Learn. Grow. Become.™

Woodinville Montessori School

a nonprofit organization

HIGH SCHOOL COURSE CATALOG

GRADES 9-12

2023-2024

TABLE OF CONTENTS

INTRODUCTION

Woodinville Montessori School's high school is a college preparatory program based on Montessori pedagogy and current research into the needs of adolescents. The high school community is designed to help students develop strong partnerships and deep relationships with their teachers and each other. Collaborative, positive, and supportive interactions are the norm in this community.

With their curious minds as a guide, students curate ideas and information to master concepts. This approach is built on a concept of students' development as a continuum, so opportunities for revision, improvement, choice, and working towards mastery are integral to the program. Critical analytical thinking, as well as active and creative work, is emphasized through Socratic discussions and experiential learning.

The goal is for young adults to graduate from our program with a sense of purpose in life, a strong moral compass, and experience in transforming ideals into action. They have an understanding of the complexities and connections that govern positive interactions in a global society. They know how to take charge of their learning, have a strong work ethic, and are leaders ready for their next step in life.

DIPLOMA REQUIREMENTS FOR GRADUATION

Students earn high school credits in coursework that meets or exceeds Washington State graduation requirements, with flexibility for students to pursue individual projects of interest, challenge themselves with Honors classes, and receive support in challenge areas. The intent is to build a foundation in the humanities, mathematics, and sciences that enables students to discern and prepare for the college or career experience of their choice, while helping them develop a high level of independence, self-discipline, social problem-solving, and self-advocacy. The program is oriented toward fostering a global perspective, providing a deep dive into the subject being studied, and applying learned concepts to real-world situations.

All English, Social Studies, Math, and Science courses are taught at Standard level with an Honors level option available where appropriate.

The following credits and subjects are required of each candidate for graduation:

SUBJECT	2024 WMS GRADUATION REQUIREMENTS	2024 WASHINGTON STATE GRADUATION REQUIREMENTS
Community Service	Non-credit requirement	N/A
Senior Project	Non-credit requirement	N/A
English	4 credits	4 credits
Social Studies	4 credits	3 credits
Science	3 credits (4 Recommended)	3 credits
Math	3 credits (4 Recommended)	3 credits
World Language	2 credits (3 Recommended)	2 credits
Fine Arts	2 credits	2 credits
Occupational Education	1 credit	1 credit
Health	0.5 credit	0.5 credit
PE	1.5 credits	1.5 credits
Electives	4 credits	4 credits
TOTAL CREDITS EARNED	**25 CREDITS**	**24 CREDITS**

**For any students who have not completed Washington State history during Middle School, a non-credit, semester long course will be required.*

COMMUNITY SERVICE

Community Service
Grades: 9, 10, 11 & 12
Community service is an integral part of a Montessori education, reflecting the importance of engagement with our community and our role as global citizens. WMS students complete 60 hours of community service.

SENIOR PROJECT

Senior Project
Grades: 12
WMS Seniors have the opportunity to explore a passion as they launch their Senior Projects. The Project is an independent study with specific and concrete end goals. Students can choose to develop new skills, learn about a subject they haven't studied in school, undertake an ambitious community service or social justice project, or set a goal related to personal growth. Examples include writing a book, creating a photography portfolio, organizing graffiti clean-up parties in a neighborhood, building a community garden, or becoming a certified yoga instructor. Each project culminates with a student presentation to the community documenting their journey as well as their end result. Students receive project support from a mentor (inside or outside the school community), a faculty advisor, and protected time to complete their work during second semester of senior year.

2023-2024 COURSE OFFERINGS

**indicates courses offered in the 2023-2024 school year.*

ENGLISH

High School English classes are developed as part of an integrated Humanities curriculum to foster a deeper understanding of the interplay between social, political, historical and cultural aspects of life, and to provide students a contextual basis for their learning and growth. Students' writing encompasses poetry, mini-epic "journeys," short stories, monster stories, critical responses to literature, and argumentative essays. Grammar is intrinsic to these courses.

