

Grade 8

Actor's Workshop (Session 2)

Perform on stage! This course concentrates on developing acting skills through various activities and exercises, both improvised and rehearsed. Students will work on characterization, physical and verbal expression, stage movement, and other facets of bringing a fictional character to life. The class concludes with each student performing a professional monologue and/or scene.

Advanced Beginner Swim (Session 1, 2, and 3)

To determine your child's ability level, please refer to the description below. All children will be tested by the instructors on the first day of each session and appropriately placed based on their ability level. *A student must be enrolled in Enrichment and Recreation to participate in the swimming program.*

Advanced Beginner: Child must be able to swim the length of the pool (25 yards) using the freestyle stroke in 7-foot deep water.

Advanced Robotics Design (Session 1 and 3)

Enter the world of applied robotics! Students will design, build, and program Lego Mindstorms robots to complete real-world tasks. Class activities follow the official Lego League Challenge Course. Note: Advanced Robotics Design meets for two hours in the afternoon per day and is therefore priced as two courses.

Animation (Session 3)

Learn to shoot stop-action animation and make your own movie. Students provide the material (clay, pen and paper, watercolors, etc.) and the story and script. We provide the lights, cameras, and computers for capturing and editing movies. Animated movies will be shown through a secure internet link.

Archery (Session 1)

Do more than just shoot arrows into hay bales. This course utilizes the school's archery range and will focus on the safety measures and skills needed to master this challenging sport. Each session ends with a skills contest.

Art of Paper (Session 2)

There is a lot more to paper than what goes on with a pen or paint! This class shows us how to make art forms that use paper in three dimensions. Explore all the diverse ways we use paper in creating artwork! Get creative with folding, building, sculpture, shadows, papier mâché, and more!

Astronomy (Session 1)

Study the stars! Through a series of hands-on activities, students will be introduced to such topics as the planets of our solar system, solar and lunar eclipses, the reasons for the seasons, comets, asteroids, meteors, and more. Students will also be introduced to Stellarium, an astronomical simulator, to complete a series of challenging lab investigations.

Beginner Swim (Session 1, 2, and 3)

To determine your child's ability level, please refer to the description below. All children will be tested by the instructors on the first day of each session and appropriately placed based on their ability level. *A student must be enrolled in Enrichment and Recreation to participate in the swimming program.*

Beginner: Child must be able to comfortably submerge their head in the pool.

Bing, Bang, BOOM! (Session 1 and 3)

STOMP...ACS style! From boomwhackers and rainsticks to guiros and djembe, from snare drums and bongos to doumbeks and coffee cans, students will explore the world of percussion in this fun and dynamic class. Students will compose multiple percussion ensembles based on traditional, fixed-pitch instruments and non-traditional, student-created instruments.

Bridge Building (Session 2)

Build a working bridge! Using math, physics, and intuition, students will learn how bridges are designed. They will then build their own model bridge using the same techniques used in San Francisco and Brooklyn. The final result will be tested for strength, practicality, and beauty.

Chess: Basics and Beyond (Session 1, 2, and 3)

This beginning level class is designed to take each student from basic knowledge to a more proficient level of play. Students will:

- Learn opening principles of the game: setting up the board and moving the pieces
- Study special rules: castling, under promotion, and en passant
- Understand pins, forks, check and checkmate
- Master quick ways to win, including the 4-move checkmate and the 2-move checkmate
- Study the history of chess ... and much more.

Chess: Competitive (Session 1, 2, and 3)

This class is for students with advanced technical knowledge of the game and who enjoy competitive game play. This is the ideal choice for students who would like to compete in state and national tournaments. Students will:

- Study notation
- Review famous games
- Practice the rules of tournament play
- Learn more complex openings
- Practice understanding the opponent
- Study end game techniques ... and much more.

