

## Grade 4

### **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.

### **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.

### **Author, Author (Session 1 and 3)**

Be an author with your own literary work complete with illustrations, cover, and title page. This course is designed to lead each student through the writing process from generating ideas to drafting, from proofreading to editing. Opportunity for independent, creative expression will be integrated with age-appropriate instruction on writing mechanics, grammar, and style. Students will have fun and take pride in sharing their works with each other, family, and friends. Each session is a new experience, so sign up for many fun-filled hours of creative writing.

### **Beginning Basketball (Session 1)**

Dribble, pass, shoot, score and more! Budding athletes will work on their motor abilities as they develop the basic skills of this popular sport. Eight-foot baskets and smaller basketballs help the players have a successful experience.

### **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.

### **Bonkers for Boomwhackers (Session 1)**

Inspired by the Blue Man Group's noisy antics, these pitched percussion tubes are a fun and energetic way to create music. With color-coded notes, students will create music by reading a variety of symbols to play a mix of classical & contemporary pieces.

### **Brain Games (Session 1 and 3)**

Exercises for the mind! Through a variety of games, puzzles, and activities, students will sharpen their skills and abilities in thinking logically, spatially, mathematically, linguistically, and creatively.

### **Challenge Yourself (Session 1 and 3)**

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.

### **Chapter Book Challenge (Session 1, 2, and 3)**

Dive into a chapter book! Each day students will strengthen their thinking skills by listening to parts of a classic novel, participating in class discussions, and completing a written response. This summer's featured books are; Session 1 - *Holes*, Session 2 - *My Father's Dragon*; and *The Cricket in Times Square*; Session 3 - *The Lion, The Witch, and the Wardrobe*.

### **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.

### **Courts and Trials (Session 3)**

Guilty or innocent? You decide! In this course, students will learn about this country’s legal system through situational, role-playing activities. This course leads to a mock trial.

### **Create a Play (Session 1 and 3)**

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.

### **Creative Concoctions (Session 1, 2, and 3)**

Explore simple science experiments using common household ingredients. Based on the scientific method, this class will teach young minds to make connections and discoveries, to develop hypotheses and conclusions, and to keep logs of their observations.

### **Enchanted Castle (Session 1 and 3)**

Enter the fantasy world of imaginative literature while developing critical, creative, and higher-level thinking skills. Through game activities, students will learn more about the elements, styles, and characters in fairy tales, will increase their vocabularies, and will discuss moral values. They will even create their own fairy tales to share with family and friends.

### **Escape (Session 2)**

Help open the lock! Participants work together to solve a series of engaging problems to achieve a common goal: open the locked box. A class that cultivates the life-long skills of critical thinking, collaboration, creativity, and communication.

### **Exploring Painting (Session 3)**

Calling all artists to explore the art of painting! Concepts covered will include color theory, brush and non-brush techniques, and composition, as students use a variety of paints and mediums. Students will enjoy creating many works of art while expanding their creative skills.

### **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.

### **Fractured Fairy Tales: Peter and the Wolf (Session 1)**

Remix this classic through theater and dance! Students will improve their coordination, flexibility, and imagination as they create various animal characters to help capture the wolf. Participants will also help choreograph their interpretation of this tale which they will perform for family and friends.

Note: No previous dance experience required.

### **Fundamentals of Public Speaking (Session 1 and 2)**

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.

### **The Golden Ratio and Beyond (Session 2)**

Starting with the Renaissance Masters and moving forward, students will use art and design to explore mathematical concepts. Students will construct models, drawings, and sculptures to interact with mathematical constructs.

### **Gotta Dance (Session 2)**

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 (Session 2)**

All great musicians were beginners at some time. Who knows what learning to play this popular instrument will do for any child? In nine 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.

### **Hot Cross Fun! Recorder 101 (Session 2)**

Whether you want to join the band at your school or just think playing a musical instrument would be cool, this class will prepare you for whatever future musical journey you plan to have! This course will teach you the ins and outs of a recorder. During this jam packed nine days, you will experience and improve your solo and ensemble performing as well as become musically literate all while rocking out on the recorder.