As our Montessori classes are mixed age, both the 9/10 and the 11/12 English curricula are designed as two-year rotations.

World Literature*
Grades: 9, 10
Full Year/1 credit/Honors option
This course is a study of literature from China, India, Russia, sub-Saharan Africa, North Africa and the Middle East, and Latin America, and is designed to explore a wide range of literary voices and cultures. Students will read poetry, drama, novels, short stories, folktales, essays, and sacred texts. They also write broadly, and have options for creative, analytical, informal, and experimental pieces. Major texts may include works by Chimimanda Ngozi Adichie, Ishmael Baeh, Jiang Ji Li, Anton Chekhov, Salman Rushdie, Julie Alvarez, Gabriel García Márquez, Marjane Satrapi, amongst others. The overarching theme of the course is perspectives, as we examine different ways of seeing and understanding the world, while also investigating universal themes and experiences.

Western European Literature

Grades: 9, 10

Full Year/1 credit/Honors option

This course focuses on the parts of the world that have transformed to become modern Europe. The theme is transformation, providing students the opportunity to explore works that have contributed to the development of modern Europe ranging from ancient texts to contemporary works. Focus of study compliments the regions discussed in the concurrent Western European History class to create an integrated understanding of these regions' cultures and peoples. Student work includes free responses to art, analyses of poetry and intentionally crafted argumentative essays. Texts studied may include works by Homer, Dickens, Dumas, Cervantes, and Dante.

American Literature*

Grades: 11, 12

Full Year/1 credit/Honors option

Prerequisite: Successful completion of two years of 9/10 Literature classes.

This is a seminar course on the literature of the United States, from the 1800s to the present day. Personal narratives, memoirs, nonfiction works, short stories, novels, poetry, and films are all explored. Each quarter, the literary selections integrate with the timespan being explored in American Studies, the concurrent class on history and culture. Activities include Socratic Dialogues, class discussions, and various writing activities. Students examine literature that has historically been regarded as seminal through a modern lens that encourages probing and contextualization. Texts studied may include works by Douglass, Fitzgerald, Steinbeck, Hemingway, Twain, O'Connor, Baldwin, Hurston, Hughes, Silko, and Cather.

Literature & Leadership

Grades: 11, 12

Full Year/1 credit/Honors option

Prerequisite: Successful completion of two years of 9/10 Literature classes.

This seminar series focuses on the study of transformative human struggles, individual leaders and their impacts, and the complex and deeply interrelated domains of human culture and creativity. It also covers human environmental interaction, sociopolitical constructs, the ways people establish their inner and outer selves, and their places and possibilities in the world. Students will engage in a wide variety of reading and writing pertinent to these concepts. Texts include essays, memoirs, biographies, autobiographies, poetry, novels, short stories, drama, speeches, and letters. Readings may include works by Shakespeare, Le Guin, Dickens, Potok, Lewis, and Jiles.

SOCIAL STUDIES

As our Montessori classes are mixed age, both the 9/10 and the 11/12 Social Studies curricula are designed as two-year rotations.

World History*

Grades: 9, 10

Full Year/1 credit/Honors option

Throughout the year, each quarter focuses on a different global region, highlighting specific aspects from ancient to contemporary times. The theme of perspectives is fundamental as students work with both primary and secondary sources, to develop an understanding of connections between history, geography, culture and politics. Critical contemporary issues are woven into studies of China and India, Russia, Sub-Saharan Africa, Northern Africa, the Middle East and Latin America. Current events, documentaries, art, music, and a wide variety of materials and ideas are utilized. Projects may include exploration of World Religions and the impacts of urbanization.