Competitive Chess Goals (Session 1, 2, and 3)

Take an advanced chess class with National Master (NM) Kevin Velazquez (2021 Co-State Champion). This is an exciting and positive chess class for students who already understand opening principles, tactics (short-term actions) & checkmating patterns, and wish to improve strategy (long-term outcome) by creating and taking advantage of opponent weaknesses. Students will learn to identify positional chess concepts to generate long-term ideas (strategies) to win the game. Topics may include Strong and Weak Squares, Restricting the opponents' counter-play or pieces, Outposts, Anchor pawns in the enemy camp, the activity of the developed pieces, weak diagonals, rows, and files. This class is for tournament players or students who have progressed beyond basic opening ideas, elementary tactics, and strategies, and have knowledge to arrive at checkmate from numerous positions. NM Velazquez will take competitive students to a higher level of understanding in the opening, middle game, and endgame with emphasis on the step-by-step thought processes a master goes through. This class will include competitive play between the students with the most instructive game being analyzed in front of the class after the game has been concluded. Age is not a requirement but a strong foundation of the basics and beyond is. **Note:** Competitive Chess Goals meets for two hours in the afternoon per day and is therefore priced as two courses.

Chess: Great Gameplay (Session 1, 2, and 3)

This class requires knowledge of all concepts listed under "Basics and Beyond." This course focuses on starting and completing a full game. Students will:

- Review tactics such as pins, forks, and getting out of check
- Learn notation
- Master opening strategies and middle game planning
- Study common end game combinations such as king and two rooks, king and queen, and king and one rook
- Review games ... and much more.

Dissecting (Session 1 and 2)

Cut and learn! This zoology course will teach young scientists the inner workings of animals from worms to frogs through a combination of dissections on the computer monitor and the laboratory table.

Express in Mess! The Art of Creativity (Session 2)

This mixed media class is all about discovering the joy of creativity without the pressure of perfection! Students will experiment with a variety of ideas, materials, and techniques, embracing playful exploration and happy accidents along the way. Through hands-on projects, they'll learn to think outside the box, take creative risks, and enjoy the process of making art. Over two weeks, students will build confidence in their creativity and find inspiration in the unexpected.

Fantasy Baseball (Session 1 and 2)

Pick your roster and manage your team to first place. Students will learn statistical analysis by following the performances of their favorite baseball players.

Flag Football (Session 3)

Experience the excitement of flag football! In this fun-filled, non-contact class, participants will develop new skills through mini-games and exciting drills that sharpen their catching, throwing, and running techniques, all while building confidence and a love for the game. Designed for both beginners and experienced players, this class emphasizes teamwork, problem-solving, and unforgettable fun. Whether you're a rookie or a rising star, this class is sure to be a touchdown!

Floor Hockey (Session 1)

This class will teach your child the basics of floor hockey in a gym setting. There will be mini-games, tournaments, and lots of fun. No roller skates are required, just some gym shoes and lots of energy! Your child will work with partners and teams while enjoying some fast-paced games of floor hockey.

Games Galore (Session 3)

Did you ever play Monopoly and think, "that's fun . . . for a while." Or Clue and wish, "if only we could just focus on solving the mystery." Did you know that there are versions of these kinds of games that already exist? And did you know that you can make one up yourself? In Games Galore we will spend one week learning about the structures (called mechanisms) that make games . . . games. We will do this by playing various card and board games and finding the themes and mechanisms that we find fun. In week two, we will take this knowledge and create a quick "brainstorm" game, where the emphasis will be on design, prototype, test, and redesign. This class would be a great follow up to the "How to Win at Games and Influence People" class.

GO for Beginners (Session 3)

Learn the world's most popular board game. Invented 2,500 years ago Go (in Japan), Weiqi (in China), or Baduk (in Korea) is the oldest game that has been played continuously to the present day. Students will learn the rules and the basic strategies behind this fascinating game. Students will practice with Tesuji (clever play) puzzles, review games, and will apply the ancient proverb, "lose your first 50 games as quickly as possible." Students will need to register for a free account with an online go server to fully participate. **Note:** This class is for true beginners. Mr. Leesch is an enthusiastic student of the game but is an advanced beginner himself.

