

WESTRIDGE SCHOOL



2022-2023
Catalogue of Courses

Middle School GRADES SEVEN AND EIGHT

The Westridge Middle School program is based on the premise that Middle School is more than a stepping stone to high school. While our program assumes the responsibility to prepare students to do the work in the Upper School, it is also designed to address the diverse developmental needs of students in the 7th and 8th grades, as well as to affirm the right of adolescents to be themselves.

The program emphasizes an interdisciplinary curriculum which integrates experiential education and service learning into the students' academic program. Students learn how to do research, to weigh evidence, to analyze cause and effect relationships, to synthesize information, solve problems and make concrete applications, to read critically, and to formulate and substantiate a thesis in their essays. They are encouraged to cultivate a love of learning, to develop an aesthetic appreciation and kinesthetic awareness, to shape values, and to learn how to explore, think, and draw conclusions. The Middle School experience provides students with the skills necessary for their continuing academic success and enables them to enter the Upper School as confident, articulate, self-motivated individuals.

MIDDLE SCHOOL

Cultural Studies (English/History)

#100 Cultural Studies

#200

Grade 7

one year

Cultural Studies is an interdisciplinary, project-based course that engages students in the examination of fundamental human behaviors focusing on the idea of identity, both individual and collective, and making connections between history and the choices we make in our own lives. Students enter this work through the lenses of various cultures and historical events. Through projects, and in collaboration across various disciplines, students explore four major themes: identity, upstanders, borders, and forgiveness. Students study geography, anthropology, and history, and they practice writing in a variety of genres, from informal journal responses to research papers. Close reading, critical thinking, and class discussion are emphasized together with research, vocabulary, grammar, and public speaking skills. Using their hands and minds, collaborating with teachers of different disciplines, and presenting their work to a variety of audiences, beyond their classmates and teachers, students deepen their understanding of the concepts we explore, grow their level of investment in their work and think creatively and critically beyond the confines of content or specific disciplines.

#105 American Studies

#205

Grade 8

one year

In an effort to support 21st century skills – collaboration, critical thinking, creativity, and communication – the 8th grade English/History course is a fully integrated interdisciplinary American Studies program. Given the rapidly changing demographic of the United States and the rise of globalization, what impact do current events and trends have on American identity? And what does it mean to be an American citizen in the 21st century? Using these questions as a starting point, course instructors have divided the year into four units, each focusing on four essential questions that support the overall inquiry of the central question. The curriculum is project-based, which develops 21st century skills in the most authentic way and honors each student's particular talents and interests. The interdisciplinary work requires students to make deeper connections, to move beyond specific subject content, and to bridge the skill development over two disciplines.

MIDDLE SCHOOL

Mathematics

#300 Introduction to Algebra

Grade 7

one year

This course begins with an in-depth review of basic arithmetic concepts and proceeds to build a solid foundation in the skills required for Algebra I. Topics presented include: variables, linear equations, elementary geometry, inequalities, proportions, percent, probability, statistics, and square roots. Through a balance of conceptual understanding, applications, and procedural fluency, students gain understanding of math concepts and develop their analytical and reasoning problem-solving skills.

#306 Advanced Introduction to Algebra

Grade 7 one year

This accelerated course begins with a study of the topics from Introduction to Algebra (all of the topics listed above). The course then continues with some essential skills from Algebra I, including slope and linear functions, inequalities, and absolute value functions. Additional topics covered will include similar figures and probability. This course is designed for students who have demonstrated the ability to grapple with challenging content independently and who can persevere when it comes to applying theoretical concepts in order to solve complex problems.

#315 Algebra I

Grade 8 one year

This course continues presenting algebra skills necessary for success in higher level math curricula, and is designed to enrich students' understanding of mathematical processes and operations through projects and in-depth exploration of topics. Areas of study include: review of essential algebra skills; advanced work with functions; rate of change, slope, distance, and other elements of graphing; systems of equations; exponents and square roots; quadratics and polynomials.

#317 Advanced Algebra I

Grade 8 one year

This accelerated course completes the Algebra I sequence with systems of equations, exponents and square roots, quadratics and other polynomials. The remainder of the year expands on these topics and includes many additional topics: coordinate geometry, advanced word problems, and function transformations. This course features frequent challenge problems and an emphasis on theoretical concepts. This course is designed for students who have demonstrated the ability to grapple with challenging content independently and who can persevere when it comes to applying theoretical concepts in order to solve complex problems.