Civics

Grades: 9, 10

Semester/0.5 credit/Honors Option

This semester-long Civics course focuses on educating students as citizens and future voters. The emphasis is on understanding the functional workings of governments in the United States on multiple levels, from local to state to federal, such that students understand how and why they can take active roles in the structuring of American society. Units include a focus on voting, the Constitution, the Federalist Papers, contemporary analytical data, the judicial system, and the role of the Supreme Court. Rights enshrined in the Bill of Rights and in additional constitutional amendments and civil rights laws are a subject for learning and discussion, as is the intersection between citizen activism and changes in governmental structures and social policy. Online materials used include the PBS-Learning Media series Founding Principles and material from a variety of organizations, such as Facing History and the 2021 report on Educating for American Democracy. Students participate in work and activities regarding the structure of and ways to access the government at all levels, local to federal.

Western European History

Grades: 9, 10

Semester/0.5 credit/Honors Option

This one semester course is a focused study of particular eras, regions, and peoples, of Western Europe. The theme of transformation pertains to the many significant changes that have unfolded in that part of the world, and the impacts Western Europeans have had on multiple peoples of the globe. Focus studies include the Greco-Roman Era, the Italian Renaissance, empires and monarchies, the Middle Ages and the Crusades, the Napoleonic era, the roles of Europeans in the Slave Trade and colonization, the rise of modern nation states, the World Wars, post-war and contemporary Europe, and the rise of nationalism post-2010. Many resources are used, including primary and secondary sources, maps, art, music, and video material. Students engage in varied activities and may complete projects on such topics as changing class structures, shifting borders, and important developments in the arts.

Western Art History

Grades: 9, 10

Semester/0.5 credit/Honors Option

This semester-long survey course focuses on visual arts and charts a journey from antiquity to the 21st century intended to provide awareness, understanding, and opportunities to go in depth. Students will become very familiar with and able to apply standards of formal art analysis and historical art analysis. The course will also provide integrative insight into the connection between visual arts and the broader cultural, economic, social, and political contexts in which they were created. Case studies regarding specific artists may be used to help students understand not only their creative products, but also their process of creating, as well as specific, related struggles that in many instances have been crucial to the artist's lived experience and work. Students will use a multiplicity of resources, such as video lessons from smarthistory.com, and images and essays from a broad array of readily accessible sites offering both texts and images, such as *Google Arts & Culture*, *artsy.net*, online sites of numerous world museums, the *Web Gallery of Art*, *openculture.com*, art auction catalogs, and articles by scholars, reporters, and professional commentators and critics.

American Studies*

Grades: 11, 12

Full Year/1 credit

Prerequisite: Successful completion of two years of 9/10 Social Studies classes.

This comprehensive class moves chronologically through American history from the 1800s to the present. As students progress through American Studies, their course work is integrated with the concurrent American

Literature class. Throughout the year, students engage in reading primary and secondary sources, viewing and taking notes on documentaries and on lectures by prominent historians, and viewing the nation through such cultural lenses as music, film, dance, and visual arts. In addition, students present projects of various depths, participate in seminars, and complete quarterly assessments. The course textbook is Eric Foner's AP edition of *Give Me Liberty! An American History.*

Critical Thinking

Grades: 11, 12

Full Year/1 credit/Honors option

Prerequisite: Successful completion of two years of 9/10 Social Studies classes.

In this course, students consider multiple aspects of leadership including leadership from within, of oneself, leadership within the family and the community, and leadership in expanded settings and varied situations. Students develop an understanding of the principles and mindset of leadership, practice critical thinking, and reconsider significant and transformative human struggles, such as the quest for freedom, inclusion, equity, and equality. An emphasis is put on the ethical dimensions of actions and decisions, and on the implications of what one writes, says, or does. Varied projects and extensive writing assignments are integral to this class. Texts explored include philosophical works by Aristotle and Plato as well as college-level texts on ethics, sociology, and aspects of human psychology and sociopolitical constructs. The course texts are Critical Thinking, Learn the Tools the Best Thinkers Use by Richard Paul and Linda Elder, and Thought and Knowledge by Diane F. Halpern. Students also read Maria Montessori's collection of speeches, Education and Peace, and reflect on her ideas.

