

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 descriptions 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.

Animation (Session 1)

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 2)

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.

Around the World in Twenty-One Trumpets (Session 1)

Get ready for a trumpet treasure hunt from prehistory through the ancient world, following the adventures of Ragnar, the first trumpeter in human history. He will serve as your tour guide as you uncover clues from the past about ancient trumpets and the power they held for our human ancestors. Students earn trumpet travel rewards by learning basic techniques on the natural trumpet — the 8-foot trumpet invented in the Middle Ages — which unlocks the mystery behind all brass instruments. No prior brass experience or music reading skills necessary.

Art of Paper (Session 3)

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 2)

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 descriptions 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 2 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 1 and 3)

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.

Cartooning and Advanced Drawing (Session 1)

Develop drawing skills. Students will spend the first week exploring the techniques and skills of cartooning: creating characters, developing storylines, and layout. The second week will be spent building on foundational drawing techniques such as still-life, sketchbook, and observational drawing.

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.

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.

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.

Floor Hockey (Session 2)

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 every 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.

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. *This class is for true beginners. Mr. Leesch is an enthusiastic student of the game but is an advanced beginner himself.

Great Debaters (Session 3)

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.

Hidden Universe (Session 1)

Through a series of hands-on lab activities, students will be exposed to both beginning and advanced observation techniques, using the standard light microscope. Students will participate in on-campus "field trips," where they will explore biological sample gathering techniques, followed by direct examination under the microscope. Some topics of interest will include Animal/ Plant Cells, pond water samples, polarized microscopy, micro-photography techniques, and more. Students will also have the opportunity to hatch and raise "Sea Monkeys," tracking their growth and development under the microscope, throughout the duration of the course.

Intro to Psych (Session 2)

Is the brain in charge of who you are and what you do? Begin to better understand human behavior by studying brain structure and brain chemistry. Learn how structure and chemistry affect a variety of areas, such as personality, motivation, cognition, consciousness, sensation and perception, memory, sleep, and language. A class designed to provide insight into what it means to be human.

Journalism (1 and 2)

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.

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.

Note: LCA meets for two hours per day and is therefore priced as two courses.

Makerspace (Session 1 and 3)

Bring a city to life! Students will collaboratively select a city to recreate and then leverage the full capabilities of the ACS Makerspace to produce a scaled version complete with iconic buildings, roadways, people, and, of course, city noise and lights. These budding architects will lay out their structures using CAD software and fabricate them using a combination of 3D printing, laser cutting and other tools. After customizing their structures with paints and markers, they will add various electronic components to bring this project to life.

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.

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.

Novel Study (Session 1 and 3)

Session 1: Come and explore the world of science, creativity, ingenuity, and social justice as we read *The Boy Who Harnessed the Wind*. We will discover and experiment with the science behind the story, as we read the novel.

Session 3: What was it like to live at a time when a “magical element” had just been discovered? This novel study will delve into *The Radium Girls: Young Reader’s Edition* and offer exploration of this fascinating time in history by focusing on science, ELA, and social justice projects.

Orienteering (Session 1 and 3)

Solve problems using the mind and body through the sport of orienteering. Students will solve problems by reading maps and using compasses and GPS devices while participating in treasure hunts, geocaching, and even an adventure race in the Maple Grove Forest Preserve (adjacent to the ACS campus). As they become more confident with their orienteering skills, the challenges will grow in complexity. They will create their own maps and courses for other students to follow. This class provides opportunities to develop skills in critical thinking, communication, and working in small groups while enjoying the great outdoors.

Phun with Physics (Session 1)

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.

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.

Plan New Worlds (Session 2)

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 in order to complete challenges. Logic, creativity, problem-solving, STEM, and teamwork skills are evident during robot missions throughout the session.

Sing! Sing! Sing! An Intro to Choir (Session 1)

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!

Take a Chance (Session 3)

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 3)

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.

Uke Can be a Song Writer (Session 1)

Sing, learn to play ukulele, and compose your own song in just two weeks. In this summer program class, students will combine creative writing skills with the artistry of a musician. From learning chords to strumming patterns, singers will practice self-accompanying on ukulele while they sing songs before embarking on a composition project. Uke can do it!

Volleyball (Session 3)

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 2)

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.

World Rhythm Percussion Jam (Session 1)

Journey to nearly every continent on planet earth to learn some of the captivating rhythms that have kept humanity moving and grooving for generations. This class will feature music from Africa, Asia, Europe, Australia, and South America. No prior percussion experience or music reading skills necessary.

Wreck this Art (Session 3)

Document personal life through art, inspired by Keri Smith's Wreck this Journal, this mixed media class concentrates on the exploration and creation process of art. Instead of worrying about making the "perfect" work, students will be asked to "wreck" journals that artistically capture their personal lives during the two weeks of class.

Yard Games (Session 2)

In this class, your child will discover many fun yard games that are played with friends and family in the sun. We will be playing bags/cornhole, lasso golf, and yard bowling. Your child will participate in team/partner games and make many friends along the way. They will learn the basic skills of these games and how to have fun in the summertime!

8th Group	Grade	9:00 AM	10:00 AM	11:00 AM	12:30 PM
SESSION 1					
Animation	5-8	X			
Bridge Building	5-8	X			
Chess: Basics and Beyond	K-8	X			
Hidden Universe	6-8	X			
Journalism	5-8	X			
Makerspace	6-8	X	X		
Orienteering	6-8	X			
Podcasting	5-8	X			
Sing! Sing! Sing!	4-8	X			
World Rhythm Percussion Jam	6-8	X			
Around the World in Twenty-One Trumpets	6-8		X		
Cartooning & Advanced Drawing	7-8		X		
Chess: Competitive	K-8		X		
Dissecting	5-8		X		
Phun with Physics	5-8		X		
Robotics	5-8		X		
Unknown	6-8		X		
Chess: Great Gameplay	K-8			X	
Fantasy Baseball	4-8			X	
Novel Study	6-8			X	
Uke Can Be a Songwriter!	5-8			X	
Lights, Camera, Action!	6-8				X
SESSION 2					
Chess: Great Gameplay	K-8	X			
Fantasy Baseball	4-8	X			
Journalism	5-8	X			
Modern Abstract Art Happening Now	6-8	X			
WACS Newsroom	5-8	X			
Yard Games	5-8	X			
Actor's Workshop	5-8		X		
Archery	7-8		X		
Astronomy	5-8		X		
Bing! Bang! BOOM!	4-8		X		
Chess: Basics and Beyond	K-8		X		
Floor Hockey	6-8		X		
Chess Competitive	K-8			X	
Dissecting	5-8			X	
Intro to Pysch	7-8			X	
Pickleball	5-8			X	
Plan New Worlds	5-8			X	
Podcasting	5-8			X	
SESSION 3					
Chess Competitive	K-8	X			
Games Galore	5-8	X			
Great Debaters	7-8	X			
Makerspace	6-8	X	X		

Musical Theater Dance	6-8	X			
Robotics	5-8	X			
Wreck this Art	5-8	X			
Bridge Building	5-8		X		
Chess: Great Gameplay	K-8		X		
GO for Beginners	5-8		X		
Novel Study	6-8		X		
Theater Sports	5-8		X		
Art of Paper	5-8			X	
Bing! Bang! BOOM!	4-8			X	
Chess: Basics and Beyond	K-8			X	
Orienteering	6-8			X	
Take a Chance	7-8			X	
Writeology	5-8			X	
Lights, Camera, Action!	6-8				X