Golf Club (Session 3)

Come and join the Avery Coonley Golf Club! Our classes are taught by a certified Site Coordinator from the Kids Golf Foundation. Designed for children, this course introduces them to the foundational skills of golf through a variety of full swing stations, chipping challenges, putting courses, and more! The SNAG (Starting New At Golf) equipment, available in different sizes, ensures that kids of all ages can participate. With oversized, colorful clubs, velcro balls, and targets, this program provides a fantastic opportunity to develop skills in a fun and safe environment. Ready to tee off on your golfing journey?

Great Debaters (Session 2)

Convince people to agree with your point of view. Students in this class will refine their skills in using logic and public speaking to develop oral arguments on debate topics ranging from historic contexts to current events. A great way to develop higher levels of thinking, to prepare for Forensics in high school, or to just be better at winning arguments with friends and family.

How Good of a Detective Are You? (Session 1)

What makes a good mystery? What makes a good detective? In this class, we will dive into the world of mysteries and put our detective skills to the test. Students will read short stories, play games, and examine clips from movies or TV to learn about what makes a good mystery, and even more importantly, what makes a good detective. Students will have the opportunity to use their deductive reasoning and logical thinking skills to solve a variety of mysteries. These full – participation activities develop leadership skills, improve critical thinking, and build group rapport.

How to Win at Games and Influence People (Sessions 1 and 2)

Inspired by best-selling writer and lecturer Dale Carnegie's work *How to Win Friends and Influence People*, this class will combine introductory game theory, European-style board games, and social interactions into a friendly, no-pressure environment. Students will have the opportunity to delve into a world where competition and cooperation work hand-in-hand to achieve their goals.

Intermediate Go (Session 3)

Go (or in China wei-qi, or Korea baduk) is the oldest strategic game still being played today. It has an estimated 46 million people who follow it, and 22 million active players across 75 countries, making it the most popular game on the planet. Dive deeper into the strategies and techniques of the ancient game of Go. Students will study opening theory, shape, sente, endgame, and attacking and defending. Students will begin to practice reading (a process of visualization) and reviewing their games. In Beginner Go, students learned the fundamentals on a 9 by 9 board, but this class will focus on the 13 by 13 and 19 by 19 boards, offering more strategic considerations. Students will study problems (called tesuji), practice opening and midgame theory, and of course, play full games. **Note:** Participants in this class should have completed the Beginner Go class in a prior session or have a rating of between approximately 25 and 20 kyu.

Journalism (Sessions 2 and 3)

Be a reporter, editor, and publisher in this popular course. Using desktop publishing methods, students will produce a summer program newspaper using "all the news that's fit to print." After looking for news, conducting interviews, and writing and editing stories, the class will publish the paper using the school's latest computer technology.

King Arthur: Fact or Fiction? (Session 1)

Merlin. Excalibur. Camelot. The stuff of legend, people say. Yet was King Arthur a real person? Join the quest to learn the history behind King Arthur and how facts became stories, which turned into legends. We will explore different ways the Arthurian legend has been portrayed in books, TV, and movies to determine why the Arthurian legends are so embedded in popular culture. Do you think you have what it takes to be part of Arthur's knights of the round table?

Lights! Camera, Action (Session 1 and 3)

Perform on the big screen! This course serves as an introduction to the art of making films and videos. The first week will focus on learning the basic techniques of filmmaking, with students creating short silent movies. The second week will incorporate sound as well as working in a group process of telling a story in a sound movie. Final productions will be available for viewing via a secure link. Please note by enrolling in this class you are agreeing to your image being used on our secure ACS link. **Note:** LCA meets for two hours in the afternoon per day and is therefore priced as two courses.