SCIENCE

Science courses provide students with the opportunity to engage in hands-on, guided inquiry learning featuring frequent class discussions, cutting-edge information, and lab work. There is a focus on working together effectively in a lab group while also building individual understanding. Most science classes are offered as year-long experiences, while science electives are semester-long.

As our Montessori classes are mixed age, both the 9/10 and the 11/12 Science curricula are designed as two-year rotations.

Biology*

Grades: 9, 10

Full Year/1 credit/Honors Option

Corequisite: Concurrent enrollment in Health

This year-long lab course is offered every other year and includes a study of biochemistry, cell biology, evolution, genetics, and bioethics. The class reads a variety of articles from scientific journals and participates in frequent laboratory investigations and hands-on activities.

Physics*

Grades: 11, 12

Full Year/1 credit/Honors Option

Prerequisite: Algebra II/Trigonometry completion or concurrent enrollment

Physics is a laboratory based introductory course designed to help students gain a richer understanding of everyday physical phenomenon. Students explore fundamental concepts through readings, class discussions, classwork, homework, computer simulations, hands-on activities, laboratory experiments and independent research. The first semester covers an in-depth analysis of mechanics including forces governing motion and long-

range forces such as gravitational forces on objects. The second semester covers periodic motion, sound waves, light, object formation in plane and curved mirrors, bending of light in lenses, electricity, and magnetism. Students taking the Honors level class will follow the same curriculum but are expected to do additional reading, and complete more challenging problems and lab activities.

Chemistry

Grades: 11, 12

Full Year/1 credit/Honors Option

Prerequisite: Algebra II/Trigonometry completion or concurrent enrollment

Chemistry is a lab-based course designed to give students a broad overview of Chemistry. Students will explore fundamental concepts through readings, class discussions, online simulations, laboratory experiments and independent research. Students also work on applying mathematical skills to solve chemical problems and analyze laboratory data. Topics covered in the first semester include atomic structure of elements, arrangement of elements in the periodic table, chemical bonding, reactions and stoichiometry. Topics covered in the second semester include aqueous solutions, properties of acids and bases, chemical equilibrium, redox reactions and organic chemistry. Students taking the Honors level class will follow the same curriculum but are expected to do additional reading, complete more challenging problems and lab activities.

Anatomy & Physiology

Grades: 9, 10, 11, 12

Semester/0.5 credit/Honors option

The course is a semester-long overview of the systems of the human body, focusing on the muscular, skeletal, digestive, respiratory, cardiovascular and sensory systems. Students study anatomical directions, make models of different systems, and engage in histology labs, examining and learning to identify different tissues of the body under a microscope. This course includes frequent dissections (chicken wing, sheep heart, eyeball, and fetal pig).

Astrobiology

Grades: 9, 10, 11, 12

Semester/0.5 credit/Honors option

This semester-long course is an introduction to an interdisciplinary field of study touching on evolution, genetics, chemistry, astronomy, anthropology, aerospace engineering and physics. The class includes a study of organisms that live in extreme environments on Earth, experiments related to remote sensing of data, practical astronomy, the history of space exploration, and SETI (the Search for Extraterrestrial Intelligence).

Forensic Science

Grades: 9, 10, 11, 12

Semester/0.5 credit/Honors option

A semester-long lab exploration course that combines aspects of psychology, chemistry, biology, anatomy and physics to solve (simulated) crimes. Practicing real-world forensic techniques and interpreting actual case studies is part of this course. Lessons include procedures for collection of evidence, observation of a crime scene, fingerprinting, chromatography, toxicology, and DNA analysis. Students engage in numerous hands-on activities, research, and an appreciation of how crimes are solved in the real world.

