

# Kids' College @ SFU

## Summer 2021

**Kids' College** at Saint Francis University are summer camp programs designed for school children in grades 1 through 10. These two, three, and five day camps introduce children to various branches of science: astronomy, biology, chemistry, computer technology, engineering, physics, and other fields. In each camp, children become scientists who critically observe the surrounding environment, pose scientific questions, conduct experiments, collect and analyze data, and draw their own conclusions. Each camp includes daily (weather permitting) outside activities: field trips, short hikes, games, and physical exercises. Camps do not provide lunches (please pack lunch for your child); however, snacks and refreshments are provided throughout the day.

### Schedule of the Summer Camps

Camps	Grades	Dates	Days	Fee
From Dinosaurs to Spaceships	1-3	06/21-06/23	3	\$ 120
Marine and Land Animals	1-3	06/24-06/25	2	\$ 80
Kitchen Scientists: Chemistry, Biology, Geology!	3-6	06/21-06/23	3	\$ 120
Build It Better: Water City	3-6	06/24-06/25	2	\$ 80
Geology-Engineering Design Camp	6-10	06/21-06/23	3	\$ 120
From DaVinci to SpaceX	6-10	06/24-06/25	2	\$ 80
Build It Better: Let's Learn Some Science	1-3	06/28-06/30	3	\$ 120
Fun Chemistry	1-3	07/01-07/02	2	\$ 80
Chinese Language and Culture	3-6	06/28-06/30	3	\$ 120
Young Biologist 1	3-6	06/28-06/30	3	\$ 120
Young Biologist 2	3-6	07/01-07/02	2	\$ 80
Extreme Biology	6-10	06/28-07/02	5	\$ 200
Science and Engineering for Kids	1-3	07/05-07/07	3	\$ 120
123 STEAM	1-3	07/08-07/09	2	\$ 80
The Human Body 1 (Medical Camp)	3-6	07/05-07/07	3	\$ 120
The Human Body 2 (Medical Camp)	3-6	07/08-07/09	2	\$ 80
Young Chemist	6-10	07/05-07/07	3	\$ 120
Nanochemistry and Its Applications	6-10	07/08-07/09	2	\$ 80

### Discounts

- Returning participants receive \$15 in savings per camp per child (discount coupon that was given to participants in previous years must be mentioned during registration and included with payment).
- SFU employees and students (parents, grandparents, as well as close relatives) receive \$10 discount per camp per child for 5 and 3-day camps and \$5 discount per camp per child for 2-day camps (SFU email must be used during registration).
- Other "pop-up" discounts during regular registration period will be available on Facebook: [www.facebook.com/SFUScienceOutreachCenter/](https://www.facebook.com/SFUScienceOutreachCenter/) – check the page frequently.

## New Features in Summer 2021

- Camps are mostly arranged in a 3-day plus 2-day program each week. Parents can choose between 3-day and 2-day camps or enroll their children in both camps for the entire week.
- Parents of children in 3<sup>rd</sup> grade have an option of enrolling children in camps for grades 1-3 or 3-6. Parents of children in 6<sup>th</sup> grade have an option of enrolling children in camps for grades 3-6 or 6-10. The decision can be made based on maturity level of the child and topic interest.
- Unfortunately, due to COVID-19 restrictions, our portable Palumbo Planetarium will not be set up during the camps this summer. Instead, children will spend more time outside hiking a local trail and visiting the Mount Assisi Gardens.
- Camps are subject to federal, state, and university policies regarding COVID-19 and camp safety policies will be adjusted accordingly.

## Registration

Space is limited. Registrations are accepted until *three business days* prior to the start date of the chosen camp.

Complete the online registration form on our website: [www.francis.edu/summer-science-youth-camps](http://www.francis.edu/summer-science-youth-camps). Print the confirmation email and mail it with your payment. If you have coupons for any of the camps, please deduct their value from the payment and include the coupons in the envelope (restrictions: no more than one coupon per camp can be used). Please make the checks payable to Saint Francis University. We do not accept credit cards at this time. Mail your registration form and payment to:

SFU Science Outreach Center  
Kids' College  
PO Box 600  
Loretto, PA 15940



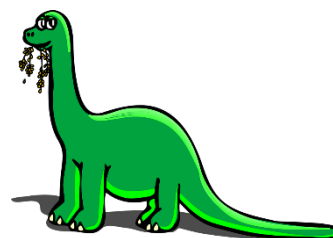
## Grades 1-3

For girls and boys entering grades 1-3 in Fall 2021

### 1. From Dinosaurs to Spaceships (3-day camp)

How did dinosaur bones help find the age of Earth? How did ancient Egyptians build the pyramids? Why does a medieval catapult work? What science is behind a rocket launch? We look at key moments in history where science has advanced technology and our understanding of the planet. This three-day camp is designed specifically for young children and explores many science facts through fun and hands-on activities.