MIDDLE SCHOOL

Science

#400 Life Science

Grade 7 one year

Life Science is an introductory biology course with emphasis on both scientific thinking and writing skills. Students engage in the natural world around them through discovery and practice application of skills and concepts through various lab activities and creative projects. Topics include cell biology, genetics and heredity, evolution, classification, ecology and botany.

#404 Concepts in Earth and Physical Science (CEPS)

Grade 8 one year

This course will continue to build science investigation skills and develop our understanding of the relationships between math and science. The 8th grade year will explore the areas of physical science, basic chemistry, and earth science as students approach these topics in a story telling format. The course will start with understanding the origins of all matter and end with the exploration into the forces that shaped the geology of our planet. Students will be exposed to new and developing theories in both areas, use mathematical formulas, and use technology to support

their learning. Students will also take part in a yearlong science capstone project that will allow them to explore science discipline of their choosing.

MIDDLE SCHOOL

World Languages & Culture

Students choose to study Spanish, Mandarin Chinese or Latin. All languages are a two year commitment. In 9th grade, students may continue to study their language from Middle School or begin a new language provided there is sufficient enrollment (Spanish I, Mandarin Chinese I, Latin I).

#533 Latin 7

Grade 7 one year

Latin 7 introduces students to beginning Latin as a basis for the study of language. English and Latin grammar are discussed and compared, as are English derivatives from Latin roots. Students learn useful study techniques and terms specific to the study of language. Over time, students build up a store of vocabulary words and learn about case uses, verb tense and voice, and many other aspects of how the language functions. Much time is spent on the process of translating and in developing analytical skills. While the goal of the course is gradually to develop reading comprehension of Latin text, classical mythology, culture, history and literature are also explored.

#582 Mandarin Chinese 7

Grade 7 one year

Mandarin Chinese 7 introduces students to basic communication skills. Students build a vocabulary that reflects daily contact with the world around them and are introduced to basic grammatical structure, the pinyin phonetic system, tones, the concept of radicals, basic strokes, and proper stroke order. The traditional form of characters is taught in class. In addition, students are taught to recognize the simplified form of the characters. Students are provided ample practice in pronunciation, conversation, and writing of characters. Awareness of Chinese culture is emphasized.

#562 Spanish 7

Grade 7 one year

Spanish 7 is an introduction to the formal study of Spanish at the middle school level. Through differentiated instruction and classroom activities, the course meets the needs of students new to the study of Spanish and students who have prior experience with the language. Students build vocabulary, learn grammatical concepts, and work on listening, speaking, reading, and writing in the target language. Students are also introduced to important aspects of Latin American and Spanish culture. Students are provided ample practice in pronunciation and oral communication strategies. Projects and presentations help students apply vocabulary and grammar structures in real situations and provide opportunities for further practice in conversation and writing. Students are expected to participate in small group and whole group conversations in Spanish during class. Cooperative learning and teamwork is emphasized. By the end of Spanish 7, students will be expected to have mastered the present tense.

#534 Latin 8

Grade 8

one year

This course is a continuation of Latin 7. Students continue their study of basic Latin grammar by acquiring more sophisticated grammatical structures, including relative clauses, personal and demonstrative pronouns/adjectives, and verb conjugations and their tenses. In addition, more areas of culture and history are explored, as well the current use of Latin in various areas such as in academic texts, medical and pharmaceutical terminology, the mythological origins of constellations, animal and plant genus and species names, and state and college mottoes. Students take the National Latin Exam as part of the program (although it does not count toward a Westridge grade in the class).

#583 Mandarin Chinese 8

Grade 8

one year

Mandarin Chinese 8 provides students with the skills to continue to build their communication skills by acquiring more grammatical concepts, vocabulary words, radicals and character writing. Students continue to learn character writing. In addition, students are provided with ample practice in pronunciation, conversation and composition. Awareness of Chinese culture is emphasized.