Neuroscience

Grades: 9, 10, 11, 12

Semester/0.5 credit/Honors option

This semester-long class is an introduction to the workings of the human brain. Coursework includes dissection of a brain, memory experiments, psychology research, vision investigation of optical illusions, and researching current events in neuroscience (i.e. using the mind to control artificial limbs and cochlear implants). Students will also learn about sensory systems as part of the nervous system, with a particular focus on vision and hearing.

MATH

Student placement in Math classes is determined using a combination of prior experience, teacher recommendations, grades and assessments. Students in Algebra and above receive high school credit. All high school math classes are year-long and offer an Honors option, in which students work additional challenging problems.

Algebra I*

Full Year/1 credit/Honors Option

Prerequisite: Pre-Algebra or equivalent

Algebra 1 is a foundational course to prepare students for ongoing study of advanced mathematics. Topics covered include real numbers, rational equations and functions, graphing linear equations and inequalities, exponential functions, polynomials, quadratic equations, and factoring. Students also engage in collaborative problem solving, writing and talking about mathematics, and exploring careers that use mathematics.

Geometry*

Full Year/1 credit/Honors Option

Prerequisite: Algebra 1

Geometry weaves together experience with geometric problem sets, constructions, and two-column proofs. Along with traditional topics like triangle centers, surface area and volume, and an introduction to trigonometry, this course also introduces students to the Greek alphabet, principles of formal logic, and applications of geometry in architecture. Several hands-on projects during the last two quarters allow students to demonstrate their understanding in novel ways.

Algebra II/Trigonometry*

Full Year/1 credit/Honors Option

Prerequisite: Geometry

Each topic covered in Algebra II/Trigonometry is explained using algebraic, graphical, and numerical methods to enhance student learning. Students practice their skills using traditional methods, real-world applications and also use graphing software. Topics covered in the first semester include inequalities, complex numbers, functions, transformation of functions, linear and quadratic equations, polynomials, exponential and logarithmic functions. The second semester focuses on trigonometric functions by introducing the unit circle, evaluating trigonometric expressions both algebraically and graphically, using trigonometric identities, polar coordinates and vectors.

Precalculus*

Full Year/1 credit/Honors Option

Prerequisite: Algebra II/Trigonometry

Precalculus students engage in mathematical modeling using linear, quadratic, exponential, logarithmic and trigonometric functions, with an emphasis on critical thinking and analysis. Additional topics include polar graphs, parametric equations, partial fraction decomposition, matrices, conic sections, sequences and series, probability, and limits.

Calculus I

Full Year/1 credit/Honors Option

Prerequisite: Precalculus

Calculus I topics include limits, rules of differentiation, applications of derivatives such as related rates and curve sketching, integrals, the Fundamental Theorem of Calculus, differential equations and the volume of solids of revolution. Emphasis is on conceptual understanding of topics via a multi-representational approach. Along with traditional textbook problem-solving, students also work in groups on guided inquiry learning labs and complete an art project modeling volume by cross-sections.

Calculus II*

Full Year/1 credit/Honors Option

Prerequisite: Calculus I

Calculus II students continue their study of single variable calculus with additional integration techniques, infinite series, parametric equations, polar coordinates, and vectors. Students are immersed in both theoretical and real-world applications of these concepts. Throughout the year, students complete cumulative review assignments each week to maintain and sharpen their skills in the methods and applications of Calculus. Additional emphasis is on conceptual understanding and the communication of mathematics, both written and orally, using accurate mathematical vocabulary.

Data Science

Full Year/1 credit/Honors Option

Prerequisite: Algebra II/Trigonometry

Data Science introduces students to the main ideas in data science and statistics concepts through tools such as Google Sheets, Python, Data Commons and Tableau/SQL. Students learn to be data explorers in project-based units, through which they develop their understanding of data analysis, sampling, correlation/causation, bias and uncertainty, probability, modeling with data, making and evaluating data-based arguments, and the power of data in society. Statistics topics include analyzing categorical data, displaying and comparing quantitative data, summarizing quantitative data, modeling data distributions, exploring bivariate numerical data, study design, probability counting and permutations and combinations, random variables, sampling distributions, confidence intervals, hypothesis testing, two sample inference for the difference between groups, chi-square tests, advanced regression, and analysis of variance. At the end of the course students will have a portfolio of their data science work to showcase their newly developed abilities.

