

Spring 2024 Weekend Programs Course Catalog

PreK - Grade 8

Northwestern University's Center for Talent Development (CTD) has an array of high-quality, captivating online and in-person enrichment courses available for students on Saturdays. Our courses focus on high-interest topics, include both collaborative group work and individual hands-on projects, and are led by expert instructors who demonstrate the joy in learning. Courses in mathematics, science, design & engineering, and computer science & technology engage students during six Saturdays. Students with demonstrated strengths in verbal/reading and/or math, depending on course, may apply. See <https://www.ctd.northwestern.edu/eligibility> for eligibility details. Visit our [application page](#) to begin your application.

Weekend Enrichment Program Details
Dates: Saturdays, April 13, 20, 27, May 4, 11, 18, 2024
Times: 9:00 a.m. - 11:30 a.m.; select afternoon courses (12:00 p.m. - 2:30 p.m.)
Locations: Evanston - view the Weekend Enrichment Program web page for details.
Tuition: \$375

PreK - Kindergarten

Rainforest Expedition

Why are rainforests called the "jewels of the Earth?"

Did you know that about half of the world's species of plants and animals are found in the rainforest? Delve into the rainforest - from the floor up through the canopy - and examine the diversity of life in this vast ecosystem. The rainforest comes alive as students learn about a wide variety of animals and plants that call rainforests their home, including iguanas, monkeys, water lilies, orchids, harpy eagles, sloths and more! Through hands-on activities, dramatic play, and literature students explore the similarities, differences and connections between their everyday environment and the lush rainforest environment as they investigate what grows and lives on each level.

Open Enrollment: no eligibility requirements

SUBJECT: Science

Business is Booming

How do we use money in our world? Through dramatic play, explore what it means to manage a bank, run a grocery store, design a business and more. Learn about deposits and withdrawals, investing, and saving money. Create your own currency and explore a play banking system to understand how money fits into our everyday world.

Open Enrollment: no eligibility requirements

SUBJECT: Mathematics

Kindergarten - Grade 1

Mysteries of the Deep

What allows clownfish to live among stinging anemones? Where do ocean animals go during a hurricane? Is there life in the deep Marianas Trench? Marine biologists-in-training discover the fascinating world of aquatic life while solving the great mysteries of the deep. Through hands-on projects, investigations and lively discussions, students learn about the amazingly diverse life inhabiting our freshwater lakes and salty oceans and the inner-workings of our ecosystem.

Open Enrollment: no eligibility requirements

SUBJECT: Science

Grades 1 – 2

Active Architects: Design & Build

Future designers, engineers and architects are introduced to architectural vocabulary, design and building tools, and visual/spatial thinking. Design your own original 2D and 3D models and buildings in various formats and with diverse materials. Investigate art, architecture, science, and math in this interdisciplinary course.

Open Enrollment: no eligibility requirements

SUBJECT: Technology and Engineering

Young Author's Workshop

Aspiring authors develop original narratives and performances in this active class. Students engage with the illustrations and writing of award-winning children's literature. Analyze images and videos of skilled storytellers and actors to inspire unique works. Independent and collaborative exercises focus on dramatic play, creative writing, storytelling, and performance.

Open Enrollment: no eligibility requirements

SUBJECT: English & Language Arts

Zoom: The Math of Fast

If a gazelle and a zebra are running in opposite directions from a hungry lion, how can we determine which one is faster? Using word problems and hands-on experiments, explore units, measurement, estimation, speed, and rate in relation to things that move. Make data comparisons, use basic multiplication and grapple with algebraic equations in the quest for speed.

Open Enrollment: no eligibility requirements

SUBJECT: Mathematics

Grades 3 – 4

Digital Architects

Explore the architectural design process using math, physics, and visual-spatial reasoning skills. Through hands-on building projects, blueprint sketching, and digital modeling software, such as SketchUp-Make® 3D, novice architects investigate how buildings come to be and how people interact with the built environment. Students experience how math and art come together as they design and create their own model buildings.

Qualifying Area: Reading OR Math

SUBJECT: Technology & Engineering

Stories of the World: Myths & Legends Throughout History

Why are myths and legends still relevant today? Trace the origins of tales and characters of all kinds as you travel back in time to read myths from around the world. Consider how oral tradition still informs culture today and how these stories influence what we understand about our world. Read and interpret modern adventure stories as well as classic myths and legends about ancient figures and the creatures who protected and terrified them. Design and compose original fictional works about mythological characters.

Qualifying Area: Reading

SUBJECT: English & Language Arts

Zoology: Animal Behavior & Biology

What behaviors do animals use to claim a territory, find food, avoid predators, find mates, and migrate? Through hands-on experiments and research, learn about the unique behavioral adaptations that animals have in their ecosystems. Track the movement of birds and animals of the land and sea to evaluate how animal migration and behavior is influenced by natural phenomena such as weather patterns, landforms, or seasonal changes.

Qualifying Area: Reading OR Math

SUBJECT: Science

Grades 5 – 6

Beyond the Block: Programing with Python

How do you build your own unique games using simple code? Python is a powerful, flexible, object-oriented programming language used for different real-world purposes in a variety of fields. Apply core programming concepts as you further explore and develop tools and skills necessary to develop more complex programs. In a pair programming environment, collaborate with peers to workshop your creations. Build original games, animations, and more while learning about syntax, strings, conditionals, and functions with this robust text-based language.

Qualifying Area: Reading OR Math

SUBJECT: Technology & Engineering

Engineering for a Changing Climate

Using real-life examples from scientists around the world, discover how changing climate conditions impact Earth, including sea level rise and occurrence of severe weather events. Through hands-on activities like case studies, experiments, and engineering labs, students explore climate science from multiple angles and develop knowledge about the diverse influences on water, air, land, and

living organisms. Investigate the role that climate engineers and modern technology play in identifying, predicting, and changing how humans and our climate interact, and design your own solution to one of Earth's climate concerns.

Qualifying Area: Reading OR Math

SUBJECT: Technology & Engineering

The Science of Color

How does the application of science enhance color in our world? How is color added to fireworks? How is it that the color white is all colors according to scientists, but you cannot make white by mixing all colors of paint in an art studio? Using the principles of chemistry and physics, explore the world of color that blends the line between art and science. Discover how light produces color and apply topics of color theory to original creations. Through hands-on projects and experiments, delve into how light interacts with matter, the chemistry of paint, and wavelength theory. By studying reflection, refraction, movement, and combinations, observe how color interacts with and influences the world around us.

Qualifying Area: Reading OR Math

SUBJECT: Science

Grades 7 – 8

Essay Essentials: Writer's Workshop

Well-penned essays demonstrate how the written word can shed light on an issue, present a point of view, or prompt a reader to take action. In this writer's workshop, collaborate as you learn the fundamental skills employed by exceptional essayists. Analyze and critique a range of texts to further develop critical thinking skills. Write and revise your own essays, focusing on the persuasive, critical, narrative and personal forms, while learning about audience, purpose, and point of view.

Qualifying Area: Reading

SUBJECT: English & Language Arts

Integrated Math

Where and when do we actually use algebra in the world, and how is it connected to the other strands of math? By analyzing and integrating mathematical methods taken from algebra, geometry, statistics and probability, learn how to use math as a reasoning tool outside of the classroom. With a problem-based, student-centered approach, apply quantitative thinking to real-world scenarios and engage in collaborative exploration of realistic problems with other math-minded classmates.

Qualifying Area: Math

SUBJECT: Mathematics