

Grades 5 and 6

Advanced/ Beginner Swim

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 on their ability level.

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

A student must be enrolled in Enrichment/ Recreation to participate in the swimming program.

Altruistic Ad Agency

Meld economics and philanthropy. As members of an ad agency, students will study the psychology and techniques of oral, written, and visual language. They will then develop an ad campaign for a non-profit organization they select and analyze its effectiveness through its use around the ACS campus to gather actual donations for the organization.

Archery

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

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 3 dimensions. Explore all the different ways we use paper in creating artwork! Get creative with folding, building, sculpture, shadows, paper mache, and more!

Astronomy

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.

Bing, Bang, Boom!

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 as well as non-traditional, student-created instruments.

Bridge Building

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.

Ceramics

Fire up the kiln! A variety of methods will be introduced to give the student a wide range of possibilities with ceramics. Pinch, slab, and coil techniques will be explored to encourage inventive problem-solving to create pottery and sculptural forms. Several fired and glazed pieces will be the result. This course will meet each student's needs depending on previous experiences with clay.

Challenge Yourself

It will take teamwork, planning, listening, and compromise to complete the challenges of the Avery Coonley School adventure course. Students will test their bodies and minds as they work through new tasks on the low ropes course. No one gets left behind in this class as we strive to accomplish new heights together.

Chess for All

Professional chess instruction will include opening game principles, middle game combinations with strategies and tactics plus end game ideas for an exciting and interesting experience with the "sport of the mind" CHESS. Each student will move to a new level of expertise through their 2-week session.

Comic Strips and Cartoons

Your emerging author will use storytelling and imagery to create their own graphic novel. Students will explore different types of graphic novels and use imagery to enhance their own narrative writing.

Creative Drawing

Get ready to sketch! Each artist will learn how to draw using different media. Students will learn various techniques that include shading and the use of space to create depth within their drawings. Emphasis will be placed on imagination and creativity.

Create-a-Play

Build a play from scratch! Students will brainstorm ideas; write a script outline through discussions and improvisations; develop situations, characters, and dialogue; rehearse scenes; build and/or borrow sets, props, and costume pieces; and present a final production during the last class.

Daily Survival

Can you survive? Students will sharpen their skills in reading, math, and critical thinking as they apply them to everyday living using authentic scenarios (i.e. planning a budget, living on a professional salary, planning a vacation) and sources. This practical class includes economics, geography, and more.

Dissecting

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.

Elementary Chemistry

Explore the uses of chemistry in our everyday lives. In this introductory course, participants will experience such topics as the construction of a working battery, chromatography, and nucleation. Students will also engage in a series of lab investigations, which will include making Slime, Kinetic Sand, and Oobleck.

Fantasy Baseball

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

Fundamentals of Public Speaking

Learn the fundamentals of public speaking while having fun. In this class, students will learn the correct method of writing a two to three-minute speech they will present for the class. Along the way they will also play games that teach projection, hooking the audience's attention, and listening skills.

Gotta Dance

Move your body to the beat. Designed and taught by a professional dance instructor, this course introduces students to a variety of basic jazz, contemporary, and musical theater dance techniques. Note: Comfortable, loose clothing should be worn; jazz or ballet shoes may be worn but are not required.

Guitar for Beginners

All great musicians were beginners at some time. Who knows what learning to play this popular instrument will do for any child? In ten short lessons, students will be taught basic fingering, fretting, and strumming, using an acoustic guitar. They will also receive individual instructions to help them progress more quickly with these skills. Classroom guitars will be available or bring your own acoustic guitar from home.

Introduction to Movie Making

Become a filmmaker! Taught by the ACS director of drama, this class will guide students through the process of creating short movies including generating ideas, scriptwriting, acting, videography, directing, and editing. On the final day of class, movie premiers will be shown to family, friends, and family campers either live or through video links.

Note: Intro to Movie Making meets for two hours per day and is therefore priced as two courses.

Maneuvering Math

Engage in solving intriguing problems. Students will challenge themselves in thought-provoking skill practice, projects, games, and activities to increase their understanding of math.

Minecraft Master Masons

Are you ready to hone your design skills? Starting with the basics, students will recreate one of their own drawings in Minecraft. From there, students will use Minecraft to create their own house, city, or world. Beginners and experienced students alike are encouraged to participate. Students can create a totally new design or can draw ideas from other experiences.

National Park Art

Creatively capture the wondrous lands and animals from our United States National Parks. Art and science-based, this class is packed with art projects using paint, papers, pastels, maps, photographs, and print-made images. Curious collage ideas and varied natural materials encourage unique eye-catching creations.