### **Invention Convention (Session 1 and 3)**

Construct your original invention. This popular course will review the contributions of past inventors and provide students with the opportunity to develop and construct their own original inventions. This is a great hour of expanding the mind, solving problems using creativity, collaboration, and teamwork while having fun.

### **Knock, Knock: SCARY is Here! (Session 1)**

Have fun making scary objects! Students will have a delightfully creepy time learning about "frightening" things from the past to the present through art, literature, and science, and then create their own scary works of art.

### **LEGO® Science (Session 1 and 2)**

LEGOs are more than toys! This popular LEGO-designed curriculum introduces students to simple machines and structures that explain how things work. Students will assemble their own working models to explore physical principles.

### **Magical Printmaking (Session 2)**

Printmaking is magical! The process of creating images and transferring the images to a variety of paper, wood, or cloth is exciting, along with learning how to make multiple copies. Try foam printing plates, alternative photography processes, relief printing, stamping, and more.

### **Minecraft Master Masons (Session 1)**

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.

### **Movin' and Groovin' (Session 3)**

Develop and challenge your expressive and creative talents. This course will guide students to do this through a variety of dance movement explorations. No previous dance experience is required. Each session culminates in an informal presentation for family and friends. Comfortable, loose clothing should be worn.

### **Music Theory (Session 3)**

This course is intended for students with little or no background in music who would like to develop a theoretical and practical understanding of music and how music works. Students will be introduced to the technical details of music such as musical notation and rhythm. We will also explore the world's most famous composers and their works as well as different music genres.

### **NU CTD Brains, Brains, Brains! (Session 2)**

**Week 1:** Brain Games: Math & Logic – Explore and build a variety of mathematical, deductive reasoning and logic puzzles to build problem solving strategies and stretch your "math mind!" Through independent and collaborative efforts, students strategize solutions and grapple with games.

**Week 2:** Brain Surgery – Young neurologists go inside the brain to analyze its systems and understand its connection to the rest of the body. Among other activities, students map the brain,

experiment with senses and the brain, and use interactive web tools to investigate this amazing and complex organ.

**Admission Criteria, Grades 3-4:**

- Scores of 90% or above in either verbal or math on a standardized test
- If no scores are available, portfolio can be submitted for grades 3-6
- Portfolio is a grade report and a teacher recommendation
- Registration for this course is not complete until paperwork is fully submitted
- This class is a 3-hour course. No other Enrichment courses can be chosen during the session.
- Lunch and recreation can be added to the registration of this class.

**NU CTD Force and Motion (Session 2)**

In this two-week course, students investigate and apply physics principles by designing and building objects and vehicles that move and crash. What begins as a question of speed becomes a fun ride on the road of creative reinvention, where design-engineering skills get better with every test drive. Discuss physics examples from human history and the animal world.

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**NU CTD From Comics to the News (Session 1)**

Week 1: Comic Book Characters - Graphic novels and comic books cover topics from superheroes to historical events, capturing complex ideas through a unique combination of text and illustrations. As students learn the elements of graphic novels and comics, they focus on applying these elements to build strong characters and plot lines in their own stories.

Week 2: Journalism 101 - Aspiring journalists conduct research, think critically about reliable sources, and separate fact from opinion. Students learn key nonfiction writing skills as they brainstorm and write articles about topics of interest and collaborate with peers to develop their own classroom publication.

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## **NU CTD Hands-On with Math: Geometry and Codes (Session 1)**

**Week 1:** Geometry Unfolded: Spatial Reasoning in 2D & 3D – From origami to computer modeling, visualizing 2D geometric problems in 3D allows scientists and engineers to design solutions to complex challenges. Explore and investigate geometric and spatial concepts in a fun, engaging way by illustrating original 3D images, creating, and solving puzzles, learning the art and math of origami, manipulating 3D shape nets, and building 3D designs.

**Week 2:** Coding: Break It, Build It – Computational thinking requires decomposition, the ability to take an idea and break it down into smaller parts for deeper understanding and analysis. Students create coding projects using a variety of digital tools and collaborate with other programmers. Tangible materials like logic games and 3D puzzles challenge students to demonstrate their thinking using novel tools.