#563 Spanish 8

Grade 8

one year

Spanish 8 is a continuation of Spanish 7 that prepares students for what they will encounter at the Upper School level. Students will continue to build on and reinforce their knowledge of Spanish grammar, refine their pronunciation, expand their vocabulary, and increase their confidence in speaking. Students will continue to learn important aspects of Latin American and Spanish culture. Projects and presentations help students apply vocabulary and grammar structures in real situations and provide opportunities for further practice in conversation and writing. Speaking and conversational skills are emphasized and students are expected to participate and collaborate in small group and whole group conversations in Spanish. By the end of Spanish 8, students will be expected to have mastered the preterit tense.

MIDDLE SCHOOL

Physical Education

#700 & #701 Physical Education

Grades 7 & 8

one year

The Middle School Physical Education program is designed to expose students to a diverse offering of physical activities, with thematic emphasis on the importance of adopting a “lifetime commitment” to health and wellness through movement. The curriculum includes an appealing range of developmentally appropriate options that includes Yoga, Team Sports, Fitness, Dance, and Recreational activities.

MIDDLE SCHOOL

Performing and Visual Arts

#672 Middle School Orchestra

Grades 7 & 8

one year

Middle School Orchestra is an ensemble which explores instrumental music through a variety of genres including folk, classical, and non-classical works. Performance skills and understanding of the art form, both in practice and in theory, will be attained through rehearsal, discussion, class work, and performance. The ensemble experience will build technique, listening, and additional skills including creativity, discipline, cooperation, and self-compassion in the learning process. The following instruments are eligible for orchestra: Strings – violin, viola, cello, or bass (beginning to experienced). Students may enroll for either one semester per year or for both semesters per year.

#920 Middle School Choir

Grades 7 & 8

one semester

Middle School Choir gives students experience in reading choral scores and singing in two- and three-part harmony repertoires in various genres. Vocal technique, diction, phrasing, musical interpretation, and music analysis are emphasized. Middle School Choir provides occasional musical leadership opportunities for students as section leader or assistant conductors.

#601 Visual Arts 7

Grade 7

one semester

This semester class provides an opportunity to study the principles of art and visual communication in depth and breadth using a variety of two-dimensional media. Students expand their visual awareness as they learn how the art-making process increases positivity and intellectual sharpness. Throughout the class, hand-eye coordination is refined through a series of projects. The design concept of pigment value is used to investigate the illusion of space by blending photography, Photoshop, and graphite to redefine traditional objectives of proportion and the position of features in portraiture. Identification and creation of negative space and shapes is emphasized by using charcoal to draw landscapes. Through the production of complex architectural drawings, the concepts of line, value, and linear perspective are explored using acrylic paint and canvas. Sketchbook assignments encourage imagination and creativity while promoting examination and discovery through observation.

#604 Visual Arts 8

Grade 8

one semester

This course expands on the visual arts foundation developed in the 7th grade with an exploration of form and space. Students examine the meaning and purpose of sculptural forms in their daily lives. They learn how to render 2D objects into objects in the round, as well as how objects change with material substitution. They use recyclable materials such as clay, cardboard, and even Jell-O to balance aesthetic judgment with problem solving and the limitations and possibilities of each material. Assignments include translating an architectural photograph into a clay form, substituting a new material for another, resulting in a Jell-O tie or a fork made from fruit loops, and creating usable, portable games with cardboard. Students develop an awareness of their physical

world and competence in creative fabrication strategies. Finally, students develop an understanding of spatial considerations, including volume, weight, scale, balance and emphasis, and surface attributes of color, line, and texture.

MIDDLE SCHOOL

Computer Science Classes

#848 Computer Science 7

Grade 7 *one semester*

In this STEM-focused, project-based course, students focus on creative engagement with and personal connections to computing by drawing upon creativity, imagination, and individual interests. Students build and program robots to solve a series of challenges, practice fundamental coding concepts in several languages, and explore engineering concepts in a 3D design and printing challenge.

#847 Computer Science 8

Grade 8 *one semester*

Computer Science 8 (CS8) is modeled after the AP Computer Science Principles course. CS8 examines the foundations of computer science with a focus on how computing powers the world. CS8 is organized around five big ideas that are essential to studying computer science: creativity, data & information, coding, the Internet, and the global impact of computing our society.

