

2020 FALL SUPER SATURDAY GOES VIRTUAL!

Introduction

GER²'s Virtual Super Saturday program provides learning experiences that explore advanced material and develop critical and creative thinking. We offer a caregiver-child format for children in PreK - 5th grades so caregivers can spend quality time and gain experience working with their children. This is required. The participation of caregivers of students in 6th - 12th grades is not required, but parents are invited to our parent interest sessions.

Classes are designed to meet the needs of academically, creatively, and artistically talented children from PreK through 12th grade so class content will be at least two academic grade levels above the child's current school grade level. The Fall program is an opportunity for children to explore advanced material and develop critical and creative thinking skills while spending quality time with their caregivers, who gain experience working with their children.

What makes it super?

- Caring teachers who specialize in gifted education.
- Challenging learning with hands-on activities.
- Students can pursue their personal areas of interest and forge new friendships.
- An environment that values critical thinking, creativity, diversity, achievement, and independent learning.
- A chance to share common interests with other high-ability children.



Course information

Date: Oct 10th & 17th

Grades: PreK-K, Gr.1-2

Time frame: 9 am - 1 pm

Two sessions of affective class, two sessions of enrichment class

One session of Parents talk with GER²1 speaks with expertise in gifted education.

Registration fee: \$50

Grades: Gr. 3-5, Gr. 6-8, Gr. 9-12

9 am- 3 pm (1 hour for lunch)

Two sessions of affective class, three sessions of enrichment class.

One session of Parents talk with GER²1 speaks with expertise in gifted education.

Registration fee: \$70

REGISTER ONLINE at: <https://www.cvent.com/d/s7q14d>

Registration will close on October 3rd.



Please visit www.purdue.edu/geri, email Yao Yang at yang1707@purdue.edu for more information!

PreK– K Grade Courses

Course Title: *STEM Activities for Little Engineers*

Course Description: Students will learn to use the Engineering Design Process (ask, imagine, plan, create, improve) to complete activities in Science, Technology, Engineering and Math. Our activities will be hands-on and will use simple materials.

Course Title: *All about Apples*

Course Description: Did you know there are over 7,500 different types of apples grown all over the world? Come spend the day with us as we explore the life cycle of an apple, create different apple projects, and taste a few of the many varieties of apples!

Course Title: *How to Become a Money Genius*

Course Description: This is a journey with your kids to understand more about money, allowing them to understand the concept of financial responsibility. Additionally, we will dive in the issue of poverty and allow students to make choices as a family that is in poverty.

Course Title: *My Place in the World—an Exploration into Geography*

Course Description: This course will introduce children to the elements of today's world, consisting of land, air and water. Additionally, we will allow students to be more self-aware of where they are located how the world goes around and around.



1st-2nd Grade Courses

Course Title: *What is Endangered Species?*

Course Description: This course will look into endangered species and what threats they are facing. The class will also let students pick an endangered animal and further look into the specific threat they are facing in detail.

Course Title: *Wicked Weather*

Course Description: Just picture the opposite of a mild, sunny day and perhaps some of these weather hazards will come to mind! Hurricanes, tornadoes, and blizzards are all weather events that may pose threats to people or property. But what happens if it's raining cats and dogs? After exploring a variety of weather events with fun, hands-on activities, students will participate in a musical play called "The Weather Show".

Course Title: *To the Rescue*

Course Description: Rains have caused severe flooding, washing away the only road into a remote community, and cutting the community off from important supplies. Using the engineering design process, you have been asked to design an aid drop package that can be dropped from an aircraft that will be easy to find once it reaches the ground, while at the same time protecting the contents of the package.



Course Title: *Lettuce talk about Plants!*

Course Description: Plants are all around us, it is how we have oxygen to breath and we also gain nutrients from eating them! Do you know that plants are living things like you and me? Let us explore a plants life cycle and all about their needs and wants!