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## **NU CTD How Things Work: Electronics, Sensors, and Circuits (Session 3)**

Electricity is all around us. We use it to play, but we are warned not to play with it. In this two-week course students investigate simple circuits and sensors by safely taking apart electronic devices and making – and breaking – circuits. Using a range of everyday materials and their imaginations, students will learn the fundamentals of electricity and robotics, and how to think like electrical engineers, as they participate in design challenges.

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- This class is a 3-hour course. No other Enrichment courses can be chosen during the session.
- Lunch and recreation can be added to the registration of this class.

### **NU CTD LEGO® Architecture: Landmark Designs (Session 3)**

What makes a structure a landmark rather than just a building? Does it involve its distinctive features, function, or location? Or does it have to do with its meaning to those who use and see it? An architect's design considers all of these factors. Using LEGO® bricks and household materials, student designers solve building challenges as they learn about architectural elements and engage in the design process in this two-week course. Apply concepts of engineering, art, and urban planning to create original landmark designs.

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### **Nutty Nutcracker (Session 2)**

The holiday classic - without the snow! In this course, students will jump, turn, leap, and sword fight their way through the familiar Christmas tale while exploring a variety of ballet movements as they produce one nutty Nutcracker performance on the final day. Note: No previous dance experience required. Ballet shoes may be worn but are not required; students should wear comfortable, loose clothing.

### **Penning Poems (Session 2 and 3)**

Be inspired by poetry. Young writers in this class will study the structure of a variety of poetic forms to ignite their imaginations as they pen their own poems. Emphasis will be put on the creative writing process as students produce a book of their original poems to take home.

### **Pine Car Derby (Session 2 and 3)**

Physics, engineering, and racing: OH MY!! Students will design and construct their own wooden car, then race them against their classmates. Be the first under the checkered flag and win the Coonley Cup.

### **Science Olympics (Session 2)**

Experiment and explore! This course is a hands-on science class, focusing on experimentation and discovery. The world is the classroom for students as they get involved in this active learning process.



### **Sculpture (Session 1 and 2)**

Artists will use building, sculpting, and compositional techniques to construct three-dimensional works of art. The first week will focus on hand building techniques with clay. During the second week, artists will glaze their ceramic pieces and explore additional three-dimensional media.

### **Seven Windows on the Forest (Session 2 and 3)**

Take a closer view of trees, forest, forest animals, and the tropical rain forest. This course is designed to meet the needs of a variety of learners through an integrated approach using math, science, and language arts to teach students the importance of trees, food chains, and how all living things are related.

### **Shipbuilding (Session 2 and 3)**

What makes a ship float? This hands-on science course is for kids who love to sail or kids who love to build. After examining ships from dinghies to huge ocean vessels, students will design and build their own boats including a launching on the final day.

### **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!

### **Soccer Skills (Session 3)**

In this class, your child will learn the basic soccer skills of dribbling, passing, and shooting a goal. There will be mini-games, tournaments, and a lot of team building to ensure your child is having fun while learning the basics of soccer.

### **Spanish: Uno, Dos, Tres (Session 2)**

¡Hola! Come learn a new language in this introductory course. Students will learn the basics of conversation, numbers, colors, how to describe themselves, and sing a few songs in Spanish. ¡Hasta luego!

### **Tech-A-Sketch (Session 1 and 3)**

A handheld classic meets the 21st century! In this project students will complete a handheld drawing project complete with programmable LCD display, buttons, and knobs to customize their drawing experience. They will learn about the science of displays, coordinate systems, along with plotting basic shapes to create a one-of-a-kind experience. Not happy with your creation? Shake it up and try again!

### **Theater Arts (Session 1 and 2)**

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 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.

### **Ukulele (Session 3)**

The ukulele craze started in 1915 and continues to this day! Students will enjoy learning how to play this compact and sweet-sounding instrument in just two weeks. With only four strings, students will be able to master many techniques and songs ranging from folk to pop. A recital will be held at the end of the session for students to showcase their newfound abilities.

### **Wild and Wacky Art (Session 1 and 2)**

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.

### **Wild Math (Session 2)**

Sharpen math skills while playing! This course will have students playing games and creating projects which are designed to have them improve in math without knowing it - a fun way to work on those skills during the summer.