MIDDLE SCHOOL

Human Development

#970 Human Development 7: It's Perfectly Normal

Grade 7 *one year*

Human Development 7 gives students the opportunity to learn about issues that impact their social, emotional, and physical lives, in and out of school. Through conversation, activities, role-playing and reflection, students have the chance to determine what matters most to them as they navigate adolescence. Topics include the transition into Middle School, personal respect, the importance and complexity of friendships, study skills and time management, and emotional and physical well-being. It also provides comprehensive information about the developing bodies of adolescents and an introduction to human sexuality. Parents are encouraged to participate in these conversations by engaging their daughters in discussions about their own family values, a focus that is continually emphasized. Students read the text, *It's Perfectly Normal*. The class is graded pass/fail.

#971 Human Development 8: Navigating My World

Grade 8 *one year*

Human Development 8 helps students explore issues relating to the daily lives of 8th graders and their social, emotional and physical growth and development. Through conversations and

activities, students are empowered with accurate information while exploring their own values and beliefs. The curriculum builds on the foundation of the 7th Grade course and includes topics such as effective communication and decision making, health and wellness, media literacy, assertiveness and personal safety, cultural identity exploration, reproduction and sexuality, alcohol, stress relievers, and identifying and coping with pressures typically experienced in adolescence. Several guest teachers are used throughout the quarter. The class is graded pass/fail.

MIDDLE SCHOOL

Electives

Theatre

#607 Theatre 7

Grade 7 *one semester*

This course provides an introduction to theatre arts at Westridge. Students will learn to build a trusting and supportive ensemble through a variety of collaboration exercises and theatre games. Throughout the semester students will learn the true meaning of "play" as they discover their creative voice. To explore performance, students will develop the foundations of solid physical and vocal technique, and explore character development through the practice of theatre improvisation. Students will learn about theatre terminology and architecture. Through guest visits from the Westridge Theatre department faculty and staff, students will have the opportunity to explore the Westridge Performing Arts Center and get familiar with all the various positions involved in bringing our theatrical productions to life.

#606 Theatre 8

Grade 8 *one semester*

This course will build on the foundations established in 7th Grade Theatre, although students new to theatre are also welcome. Theatrical styles will be explored through various exercises as students learn to take big risks and challenge themselves creatively. Through scene study students will discover personal connection to text, character, and story. This course allows students to work not only as interpretive artists, but also as generative artists, creating their own original performance pieces based on the exciting world of improvisation and physical comedy. Upon completing this course, students will have the fundamental knowledge of various acting techniques and elements of theatre production needed to enter into upper school theatre classes and/or productions.

#903 Speech & Debate

Grades 7 & 8 *one semester*

This course introduces students to the world of competitive speech & debate, teaching students the skills of basic communication and persuasion. Speech teaches students an array of skills, including speech-writing, research, script-cutting, and even theatre skills. In debate, students learn how to conduct research using databases and think tanks from around the globe, how to organize and formulate arguments, and how to argue effectively for any ideas

which they are given to defend. In addition to the prior curriculum, debaters will travel to tournaments throughout the year in order to compete against fellow debaters from around the nation.

#905 Coding & Game Design

Grades 7 & 8

one semester

“Coding is the language of the future and every girl should learn it.” – Rashema Saujani, Founder of Girls Who Code. An understanding of coding and computer science will be important in many majors and careers. In order to be well educated and empowered, our students should be creators, not just consumers. Most of us have played games and used apps, but how do people actually design and create them? The Coding and Game Design course will explore these questions and others with a focus on core programming concepts. Students will create games, apps, and art using Scratch, Processing, and Python. Students will also work with Hummingbird robotics, electronics, drones, and the STEAMWork Design Studio to create projects that combine coding, engineering, and making. The course will cultivate critical skills such as systems thinking, problem solving, creativity, collaboration, digital media literacy, and a motivation for STEM learning.

