## STREAM Academy

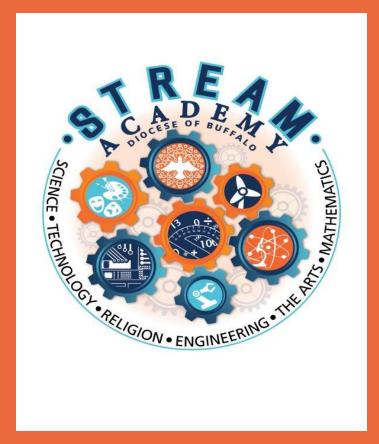
Course Brochure 2017-2018

GOING STRONG: ISSUE NO. 04 MAY 2017

### How to Prepare Students for their Bright Future

REBOOT YOUR OLD KITS AND/OR ENJOY NEW COURSES!

Register
and
Purchase
by June 16, 2017
WNYCatholicSchools.org



Build STREAM Programming and turn on the next generation of designers, scientists, leaders and believers! Pre-K-1

## STREAM SPROUTS III FAVORITE AUTHOR FRIENDS

Connect STREAM learning through literature! Story and picture books are essentials for our youngest learners. They are also great tools for teacher a to launch engaging STREAM activities too!

STREAM SPROUTS Volume III uses our favorite stories to encourage students to explore their world through STREAM based activities.

For instance, this unit kicks off with Leo Lionni's "Inch by Inch" and engages students in measurement and coding activities.



**KIT** \$360.00

Gr. 1-3

## PEAP

PRIMARY ENGINEERING ADVENTURES PROGRAM
ESTABLISHED 2014
RETURN TO VOLUME I

## COME TO THE RESCUE OF YOUR FAVORITE FAIRYTALE CHARACTERS





Assist Goldilocks as she improves the design on that broken chair and makes it "just right." PEAP brings the engineering design process to our youngest learners.

This Academy course adapts the engineering design process to meet the needs of our favorite fairy tale characters. These familiar and timeless stories encourage students to begin problem solving, generate design proposals, collaborate, and make connections to the enchantment of engineering! New and improved!

KIT \$340.00 BINDER \$95.00



FUN WITH A PURPOSE

Bring abstract concepts to life with a fun, hands-on approach that really engages students. LEGO® bricks turn

numbers, words, and ideas into real models that can be touched, described, and innovated across all subject areas!

Each week, the students will undertake a design challenge connected to topics taught at the primary level in ELA, Science, S.S., Religion, or Math utilizing LEGO® bricks. They will also have opportunities to present and share, strengthening their presentation skills!

NOTE: Kit comes with specialty pieces only. Basic buckets of Lego® can be purchased separately as needed.

KIT \$290.00

Gr. 2-4

# Kitchen Chem VOLUME ONE RETURNS



An introduction to food preparation is a way to reinforce and teach subjects like science, math, and reading, and provides a fun, hands-on way to introduce young students to other life skills such as budgeting, problem- solving, grocery shopping and more!

In addition to food preparation, some of the things students will learn about are the origins of food, healthy food choices, and not only how to achieve accurate measurements, but why it is so essential to the final outcome of a recipe. Food tastings and identification, as well as safe kitchen practices will be emphasized.

Get ready for the coolest culinary academy in WNY which culminates with an X-STREAM Games Cook-off! Join us and put that school kitchen to work for engaged learning!

NOTE:

Made possible by a grant from Fidelis





A Home Run! Loads of Creative Fun!

Based on "Caine's Arcade," this course invites students to design and build fun and engaging arcade games made from cardboard, recycled materials and imagination. The games are then shared with the school community to help raise awareness and funds for a charity of their choice. BRING THE BEST TO X-STREAM GAMES AND EXPO!

SHARK TANK LIVES!

INVENTION CONVENTION

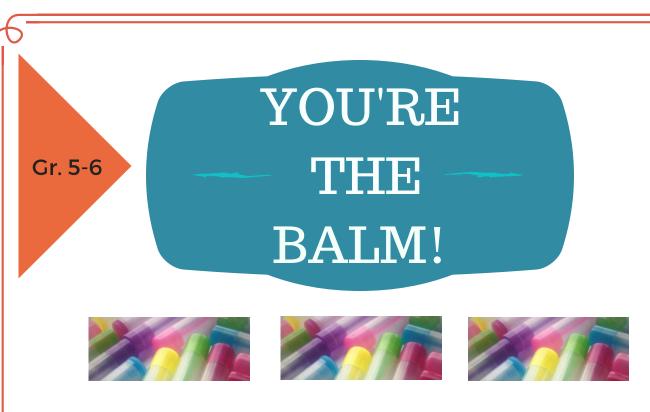
SHARK TANK LIVES!

