary includes terms in cooking, geography, and architecture. Instruction in language structure and grammar includes present– and past–tense verb forms and uses, negation, and direct and indirect objects. Students deepen their knowledge of French–speaking regions and cultures by learning about history, literature, culture, and contemporary issues. The material in this course is presented at a moderate pace. This course is built to the American Council on the Teaching of Foreign Languages (ACTFL) standards.

FOREIGN LANGUAGES

Grade 10

1 credit

panish

Spanish I teaches students to greet people, describe family and friends, talk about hobbies, and communicate about other topics, such as home life, occupations, travel, and medicine. Each lesson presents vocabulary, grammar, and culture in context, followed by explanations and exercises. Vocabulary includes terms to describe school subjects, parts of the body, and people, as well as idiomatic phrases. Instruction in language structure and grammar includes the structures and uses of present-tense verb forms, imperatives, adjective agreement, impersonal constructions, formal and informal address, and reflexive verbs. Students explore words used in different Spanish-speaking regions and learn about the cultures of Spanish-speaking countries and regions within and outside Europe. The material in this course is presented at a moderate pace. This course is built to the American Council on the Teaching of Foreign Languages (ACTFL) standards.

Building on Spanish I concepts, Spanish II students learn to communicate more confidently about themselves, as well as about topics beyond their own lives – both in formal and informal situations. Each lesson presents vocabulary, grammar, and culture in context, followed by explanations and exercises. Students expand their vocabulary in topics such as cooking, ecology, geography, and architecture. Instruction in language structure and grammar includes a review of present-tense verb forms, an introduction to the past tense, the conditional mood, imperatives, impersonal constructions, and reported speech. Students deepen their knowledge of Spanish-speaking regions and cultures by learning about history, literature, culture, and contemporary issues. The material in this course is presented at a moderate pace. This course is built to the American Council on the Teaching of Foreign Languages (ACTFL) standards.



panish

FOREIGN LANGUAGES

Grade 10

1 credit

In Spanish III, students build upon the skills and knowledge they acquired in Spanish I and II. The course presents new vocabulary and grammatical concepts in context while providing students with ample opportunities to review and expand upon the material they have learned previously. Students read and listen to authentic materials from newspapers, magazines, and television. The content is focused on contemporary and relevant topics such as urbanization and population growth in Latin American countries, global health concerns, jobs of the future, and scientific advancements. The materials engage students as they improve their command of Spanish. Students review the formation and use of regular and irregular verbs in the present and future tenses, as well as the use of reflexive particles and infinitives. They also expand their understanding of noun and adjective agreement, the comparative and superlative degree of adjectives, and the placement and use of direct and indirect objects and pronouns. Students expand their vocabulary through exposure to word roots and families, popular slang, the correct use of words that are often confused for one another, and review of concepts such as proper placement of accents and stress. Presentation of new materials is always followed by several interactive, online exercises, allowing students to master the material as they learn it. Teacher-scored activities provide students with opportunities to use their new Spanish skills both orally and in writing. Discussion activities allow students to interact with their peers in the target language.

This course is built to the American Council on the Teaching of Foreign Languages (ACTFL) standards.