Advanced Math Topics

Full Year/1 credit/Honors Option

Advanced Math Topics is an independent study class offered by permission of the instructor. Topics are based on students' interests as well as their math background and skill level. Independent activities include reading, instructional video, and problem-solving practice. Students meet with their instructor one hour per week to

discuss what they've learned and may prepare and poster presentations and/or interactive lessons for WMS secondary students. Topics may include intermediate Counting and Probability, vector study of planes and lines in three-dimensions, Python programming, and data science.

WORLD LANGUAGES

Japanese 1*

Grades: 9, 10

Full Year/1 credit

This one-year course provides a general introduction to the Japanese language. Students learn Hiragana, Katakana, and some Kanji characters, basic grammar patterns, listening and speaking skills. Topics include self-introductions, weather expressions, days of the week, dates of the month, months of the year, family members, occupations, extracurricular school activities, hobbies, and descriptive characteristics of people. Projects take the form of cultural/research presentations, singing Japanese songs, cooking Japanese food and Japanese calligraphy.

Japanese 2

Grades: 9, 10

Full Year/1 credit

Prerequisite: Japanese 1 or instructor approval

Japanese 2 builds upon knowledge gained in Japanese 1. Students continue to develop their listening, speaking, reading and writing skills utilizing more complex sentence structures. Topics include school academic subjects, description of classes/teachers, school policies, driving/transportation, and health. Projects such as writing a folktale story, making a speech, singing Japanese songs, cooking Japanese food, writing a New Year's Card, and Japanese calligraphy provide opportunities to further students' understanding of Japanese culture.

Japanese 3*

Grades: 11, 12

Full Year/1 credit

Prerequisite: Japanese 2 or instructor approval

Japanese 3 builds upon the knowledge and communication skills gained in Japanese 2. Students study and discuss a variety of topics in spoken and written forms. Topics include holidays, part-time jobs, giving directions, shopping, and Japanese cooking. The focus will be on accuracy and attention to detail provided in their explanations. Students also learn about various Japanese cultural concepts and express their opinions on Japanese society through presentations. Projects include making a street direction map, writing a dialogue, creating a Japanese board game, making a cooking video and Japanese calligraphy.

Japanese 4

Grades: 11, 12

Full Year/1 credit

Prerequisite: Japanese 3 or instructor approval

Japanese 4 builds upon knowledge gained in Japanese 3. Students also explore the social, historical and cultural aspects that influence Japanese life today. A topic in the first semester is Japanese traditional and modern entertainment including manga and anime. In the second semester, students learn about environmental issues. Students focus on what it means to be a global citizen, learning to help sustain the environment as well as learning about natural disasters. Projects include research on the Japanese recycling system and preparedness of natural disasters.

Spanish 1*

Grades: 9, 10

Full Year/1 credit

Students develop a basic understanding of the seven most essential verbs for communication in Spanish, in the present tense. Students also become familiar with other verbs and vocabulary related to the following topics: greetings, the weather, food, school activities, personal characteristics, shopping, and household activities. Finally, students are introduced to the variety of Spanish-speaking cultures around the world through visual art, biographies, and music.

Spanish 2*

Grades: 9, 10

Full Year/1 credit

Prerequisite: Spanish 1 or instructor approval

Students further develop their experiences with the seven most essential verbs for communication in Spanish by working with them in their preterit and imperfect (past tense) forms. Students also become familiar with other verbs and vocabulary related to the following topics: daily routines, staying healthy (including sports and other outdoor activities), giving commands, expressing preferences and opinions, travel, family, community, and current events. This course highlights and incorporates the variety of Spanish-speaking cultures around the world through visual art, biographies, and music.