#949 Rocketry

Grades 7 & 8

one semester

This course introduces students to the hands-on process of model rocketry. Starting from scratch, students work together as a team to design and build model rockets using equipment in the STEAMWork Design Studio (including 3D printers and the laser cutter), and assemble the parts by hand. The design process integrates math, physics, and engineering concepts as well as aesthetic decision-making. Students test their completed rockets at the Santa Fe Dam on weekend field trips, collecting data from their launch. They take this information and experience back into the classroom for discussion, weighing cause and effect, and building new iterations and modifications to their design. Students will ultimately have the opportunity to compete with their rocket in the Team America Rocketry Challenge (TARC) and, with qualifying scores, can attend the National Flyoffs in Washington DC in May. This is a semester long class which requires those who want to compete in the national competition to take Rocketry as a club in the second semester. This course develops strong teamwork skills and allows students to engage in the full engineering cycle: to design, build, test, and repeat.

#909 STEAM with Light

Grades 7 & 8

one semester

In our Middle School STEAM electives, students learn about concepts bridging the STEAM disciplines (Science, Technology, Engineering, Arts, and Math) by conducting hands-on laboratory activities, experiments, and other exploratory activities. They are then given challenges that ask them to create projects within given parameters. Students exercise problem-solving, engineering, and design-process skills as they work on their projects. Concepts

covered in this course include properties of light, optics, and electric circuits. Projects can include pinhole cameras, digital photography, wired jewelry and greeting cards, and stuffed animals that light up. In addition to the main topics, students are given short-term challenges such as artistic compositions and building structures.

#910 STEAM and the Ocean

Grades 7 & 8

one semester

In our Middle School STEAM electives, students learn about concepts bridging the STEAM disciplines (Science, Technology, Engineering, Arts, and Math) by conducting hands-on laboratory activities, experiments, and other exploratory activities. They are then given challenges that ask them to create projects within given parameters. Students exercise problem-solving, engineering, and design-process skills as they work on their projects. Concepts covered in this course include oceanography and marine biology. Projects will include both short- and long-term challenges. Examples include artistic interpretations, model making, biomimicry (product design inspired by living things), designing structures to withstand waves and currents, and exploring how robots and other technology are used to study the ocean.

#938 STEAM and the Ocean

Grades 7 & 8

0 units, each semester

Students will be exposed to topics in leadership, social justice, diversity, equity, and inclusion. In addition to building students' leadership skills, the course will provide an opportunity for students to conduct research related to the aforementioned topics, engage in intentional planning for school assembly programming, engage in interactive activities, and facilitate discussions. The course is required for students interested in being Affinity Heads and open to all students who are interested in being a part of Student Voices and who would like to take an active role in planning for and presenting during school assemblies and activities. Students taking the elective must attend the 2-day Student Leadership Retreat before the school year begins.

#996 Service*Grades 7*

This course focuses on environmental responsibility at a personal level. Students are exposed to a range of environmental issues through field trips, guest speakers, and hands-on experiences. The semester culminates with action group projects based on sustainability and environmentalism. Throughout the course, students gain knowledge about different aspects of environmental responsibility as well as tools to help them lead more eco-friendly lives.

Learning*one year**Grades 8**one year*

Building on the seventh grade course, students are exposed to a broad spectrum of social issues. Through field trips, guest speakers, and hands-on projects, students explore aspects of our local and global community as well as ways that they can make a difference in the world. By the end of the course, students have a broad range of knowledge about service issues and organizations as well as experience working on issues of their choice.

#908 Learning*Grades 7 & 8*

Learning Strategies are essential tools all students need for a more successful and fulfilling educational experience. In this class, students meet once a week and are introduced to neuroscience, learning how their brains develop and work in an academic setting. Through the introduction of metacognition, students begin to explore concepts related to assessing their own learning within a growth mindset platform. During the course of the year, students also have the opportunity to work on time management, note-taking skills, how to ask for help from teachers, how to stay motivated when subjects become more challenging, and the importance of balance in their lives.

Strategies*one year***Athletics***Grades 7 & 8*

Middle School students compete in the Middle School Independent League in basketball, flag football, golf, soccer, softball, swimming, tennis, track and field and volleyball. Middle School athletics provides each student the opportunity to participate on a team. 7th Grade and tournament teams teach girls the fundamental skills and provide interscholastic competition while 8th Grade teams are reserved for girls who seek highly competitive opportunities and have had previous experience. Students also compete in the Interscholastic Equestrian League.

Clubs*Grades 7 & 8*

Middle School students may participate in clubs during the school day once per rotation. Students may form their own interest-based clubs or they may participate in a faculty-sponsored club.