Making a Music Video (Session 2)

Develop the next music video hit! From idea and conception to choreography and post-production, this course focuses on the creating of a music video. Team-taught by the ACS Director of Drama and an experienced choreographer educator, students will select one or more songs, write a script, act, shoot the video, and edit the final footage. Family and friends will be able to view the videos on a secure internet link. **Note:** By enrolling in this class you are agreeing to your image being used on our secure ACS link.

Modern Abstract Art Happening Now (Session 2)

Create art like living modern abstract artists of today. Learn how they develop their specialized ideas and messaging, and try their tips to have fun experiencing drawing, painting, layering, adding the illusion of depth, and experimenting with your messaging and ideas.

Monsters and Mazes (Session 3)

Ever wonder what an orc eats for breakfast? Hopefully, not your brave hero! Join an adventure party and journey through swamps, forests, and yes, dungeons. Dragons are not the only danger your party shall face; you may also encounter orcs, goblins and... umber hulks? Dungeons & Dragons 5th edition will be the template followed for this class.

Motion, Visual Effects, and Compositing! (Session 2)

In this course, students will learn to use Green Screening Technology combined with DaVinci Resolve and Stop Motion Studio software, to create complex shots, such as the lightsaber blade effect, as seen in movies such as Star Wars. Green Screening techniques will be explored in depth, allowing students to strategically place characters/objects, or even themselves, into any environment of their choosing.

Advanced Camera settings, lighting, storyboards, and stop-motion video creation will also be explored and combined with green screen techniques, to produce amazing visual effects.

Musical Theater Dance (Session 3)

For everyone who loves musical theater! Performing artists will combine acting with dance and choreography. The session culminates with a debut performance in the ACS Performing Arts Center for family and friends.

Natural Disasters (Sessions 1 and 3)

Ever wonder what causes earthquakes to shake the ground or how tornadoes form their powerful spirals? Curious about how hurricanes, forest fires, and floods develop and impact our world? Let's dive into the fascinating world of natural disasters! In this class, we'll explore the science behind these events and complete hands-on STEM labs to discover the power of nature and engineer solutions to prepare for its challenges!

Phun with Physics (Session 3)

Can gravity be overcome? Find out in this exciting and fun introduction to physics. Using a hands-on approach, students will study the laws that govern aspects of the physical world such as gravity, electricity, and motion.

Physics in Action! (Sessions 1 and 2)

Welcome to the action-packed world of Physics! In this 100% hands-on course, you will design, build, and test unique devices such as a mousetrap-powered car, a medieval catapult, a Newton's cradle, and more! If you enjoy working with your hands and building projects that you can take home, this is the class for you!

Pickleball (Session 2)

Ping-pong on the court. Players use an enlarged paddle to volley an enlarged ball over a net set on the gym floor while developing their eye/hand coordination and agility. This is a great game for all ages with skills that are also used in tennis.

Piece Together Your Passion for STEAM in the Makerspace (Session 1)

Unleash your creativity in this dynamic, student-led STEAM adventure! Design and craft projects that showcase your unique passions—whether it is creating artwork, designing custom T-shirts or mugs, designing accessories or artwork, or prototyping solutions to real-world challenges. With expert mentors guiding the way, students will explore cutting-edge tools and technology, including Cricut machines for precision design and cutting, 3D printers, and laser cutters. Dive into the world of digital design as you use these tools to bring your creative visions to life. This hands-on experience emphasizes problem-solving, collaboration, and innovation as students tackle real-world design constraints like time, budget, materials, and functionality. Whether you're an experienced maker or just

beginning your design journey, this class offers the perfect opportunity to experiment, learn, and create. The camp culminates in a celebratory showcase where students proudly share their creations and stories with the community. **Note:** Piece Together Your Passion for STEAM meets for two hours in the afternoon per day and is therefore priced as two courses.

Materials fee: \$25.