### **Wonders of the World (Session 3)**

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

### **Yoga for Kids (Session 1)**

Have fun while developing focus, awareness, and coordination. Taught by a trained yoga instructor, this class stresses flexibility and balance as students participate in imaginative poses, games, songs, and relaxation. A beneficial class for the whole body.

4th Group	Grade	9:00 AM	10:00 AM	11:00 AM
<b>SESSION 1</b>				
Bonkers for Boomwhackers	3-5	X		
Chapter Book Challenge	3-4	X		
Chess: Basics and Beyond	K-8	X		
From Comics to the News	3-4	X	X	X
Hands-On with Math: Geometry and Codes	3-4	X	X	X
Knock, Knock: SCARY Is Here!	3-4,	X		
Lego Science	3-4	X		
Sing! Sing! Sing!, Sing! Sing! Sing! Sing! Sing! Sing!	4-8	X		
Theater Arts	3-5	X		
Wild & Wacky Art	3-5	X		
Yoga for Kids	2-4	X		
Author, Author	3-5		X	
Beginning Basketball	3-4		X	
Brain Games	3-4		X	
Chess: Competitive	K-8		X	
Create-A-Play	4-6		X	
Creative Concoctions	2-4		X	
Fractured Fairy Tale: Peter & the Wolf	3-5		X	
Minecraft Masers Masons	3-4		X	
Tech-a-Sketch	3-5		X	
Yoga for Kids	2-4		X	
Around the World in Twenty-One Trumpets	3-5			X
Challenge Yourself	3-4			X
Chess: Great Gameplay	K-8			X
Enchanted Castle	2-4			X
Fantasy Baseball	4-8			X
Fund. Pub Speaking	3-5			X
Invention Convention	3-5			X
Sculpture	3-5			X
<b>SESSION 2</b>				
Brains, Brains, Brains!	3-4	X	X	X
Chess: Great Gameplay	K-8	X		
Creative Concoctions	3-4	X		
Fantasy Baseball	4-8	X		
Force in Motion	3-4	X	X	X
Fund. Pub Speaking	3-5	X		
Guitar for Beginners	4-7	X		
Science Olympics	3-4	X		
Sculpture	3-5	X		
Spanish, Uno, Dos, Tres	2-4	X		
Bing! Bang! BOOM!	4-8		X	
Chess: Basics and Beyond	K-8		X	
Escape	3-4		X	
Nutty Nutcracker	3-5		X	
Penning Poems	3-4		X	
Seven Windows on The Forest	2-4		X	
Shipbuilding	3-4		X	
Theater Arts	3-5		X	
Wild & Wacky Art	3-4		X	
Author, Author	3-5			X

Chapter Book Challenge	3-4			X
Chess Competitive	K-8			X
Golden Ratio and Beyond,The	3-4			X
Gotta Dance	4-6			X
Hot Cross Fun	3-4			X
Lego Science	3-4			X
Magical Printmaking	3-6			X
Pine Car Derby	3-4			X
Wild Math	3-4			X
<b>SESSION 3</b>				
Brain Games	3-4	X		
Chess Competitive	K-8	X		
Create-a-Play	4-6	X		
How Things Work: Electronics, Sensors and Circuits	3-4	X	X	X
LEGO® Architecture: Landmark Design	3-4	X	X	X
Music Theory	3-4	X		
Penning Poems	3-4	X		
Pine Car Derby	3-4	X		
Seven Windows on The Forest	2-4	X		
Wonders of the World	4-8	X		
Challenge Yourself	3-4		X	
Chapter Book Challenge	3-4		X	
Chess: Great Gameplay	K-8		X	
Enchanted Castle	2-4		X	
Exploring Painting	3-4		X	
Movin' and Groovin'	1-4		X	
Ukuele	3-5		X	
Bing! Bang! BOOM!	4-8			X
Chess: Basics and Beyond	K-8			X
Courts and Trials	4-7			X
Creative Concoctions	3-4			X
Invention Convention	3-5			X
Shipbuilding	3-4			X
Soccer Skills	3-4			X
Tech-a-Sketch	3-5			X