Spanish 3*

Grades: 11, 12

Full Year/1 credit

Prerequisite: Spanish 2 or instructor approval

Students expand their vocabulary as well as apply their knowledge of the seven most essential Spanish verbs to communicate about a variety of topics in the past, present and future tenses. Topics include travel, volunteering, activism, environmentalism, professions and careers as well as literature (poetry & drama). Students also become familiar with how to form compound verb forms for more nuanced communication in the past and future tenses as well as the subjunctive mood. Topics explored in this course are examined through the lens of how they affect the people of Spanish-speaking cultures around the world.

Spanish 4

Grades: 11, 12

Full Year/l credit

Prerequisite: Spanish 3 or instructor approval

Students further expand their vocabulary by decoding, interpreting, and demonstrating comprehension of current events in Latin America. Students explore articles written in Spanish (at their level) that cover a variety of topics: social justice issues, environmental concerns, visual and performing arts news, cultural celebrations, and the media and popular culture in Latin America. Students also further develop their understanding of compound verb tenses and the subjunctive mood through reading and writing exercises. Students read short works of fiction that cover multiple genres from Latinx writers.

Independent Study: Spanish Language & Culture

Grades: 12

Full Year/l credit

Prerequisite: Spanish 4 and instructor approval

Students meet with the instructor to design weekly work that solidifies their repertoire of vocabulary and verb conjugations. Students also create two semester-long projects. One project is based on a culturally significant work of Spanish-language literature by a Latinx author and the other is based on a self-selected grammar topic.

FINE ARTS

Class options vary and have included: Painting*, Mixed Media Art*, Music & Pop Culture*, Graphic Design, Drama, Studio Art, Comics & Zines, Digital Photography, Digital Art.

Grades: 9, 10, 11, 12

Semester/0.5 credit

Fine Arts coursework is a key element of a Montessori education and remains an important component of the WMS High School education. Founded on the principle that appreciation of artistic pursuits is part of a broad-based liberal arts education, WMS offers a breadth of Fine Arts offerings. In keeping with Montessori tradition, students play a role in determining what courses will be offered each year and are able to select their own coursework from the courses offered. Course work offers a balance of academic understanding and hands-on experiences. Students leave each course having created original works in each subject area.

INNOVATION & DESIGN LAB

Class options vary and have included: Outdoor Geodesic Design & Construction, Laser Cutting, and Leather Working.

Grades: 9, 10, 11, 12

Semester/0.5 credit

Electives in the Innovation and Design Lab reflect current topics in STEM education. Projects are student-driven and developed in the Innovation & Design Lab to inspire creativity and teach skills. In keeping with Montessori tradition, students play a role in determining what courses will be offered each year and are able to select their own coursework from the courses offered. Course work offers a balance of academic understanding and hands-on experiences.

CAREER & TECHNICAL EDUCATION

College & Career Counseling*

Grade: 11

Semester/0.5 credit

College and Career Counseling is a graduation requirement and is typically taken in the Spring of the junior year. Class meets twice per week to discuss all aspects of the college admission process, beginning with the identification of student and family goals in the areas of academics, lifestyle and financial accessibility. Students will review the YouScience aptitude assessment, determine a plan for ACT/SAT testing, create an academic resume, and develop a balanced college list. Additional topics include key elements of college applications, interview preparation, and writing a personal statement and supplemental essays.

College Planning*

Grade: 12

Semester/0 credit

College Planning is a non-credit class provided in the Fall of the senior year. Class meets twice per week. The College Counselor supports students as they work to complete their applications, draft and finalize personal statements and supplemental essays, obtain letters of recommendation, and prepare for interviews. Additionally, the College Counselor guides students through their final decision process, including the iterative process of assessing “fit” by matching student major and career goals to specific college programs and departments.