Plan New Worlds (Session 1)

Become problem solvers and problem seekers. This class combines a creative problem-solving model and Bloom's taxonomy of the levels of thinking to provide students with a systemic approach to evaluate and act when faced with difficulties. Hypothetical problems may include but are not limited to, issues related to weightlessness, transportation, space colonies, robots, and the environment, which will help students gain new insights into the possibilities and challenges of the future while practicing valuable problem-solving skills that can be used in real life situations.

Podcasting (Session 1 and 2)

Share interest, share knowledge, share music, share anything: PODCAST! This class will teach students the basics of podcasting as they plan, research, script, and record their own digital broadcasting program. Podcasts will be uploaded throughout the session to our own Blogspot website.

Robotics (Session 1 and 3)

Design, build and program a vehicular robot using the LEGO® Mindstorm EV3 kit. Students will learn how to use the programming software to power their robot to complete challenges. Logic, creativity, problem-solving, STEM, and teamwork skills are evident during robot missions throughout the session.

Sculpture (Session 1)

Artists will use building, sculpting, and learning compositional techniques to construct three-dimensional works of art. The first week will explore clay, papier mâché, even wire mediums! During the second week, artists will glaze their ceramic pieces and explore additional three-dimensional media.

Shooters Workout (Session 1)

Nothin' but net! That is the goal in this course that is individualized to help each player improve in this important basketball skill. From lay-ups to three-pointers, technique and practice are the focus during this hour of shooting fun.

Sing! Sing! Sing! An Intro to Choir (Session 3)

Do you love to sing? Come join the ACS Summer Program Choir! We will learn proper singing technique, how to be expressive while singing, and how to sing as a group. We will challenge ourselves to learn several choral songs in time for an awesome mini performance at the end of the session! Bring your beautiful voice, favorite songs to sing, and be a part of the choir this summer!

Speed, Height, Flight Power Club (Session 3)

Start your engines! This class focuses on the scientific basis and practical applications of motion, rocketry, and flight. Students will learn the components of these mechanical systems and develop hands-on skills that use these principles in powered scale model applications. Classes will set up and race cars, build and launch rockets, and practice flying an airplane.

Take a Chance (Sessions 1 and 2)

Learn the math that helps us make decisions in an uncertain world. Through experiments and data analysis, students will learn how to predict outcomes, determine rational costs, and interpret statistical information. Students will learn why Vegas and lotteries are poor economic choices, how sports teams make decisions about plays and players, and how to simulate the outcomes of random events. Topics covered will include counting techniques, simple and compound probability, and expected value.

Theater Sports (Session 1)

Whose line is it? This class emphasizes the building of skills in improvisational theater. Through theater games and drama exercises, students will learn to "act on their feet" and generate characters, situations, dialogue, and assorted ideas and themes generated on the spur of the moment. Students' experiences in the art of writing, directing, and acting without prior planning will culminate in an improv performance.

Unlocking the Magic of AI (Session 2)

Step into the exciting world of Artificial Intelligence! In *Unlocking the Magic of AI*, students will explore what AI is, learn about its ethical considerations, and discover real-world examples of AI in action. This hands-on course will guide students through creative projects using various AI tools, showing how AI can build upon their creativity, improve productivity, and solve problems innovatively. Whether you're curious about the technology behind virtual assistants or how AI creates art and music, this class will inspire and empower you to think critically and creatively about the future of AI. No prior experience needed—just bring your curiosity and imagination! **Note:** *Unlocking the Magic of AI* meets for two hours in the afternoon per day and is therefore priced as two courses.

Materials fee: \$25.

Volleyball (Session 2)

Bump, set, spike! Add serving, and students are playing an extremely popular game filled with skill and strategy. This course is designed to have students work on basic skills and rules, so players of any ability can have fun and improve on the court.