NU CTD Engineering Pathway

Weeks 1 -2: Civil Engineering: LEGO Urban Design & Development - Urban design and architecture concepts come to life when students collaborate to plan and create buildings, roads, and city infrastructures using LEGO®s bricks that allow for architecturally-focused construction. Course activities enhance students' spatial-relational thinking skills with activities such as creating blueprints and maps.

NU CTD Life Science Pathway

Week 1-2: 3D Cell Biology - Students use LEGO® bricks and other 3D construction tools to learn about the structure of various living cells and of DNA molecules. They examine cell structures and the laws of genetic inheritance, building up their systems thinking skills and knowledge of microbiology. They develop skills related to inquiry, observation, problem-solving, and teamwork.

NU CTD Physics Pathway

Weeks 1-2: Rollercoaster Physics - Students explore the laws of physics that can make us feel lighter than air one moment and heavier than a ton of bricks the next when riding a roller coaster. Students build and test structures that deepen computational and analytical thinking skills. The science and design experience provided by this course prepare participants for later study of physical sciences and engineering.

Orienteering

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.

Perfect Pre-Algebra

Whether this is an introduction, review, or enrichment of pre-algebra problem solving; learn strategies and skills for successful problem-solving. Practice word problems, equations, and reasoning skills with integers, fractions, decimals, polynomials, and geometry. Increase confidence level, while having fun sharpening skills through a variety of activities.

Pickleball

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.

Podcasting

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.

Raiders of the Lost Arch(aeology)

Follow in the footsteps of Indiana Jones! Students will develop skills in archaeology, geography, history, and sociology from around the world. A great class to develop a broader worldview.

Robotics

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.

Sculpture

Fire up the kiln! Students will be introduced to a variety of basic ceramic techniques, including pinch and coil, in this beginning clay course. Be ready to display wonderful fired and glazed works of art from these budding artists.

Shooters Workshop

Nothin' but net! That's 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

Theater Arts

Calling all aspiring thespians! This course teaches the fundamentals of theater including acting, improvisation, projection, and stage presence. The highlight is a final, fun-filled performance, which will be shared virtually with family and friends, during the last hour of class. A new play will be performed each session, so this course may be taken more than once.

TinkRsynth

Build your own electronic instrument! TinkRsynth is TinkRworks' take on a an electronic musical instrument that produces a wide variety of sounds by combining electronic waveforms through an amplifier. Students will begin by assembling their very own TinkRsynth and then will learn about the fundamentals of sound. Using these learnings, they'll program their instrument to respond to the twist of a knob or the touch of a finger to produce their own unique sound. In the end, students may create their own music or come together to form a band.

Volleyball

Bump, set, spike! Add serving, and students are playing a very 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.

Wild and Wacky Art

Turn your creative ideas into wild and wacky art. Students will use a variety of exciting materials and techniques in combination with their unique imaginations to create fabulous works of art.

Wizards of Wall Street

Journey through the world of investments and high finances. This course will expose students to economic principles and theories for investing in the stock market and other commodity markets in the US and other countries. Activities will lead to an understanding of the terminology of investments, the use of the internet as a research tool, and the creation of a mock portfolio - an important first step forward into economics and financial planning in our growing global economy.

Wonders of the World

What makes something worth 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 Wonder of the World, and Modern Wonders of the World, and as they compile their own unique lists. A great way to study world geography.

Wreck This Art

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.

5th and 6th Grade

Session 1	9:00	Session 1	10:00	Session 1	11:00
ADV/BEG/SWIM		Fantasy Baseball		Bing! Bang! BOOM!	
Bridge Building		Orienteering		Ceramics	
Create-a-Play		Perfect Pre-Algebra		Chess For All	
Dissecting		Podcasting		Elementary Chemistry	
Tinkrsynth		Wreck This Art		Gotta Dance!	
				Theater Arts	

NU CTD Physics Pathway 9-12

Session 2	9:00	Session 2	10:00	Session 2	11:00	Session 2	12:30
Archery		Chess For All		ADV/BEG/SWIM		Introduction to Movie Making	
Astronomy		Cartoons & Comic Strips		Daily Survival			
Creative Drawing		National Park Art		Guitar for Beginners			
Fantasy Baseball		Pickleball		Perfect Pre-Algebra			
Fundamentals of Public Speaking		Raiders of the Lost Arch(eology)		Shooters Workout			
				Wild and Wacky Art			

CTD Engineering Pathway 9-12

Session 3	9:00	Session 3	10:00	Session 3	11:00
Cartoons & Comic Strips		ADV/BEG/SWIM		Altruistic Ad Agency	
Maneuvering Math		Art of Paper, The		Challenge Yourself	
Volleyball		Bing! Bang! BOOM!		Sculpture	
Wizards of Wall Street		Minecraft Masters		Tinkrsynth	
		Masons		Wonders of the World	
		Robotics			

CTD Life Science Pathway 9-12