Personal Finance*

Grades: 11

Semester/0.5 credit

Personal Finance is a requirement for all juniors and is typically taken in semester 5. Topics covered include calculating net income from gross income, building a budget, understanding credit, leases and mortgages, investing, and wealth development and management. Additional topics include life skills such as basic first aid, menu planning and budgeting for groceries, sewing/mending, ironing, and basic car maintenance.

Computer Science*

Grades: 11, 12

Full Year/1 credit

This course introduces students to the fundamental ideas of computer science and how to apply computational thinking across multiple disciplines. Students will explore the five core concepts: Algorithms and programming, Computing systems, Networks and the internet, Data, and social impacts of computing. Students will also become familiar with the concepts and tools of computer science as they learn a subset of the Python 3 programming language. The topics will cover Python 3: primitive Types, conditionals, iteration, functions and exceptions, data structures, class object, programming with Turtle Graphics and Pandas and NumPy. Students will do hands-on work to design, write, and test computer programs that solve problems or accomplish tasks. They also have opportunities to use the micro:bit to dive into electronics and Python programming.

HEALTH & PHYSICAL EDUCATION

Health*

Grades: 9, 10

Semester/0.5 credit

Corequisite: Concurrent enrollment in Biology

This year-long course is integrated with Biology and is offered every other year. Topics covered include nutrition, disease transmission, infant and child development, and human sexuality. The course includes activities from the Our Whole Lives curriculum and the King County Family Life and Sexual Health curriculum (FLASH), supplemented by current journal articles and website investigations.

High School Physical Education*

Grades: 9, 10, 11, 12

Semester/0.5 credit

Classes focus on a variety of lifetime sports and activities with the goal of developing a personal fitness plan. This course is an individualized approach to physical fitness, comprised of cardiovascular endurance, strength, and flexibility. Additionally, students travel to various parks in the area to participate in Orienteering, a combination of map-reading, walking/running, and a scavenger hunt; students use maps to find “controls” which have been placed in different locations around the park.

EXAMPLE: WMS GRADE 9 WEEKLY SCHEDULE (2023-2024 YEAR B*)

<table>
<tr><th></th><th>Monday</th><th>Tuesday</th><th>Wednesday</th><th>Thursday</th><th>Friday</th></tr>
<tr><td rowspan="2">8:30 – 10:25 AM</td><td>[1] Algebra</td><td>Algebra</td><td rowspan="2">World Literature</td><td>Algebra</td><td>Algebra</td></tr>
<tr><td>World Literature</td><td>[3] Spanish 1</td><td rowspan="2">Spanish 1</td><td>Community Meeting
Spanish 1</td></tr>
<tr><td>10:30 – 11:25 AM</td><td>World Literature
Work Time</td><td>Work Time</td><td>Community Meeting</td><td rowspan="2">Work Time</td><td rowspan="2">Work Time</td></tr>
<tr><td>11:30 – 11:55 AM</td><td>Lunch</td><td>Lunch</td><td>Off-Campus Lunch</td><td>Lunch</td></tr>
<tr><td rowspan="2">12:00 – 1:25 PM</td><td rowspan="2">[2]Art</td><td>Community Meeting</td><td rowspan="2">Art</td><td>Work Time</td><td>Pizza Lunch</td></tr>
<tr><td>World History</td><td>12:20 – 2:20
Civics</td><td rowspan="3">Orienteering</td></tr>
<tr><td rowspan="2">1:30 – 3:20 PM</td><td>Biology</td><td>World History
Work Time</td><td rowspan="2">World History</td><td>Biology</td></tr>
<tr><td>Biology
Work Time</td><td>PE</td><td>2:20 – 3:20
Work Time</td></tr>
<tr><td>3:20 – 3:30 PM</td><td>Jobs</td><td>Jobs</td><td>Jobs</td><td>Jobs</td><td>Jobs</td></tr>
</table>

***Note:** Science, Social Studies, English Language Arts are multi-age groups taught in two-year rotations: Year A/B

Alternative Options:

1. Geometry, Algebra 2
2. Music
3. Japanese 1