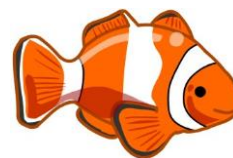
- *Dates: Monday, June 21 - Wednesday, June 23*
- *Time: 9:00 a.m. to 4:00 p.m.*
- *Program Fee: \$120*
- *Registration Deadline: June 16*



### 2. Marine and Land Animals (2-day camp)

During this two-day camp, children will explore the wild animal kingdom: from fish and dolphins that swim in the ocean to turtles, giraffes, and bears that walk on land; and many more!

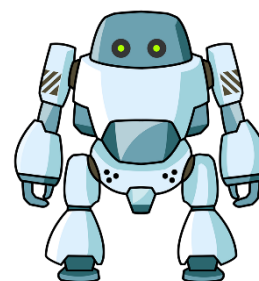
- *Dates: Thursday, June 24 - Friday, June 25*
- *Time: 9:00 a.m. to 4:00 p.m.*
- *Program Fee: \$80*
- *Registration Deadline: June 21*



### 3. Build it Better: Let's Learn Some Science (3-day camp)

During this three-day camp, kids explore numerous types of introductory sciences including but not limited to anatomy, ecology, physics, and engineering. Kids work in teams on several small build-it-better engineering projects. It is a fun-filled thought-provoking week to engage girls and boys in sciences and engineering.

- *Dates: Monday, June 28 - Thursday, June 30*
- *Time: 9:00 a.m. to 4:00 p.m.*
- *Program Fee: \$120*
- *Registration Deadline: June 23*





#### 4. Fun Chemistry (2-day camp)

Students from grades 1-3 will get the opportunity to explore the sciences through various small-scale instructor-supervised experiments during this two-day camp. These experiments include making and testing silly putty, investigating harmful effects of oil spills, exploring the pH level in various substances and learning the effects of pH on life on Earth; and many more exciting activities!

- *Dates: Thursday, July 1 - Friday, July 2*
- *Time: 9:00 a.m. to 4:00 p.m.*
- *Program Fee: \$80*
- *Registration Deadline: June 28*



#### 5. Science and Engineering for Kids (3-day camp)

This three-day camp is set out to show young ones the science that surrounds their daily life, leading girls and boys through lessons that they are reminded of everyday. During the camp, kids begin to understand what it means to be an engineer, an astronaut, a biologist, or any other scientist. Over the course of the camp, well-thought-out projects, examples, games, and lessons explain the science behind the changing phases of water and the construction of bridges; explore water quality and life cycles of plants and bugs; investigate gravity and solar energy; and much more!

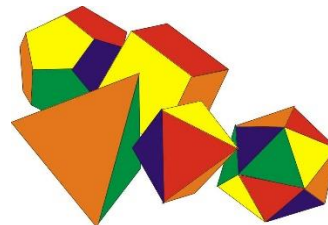
- *Dates: Monday, July 5 - Wednesday, July 7*
- *Time: 9:00 a.m. to 4:00 p.m.*
- *Program Fee: \$120*
- *Registration Deadline: June 30*



#### 6. 123 STEAM (2-day camp)

In this two-day camp, students will work with age-appropriate materials to learn various STEAM principles and skills. Students will be engaged into robotics, simple chemistry, aerodynamics of airplanes and cars, 3D modeling of geometric shapes, various art mediums and other additional topics. STEAM is an acronym for Science, Technology, Engineering, Arts and Math.