KIT \$230.00

BINDER \$95.00

Nominated BEST COURSE to integrate into ELA!

Invention Convention sparks students' inventive spirit! Participants are challenged to identify a need or solve a problem using the same procedure an inventor would follow! Students first learn how inventions evolved, are trained in creative thinking activities, and invent a product sure to be on QVC! The most innovative inventions will again have the chance to compete in this year's X-STREAM\_SHARK TANK!



Great ELA Project Based Learning or Academy Experience!

Students live the experience of entrepreneurship during this engaging course where the value of innovation, hard work, and doing good in their community is learned.

Through an eye-opening study on advertising, students learn the art of persuasion. They then conduct product research and hit the science lab to create their own lip balm product- all for a worthy cause of their choice.

Within this course, students will analyze costs, research ingredients, generate a logo, develop effective advertising strategies, and put their hard work to the test with a lip balm sale at the X-STREAM Games and Expo and other school events!

∘KIT \$280.00

Gr. 5-8

science scrimmage 2017

## ALTERNATIVE NRG

THE POWER OF RENEWABLE ENERGY

Hands-on and engaged learning happens in this year's Science Scrimmage courtesy of "Mother Nature"!



SUN and WIND



#### **EVENT I: SUN BOX DERBY**

Students will learn the ins and outs of solar power generation and solar panels, all leading up to the design and construction of their own solar-powered vehicle. The culminating event of this course – a race to the finish! Who can maximize the amount of energy generated while creating their most efficient car design?

#### **EVENT II: WHIRLWIND DERBY**

Students will explore wind power and turbines and discuss how energy is generated from wind. Students will design and make turbine blades by working through the engineering process to modify their blades for maximum energy output for this competition!

This can be fabulously integrated into the science curriculum.

**KIT** \$370.00

Gr. 6-8

# Janite the POWER OF ART A MATTER OF JUSTICE

INTEGRATE INTO ART CURRICULUM or ACADEMY

#### LOOK and LISTEN

The main purpose of art is to creatively communicate and connect to an audience. This course is all about the power of student art!

Students will explore and study the positive messages conveyed through art and music in our culture and zero in on having a powerful voice of social justice in their own art work.

Studio time is spent creating mini-murals using mixed media, and giving students a voice through their creative endeavor.





KIT \$290.00

#### **NEW YEAR. NEW CHALLENGE.**

**ROBOTICS** 

Gr. 6-8

SEE VEX TO ORDER.



Our VEX Robotics design course offers students an exciting platform for learning about areas rich with career opportunities spanning science, technology, engineering and math!

The program encourages teamwork, leadership and problemsolving among student design teams. Teachers can easily accommodate a variety of student skill levels. This year's X-STREAM game pieces and/or replacement part kits are available too. VEX training available 8/23 for \$25

#### A BISHOP MALONE FAVORITE

Gr. 6-8

Rockin' Roller Coasters

KIT \$270.00

What gives your stomach that strange queasy sensation when you are going up or downhill on your favorite rollercoaster? What keeps the cars from flying off the track? If you change the shape of a corkscrew, how will it change the ride? Find out the answers to these burning questions and more with this STREAM Academy course!

Students will research the history of roller coasters, the physics that they employ, test run computer generated coasters, and ultimately design and build their own marble roller coaster that WILL work!

Discover the fun of physics! Integrate into science curriculum!

Gr. 6-8

### GAME ON!

Video Game Art and Design

Do your students love playing video games? Take student coding and engineering skills to the next level and introduce them to the world of a video game designer!



In this high energy course, students will learn critical thinking skills, problem solving, and even explore the video game design career. Coding is crucial in today's society. Between web design, graphic design, and computer programmers, students will learn the engineering design process to experience how a video game is built. No experience is necessary!

This is perfect for beginners as well as advanced players.

Students will also become critical evaluators to see if a game is considered "balanced." Students will familiarize themselves with proper terminology for 21st century tech careers. Suitable for grades 6-8. Come and join the fun!

**FAB for Coding Curriculum!**