3rd-5th Grade Courses

Course Title: *Serious Gaming for the 21st Century*

Course Description: Did you know that "serious games" refer to any games that do more than simply entertain? Exercise your teamwork, problem-solving, and goal-directed muscles as you engage in competitive and collaborative electronic or tabletop games with a greater purpose. Consider how serious gaming can enhance skills and future career possibilities in computer game technology, media and communications, and education

Course Title: *Exploring Electricity*

Course Description: Through a series of investigations and hands-on activities, students will learn about the flow of electricity and the effects of magnetism and make models of atoms, batteries, circuits, and design a functional motor. Learn how electromagnets work in the construction of electric motors, and how energy can be converted to light, heat, and motion.

Course Title: *Soft Robotics*

Course Description: Tired of conventional clumsy and cumbersome robots made exclusively out of rigid components? In this course, we will explore how nature combines soft materials to create structures capable of gripping, flying, and catching objects at high speed. Using this "bioinspiration", we will make soft robots capable of moving fast and safely interact with humans.

Course Title: *The World According to Harry Potter*

Course Description: Explore the intricacies of Harry Potter and the factors that helped create the Harry Potter phenomenon. Study the creative process behind the fantasy genre and consider how fantasy can effectively address real-world topics and universal themes. Play games, make a wand, and design your own wizarding school as you examine how society influenced and has been influenced by the series. Pre-requisite: *Must have read/watched the Harry Potter series.*

Course Title: *STEAM Labs*

Course description: In this course, students will apply the engineering design process to design and build *STEAM Machines™*, which are creative contraptions that complete everyday tasks in complex and roundabout ways, similarly to the machines portrayed in the Rube Goldberg cartoons. Students will learn about simple machines and other science and engineering concepts used in chain reaction machines.

6th-8th Grade Courses

Course Title: *Realize the Leader in You*

Course Description: We all have within us the capability to lead. In this course we'll explore the different styles of leadership, characteristics of leadership, and tools to help us become confident in our ability to lead. It will be a wide-ranging exploration of: Growth vs a fixed mindset, communication skills, the benefits of failure, neuroscience, mindfulness, resilience, being authentic, and most importantly curious. Come prepared to be challenged.

Course Title: *Psychobabble: Let's Talk Neuroscience!*

Course Description: Step into the world of a neuroscientist with interactive demonstrations that test the power and limitations of the brain. This class will collaborate with a Purdue research lab and record brain activity in real time. Get up close and personal with a real brain and gain an understanding of how it functions. Use technology to create your own optical illusion and simulate brain responses.

Course title: *Single-Stream Recycle Machine*

Course description: In this course, students will follow engineering design steps to build their own recycling sorting machines that use various methods, such as magnets or puffs of air, to separate shreds of paper from paper clips. This course is inspired by the real-world engineering challenge of separating various materials, like paper and metals, that get combined in single-stream recycling programs.

Course title: *Famous Thought Experiments*

Course description: What do typing monkeys, half dead cats, brains in jars, slips of paper under doors, and a ship mailed in pieces have in common? Nothing. Before you stop reading, though, I should point out they are experiments that have shaken science and philosophy without ever actually taking place. This course will conduct many of the most famous thought experiments from the safety of our screens. But be warned! You may not be the same after!

Course title: *Young Authors' Guild*

Description: Can you think of six impossible things before breakfast, but aren't sure how to write them down? Come learn the skills for writing the story of your dreams! Together, we'll explore the foundations of character and plot, discuss healthy writing habits, and answer the most difficult question of all: "Where to begin?"

9th-12th Grade Courses

Course Title: *History of the English Language(s)*

Course Description: This class traces the history of English from its first barbarian speakers up to the present day—a tale of migration, medieval invasions, and global imperialism. Gain skills in etymology (the study of the origin of words) and learn about the role of English as a growing global language.

Course Title: *Game Design with Python*

Course Description: In this course, students develop computational thinking skills, a 21st-century competence, by using Python programming language to create computer games. Students will explore Python programming basics and design games. While creating their games, students will become familiar with reverse-engineering and learn how to create visual representations of their ideas using flowcharts.

Course Title: *A Planet-Sized Problem: Perspectives on Climate Change*

Course Description: The climate crisis affects all of us and it is up to us to solve it. Are we going to inform, persuade and influence international climate policy for a sustainable future? Are we interested in learning new technologies and solutions to better understand current climate change issues locally and across the globe? This course will equip you to be citizen scientists while having fun in a stress-free learning atmosphere.