- *Dates: Thursday, July 8 - Friday, July 9*
- *Time: 9:00 a.m. to 4:00 p.m.*
- *Program Fee: \$80*
- *Registration Deadline: July 5*



## Grades 3-6

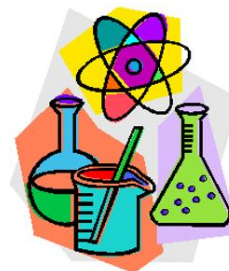
For girls and boys entering grades 3-6 in Fall 2021

### 1. Kitchen Scientists: Chemistry, Biology, and Geology! (3-day camp)

NEW!

In this three-day camp, students will become chemists, biologists, and geologists. They do this by performing different experiments using everyday household items. They will understand how each experiment works and learn the significance of each experiment. You won't believe how easy some of these are! The students will leave with the enthusiasm to show off the products from their experiments and the desire to perform them again.

- *Dates: Monday, June 21 - Wednesday, June 23*
- *Time: 9:00 a.m. to 4:00 p.m.*
- *Program Fee: \$120*
- *Registration Deadline: June 16*

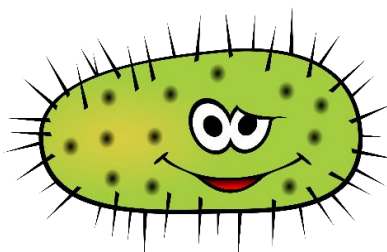


### 2. Build It Better: Water City (2-day camp)

NEW!

In this two-day camp, students will learn the significance of water and many properties of it. We will spend some of this camp at Lake St. Francis (weather permitting) and will perform experiments on samples of lake water. Students will use microscopes to observe the micro colonies in the water and will learn the significance of the water city. The students will identify many microorganisms that they find in the water.

- *Dates: Thursday, June 24 - Friday, June 25*
- *Time: 9:00 a.m. to 4:00 p.m.*
- *Program Fee: \$80*
- *Registration Deadline: June 21*



### 3. Chinese Language and Culture (3-day camp)

NEW!

This three-day summer camp is designed for children who are interested in learning basic Mandarin, making Chinese arts and crafts, experiencing Chinese culture and traditions, and making friends. No previous experience with Chinese language is necessary. Through this camp, students will practice speaking and writing in Chinese, learn calligraphy, do paper-cut art, design Chinese knot, etc. This camp will increase their multicultural experience by engaging in interactive, fun, and educational activities.

- *Dates: Monday, June 28 - Wednesday, June 30*
- *Time: 9:00 a.m. to 4:00 p.m.*
- *Program Fee: \$120*
- *Registration Deadline: June 23*

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#### 4. Young Biologist 1 (3-day camp)

**NEW!**

What makes something living? Students will learn about living vs. nonliving things. From here we will talk about cells (plant vs. animal, as well as the different types of cells in the human body). During our discussion of cells, we will talk about DNA and even build a model! Next we will look at microscopic organisms swimming around in a single drop of pond water (which we will collect from campus).

- *Dates: Monday, June 28 - Wednesday, June 30*
- *Time: 9:00 a.m. to 4:00 p.m.*
- *Program Fee: \$120*
- *Registration Deadline: June 23*



#### 5. Young Biologist 2 (2-day camp)

**NEW!**

What is the circle of life? We will learn how energy flows through our ecosystem: food chains and food webs! We will follow energy as it arrives on Earth from the sun and travels up different food chains. But what happens to the energy once it reaches the top of a food chain? We will even play some fun predator/prey games!

- *Dates: Thursday, July 1 - Friday, July 2*
- *Time: 9:00 a.m. to 4:00 p.m.*
- *Program Fee: \$80*
- *Registration Deadline: June 28*



#### 6. The Human Body 1 - Medical Camp (3-day camp)

**NEW!**

How does the brain work? How do thoughts and commands in our brain result in movements such as walking, waving or picking up a pencil? What would we look like if we did not have bones? How many bones are in the human body? During this camp we will focus on the: Skeletal System, Muscular System, and Nervous System. We will even build a "Thinking Cap"!

- *Dates: Monday, July 5 - Wednesday, July 7*
- *Time: 9:00 a.m. to 4:00 p.m.*
- *Program Fee: \$120*
- *Registration Deadline: June 30*

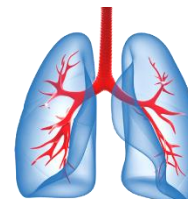


#### 7. The Human Body 2 - Medical Camp (2-day camp)

**NEW!**

How do nutrients and oxygen get to all of the cells in your body? How do the Lungs work? In this camp, we will learn about the Respiratory System and Cardiovascular System. We will also build a model of the lungs in order to understand how air enters our lungs and bloodstream.