WACS Newsroom (Session 3)

Join the WACS news team and report on breaking news and special reports at Avery Coonley. Students will concentrate on writing news stories for newscasters, reporting on various happenings, and highlighting individuals. The class will also focus on creating an interesting documentary about life at the ACS Summer Program. Students will have the opportunity to participate in all facets of the team, from writing and reporting to shooting and editing.

Wonders of the World (Session 2)

What makes something worthy of the title, "Wonder of the World"? This class is designed to stimulate students' critical-thinking skills as they study Ancient Wonders of the World, Natural Wonders of the World, and Modern Wonders of the World, and as they compile their own unique lists. A wonderful way to study world geography.

Writeology (Session 1)

Learn the ins and outs of writing. From simple summaries to informative essays, students will focus on clearly expressing themselves using the written word. Emphasis will be put on the importance of writers to support their main ideas with appropriate examples and explanations. Appropriate for authors of all abilities.

Grade 8

CLASS	GRADES	9:00	10:00	11:00	12:30
Session 1					
Advanced Robotics Design	6-8				X
Archery	7-8		X		
Astronomy	5-8	X			
Bing! Bang! BOOM!	4-8	X			
Chess: Basics and Beyond	K-8		X		
Chess: Competitive	K-8			X	
Chess: Competitive Goals	4-8				X
Chess: Great Gameplay	K-8	X			
Dissecting	6-8		X		
Fantasy Baseball	4-8			X	
Floor Hockey	6-8	X			
How Good of a Detective Are You?	6-8	X			
How to Win at Games and Influence People	6-8		X		
King Arthur: Fact or Fiction?	6-8			X	
Lights, Camera, Action!	6-8				X
Natural Disasters	6-8			X	
Physics in Action	6-8			X	
Piece Together Your Passion for STEAM in the Makerspace	6-8				X
Plan New Worlds	5-8		X		
Podcasting	5-8		X		
Robotics	5-8			X	
Sculpture	5-8			X	
Shooters Workout	5-8			X	
Take A Chance	6-8	X			
Theater Sports	5-8		X		
Writeology	5-8		X		
Session 2					
Actor's Workshop	5-8	X			
Art of Paper	5-8			X	
Bridge Building	5-8		X		
Chess: Basics and Beyond	K-8	X			
Chess: Competitive	K-8		X		
Chess: Competitive Goals	4-8				X
Chess: Great Gameplay	K-8			X	
Dissecting	6-8	X			
Express in Mess! The Art of Creativity	5-8	X			

Fantasy Baseball	4-8			X	
Great Debaters	7-8		X		
How to Win at Games and Influence People	6-8	X			
Journalism	5-8			X	
Making a Music Video	5-8		X		
Modern Abstract Art Happening Now	6-8	X			
Motion, Visual Effects, and Compositing	6-8			X	
Physics in Action	6-8		X		
Pickleball	5-8			X	
Podcasting	5-8		X		
Take A Chance	6-8	X			
Unlocking the Magic of AI	6-8				X
Volleyball	5-8		X		
Wonders of the World	4-8	X			
Session 3					
Advanced Robotics Design	6-8				X
Animation	5-8	X			
Bing! Bang! BOOM!	4-8		X		
Chess: Basics and Beyond	K-8			X	
Chess: Competitive	K-8	X			
Chess: Competitive Goals	4-8				X
Chess: Great Gameplay	K-8		X		
Flag Football	5-8	X			
Games Galore	5-8	X			
Go For Beginners	5-8		X		
Golf Club	6-8		X		
Intermediate Go	5-8			X	
Journalism	5-8	X			
Lights, Camera, Action!	6-8				X
Monsters and Mazes	5-8	X			
Musical Theater Dance	6-8			X	
Natural Disasters	6-8			X	
Phun with Physics	5-8			X	
Robotics	5-8	X			
Sing, Sing, Sing! Intro to Choir	4-8	X			
Speed, Height, Flight Power Club	5-8		X		
WACS Newsroom	5-8		X		