- *Dates: Thursday, July 8 - Friday, July 9*
- *Time: 9:00 a.m. to 4:00 p.m.*
- *Program Fee: \$80*
- *Registration Deadline: July 5*



## Grades 6-10

For girls and boys entering grades 6-10 in Fall 2021

### 1. Geology-Engineering Design Camp (3-day)

NEW!

In this camp, students learn about rocks, minerals, fossil fuels, and engineering design. Students also learn to design a mini pump using engineering tools: TinkerCad and 3-D printing. Among different activities offered in this camp, students will have a fun experience working as a geologist and an engineer in the energy field. This camp is designed to introduce children to a wide range of concepts and fundamentals in Earth sciences and Engineering.

- *Dates: Monday, June 21 - Wednesday, June 23*
- *Time: 9:00 a.m. to 4:00 p.m.*
- *Program Fee: \$120*
- *Registration Deadline: June 16*

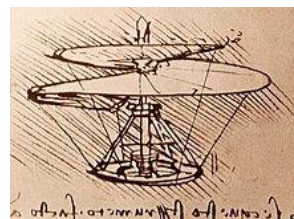


### 2. From DaVinci to SpaceX (2-day camp)

NEW!

In this camp, participants will use their imagination and apply science to invent and engineer incredible devices. Students will draw inspiration from DaVinci's futuristic flying machines, Rube Goldberg's intricate contraptions, and SpaceX-cutting edge engineering and technology. Campers will use a wide variety of materials and unlimited supplies of their creativity. The camp includes an overview and examination of works of brilliant inventors in human history.

- *Dates: Thursday, June 24 - Friday, June 25*
- *Time: 9:00 a.m. to 4:00 p.m.*
- *Program Fee: \$80*
- *Registration Deadline: June 21*



### 3. Marine World (5-day camp)

NEW!

How do living organisms deal with challenging environmental conditions such as very cold temperatures or total darkness? A surprising thing about Earth is that you can find living organisms in just about every place you look, despite living conditions that humans could certainly not survive in. In this camp students will learn through interactive activities about the many ways that life has been able to persist in some of the most extreme places on earth. Throughout the week, we will also do some activities covering basic biology concepts to give students a broad overview into the many exciting areas of biology!

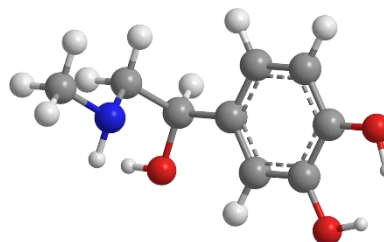
- *Dates: Monday, June 28 - Friday, July 2*
- *Time: 9:00 a.m. to 4:00 p.m.*
- *Program Fee: \$200*
- *Registration Deadline: June 23*



#### 4. Young Chemist (3-day camp)

What is chemistry? The answer is that chemistry is all around us! It is the study of matter and how it interacts with the world. In this camp, we will discuss chemistry from small to large, from atoms and molecules to the food that we eat. Campers will learn the basics of chemistry, completing hands-on projects that will encourage them to view the world through the lens of elements, atoms, and molecules. They will learn to design an experiment, collect data, analyze their results, and discuss those results with their peers.

- *Dates: Monday, July 5 - Wednesday, July 7*
- *Time: 9:00 a.m. to 4:00 p.m.*
- *Program Fee: \$120*
- *Registration Deadline: June 30*



#### 5. Nanochemistry and Its Applications (2-day camp)

What is a nanoparticle? Can I see them? What are they used for? Are nanoparticles dangerous to humans and the environment? We will address these questions and more in this camp. Students will learn the basics of nanochemistry and how it can be applied to solve some of the world's biggest problems, including cancer treatment, water cleaning, and alternative energy solutions. Campers will conduct hands-on experiments that will help them gain an understanding of nanoparticle design.

- *Dates: Thursday, July 8 - Friday, July 9*
- *Time: 9:00 a.m. to 4:00 p.m.*
- *Program Fee: \$80*
- *Registration Deadline: July 5*

