SUMMER DISCOVERY COLLEGE

COURSE DESCRIPTIONS and GUIDELINES

SUMMER 2020

VIRTUAL DISCOVERY COLLEGE SUMMER CAMP

For complete online class offerings, Click Here!
LSC-CyFair
Online Course Descriptions

Art History & Appreciation
This course is an introduction to the history and appreciation of art. Art history will provide an in-depth study of art history and basic art concepts. Students will examine a variety of aspects of art history, including themes and purposes of art, styles of art, and the elements of art. The class will be taught by Evan Malone, Adjunct Philosophy of Art Professor, Lone Star College-CyFair. (Ages 14-17)

Fun with Algebra
If you don’t think math is fun, this class will change your mind. You’ll learn tips and strategies to improve your basic math to pre-algebra skills. The class will be taught by Mehmet Cellik, Adjunct Math Professor, Lone Star College-CyFair. (Ages 14-17)

GeoTech Adventures
Gain creative hands-on lessons to enhance innovative geology education with the use of technology. The class will be taught by Priscilla Smith, Adjunct BCIS Professor, Lone Star College-Kingwood. (Ages 14-17)

Junior Architect
Learn how buildings, infrastructure and homes are designed and built. Discover the principles of drafting and modeling, including the tools of the trade. This class shows how geometry and engineering matter in everyday life. The class will be taught by Clyde Johnson, Adjunct Computer Tech Professor, Lone Star College-CyFair. (Ages 14-17)

Lights, Camera, & Action!
Experience the fun of singing your favorite hits, becoming an actor or actress, and performing the choreography of your favorite rock groups. The class will be taught by Priscilla Smith, Adjunct BCIS Professor, Lone Star College-Kingwood. (Ages 14-17)

Physics for Everyday Life
Demystify the fear of physics by exploring practical applications of it in everyday life. Students will learn by doing hands-on experiments with linear/rotation motion, collisions, sound, light, electricity and more! The class will be taught by George Blair, Adjunct Environmental Science Professor, Lone Star College-CyFair. (Ages 14-17)

School of Rock
Take your musical performance to the next level! Whether you are just beginning or fine-tuning, take part in this exciting group music class and explore the basics of technique, musicality, and interpretation. Opportunities include solo and group performances. No experience or “instrument” necessary! The class will be taught by Lee Gregory, Adjunct Music Professor, Lone Star College-Montgomery. (Ages 14-17)

What Do I Want to Do for a Career?
What do you want to be when you grow up? Don’t know? In this class, students will explore different occupations and discover the pathway to career success. The class will be taught by George Blair, Adjunct Environmental Science Professor, Lone Star College-CyFair. (Ages 14-17)
**LSC-Kingwood Online Course Descriptions**

**Around the World Art**
Take an art making trip around the world! Study and create art representing various cultures and countries. Not for a passport—just an imagination. Students will need one each of the following four items made by Artist's Loft®: Super Value Brush Pack (#10503498); Level 3 Matte Medium (#10597391); Necessities ™ Value Pack Canvas, 2-pack 5" X 5" (#10473149); and 2-pack 8" X 10" Value Canvas (#10472544). Also needed is one of: Bright Art Tissue Paper Pack by Celebrate It ™ (#10042742); Craft Smart Acrylic Paint Value Set (#10518563); 3M ScotchBlue ™ Painter's Tape (#10291153), original multi-use; Creatology ™ Chenille Stems (green) (#10041116); pair of scissors; small sketchbook. Also, 2 Mod Podge® Matte (#10406884); 3 or 4 big balloons (any color); some old newspaper. The class will be taught by Stanley Bermudez, Adjunct Art Professor, Lone Star College-Kingwood. (Ages 9-12)

**Create Your Own Short Film!**
This creative class will allow you to create your own short film from start to finish! Students will learn the basics of narrative storytelling, preparing for filming, filming techniques and tricks, editing footage together, and completing their masterpiece! Students will need access to a portable device that can record video with audio such as a phone, tablet, DSLR, or camera. They will also need a computer in which to edit their video. The instructor will have free editing software for students to use. The class will be taught by Jared Anderson, Adjunct Faculty Professor in the Graphic Arts/Video Department, Lone Star College-Kingwood. (Ages 13-18)

**Dive into Digital Media**
Attention all creative people! Have you ever wanted to explore digital media but didn't know where to start? Learn the basics and the origins of digital multimedia! Get your feet wet with dives into sound and multimedia visual programming environments MAX and Pure Data; bend and shape sound in Audacity; code in color, shapes, lines, and interaction in Processing; render in 3D in Blender; and create images in GNU-GIMP. You will need to have a computer (Windows 7 or later) or Mac (10.11.6 or later) operating platform, a mouse, trackpad or other input, and a reliable internet connection. You will need to have some form of digital camera for our exploration into GNU-GIMP. You will need to use your attached microphone or have a microphone or audio recorder to collect sound for using Audacity. Headphones or an external speaker system are also required for our explorations into Audacity, Pure Data and MAX. The class will be taught by Aaron Bielish, Adjunct Art Professor, Lone Star College-Kingwood. (Ages 13-18)

**Fun Math for Kids**
We will reinforce basic math concepts specific to the age group of the course. Mathematical concepts will be presented in a fun and creative way to reinforce what students already know as well as bringing them up to speed in any area of deficiency. Course materials will be provided as necessary. All that is required is daily participation and a positive attitude. The class will be taught by Sydney Bonnette, Adjunct Chemistry Professor, Lone Star College-Kingwood. (Ages 9-11)

**Game Design**
Students will learn about Game Design theory and application, as well as concepts such as level design and programming using a variety of tools and game engines. Students will develop several different games and learn how to share them with others. A Windows PC is required for this course. For more information, consult the system requirements listed on Unity 3D's website at https://docs.unity3d.com/Manual/system-requirements.html#editor. The class will be taught by Brandon Olive, Adjunct Faculty BCIS Professor, Lone Star College-Kingwood. (Ages 10-12)

**Geology Rocks!**
Are you a rock hound? Do you want to be one? Geologists identify rocks and minerals, search for fossils and dinosaur bones, and explore volcanoes and earthquakes—we'll do all of those things and more. Be part of the adventure! The class will be taught by Carrie Decker, Adjunct Faculty Professor in the Geology Department, Lone Star College-Kingwood. (Ages 9-13)

**GeoTech Adventures**
Gain creative hands-on lessons to enhance innovative geology education with the use of technology. The class will be taught by Priscilla Smith, Adjunct BCIS Professor, Lone Star College-Kingwood. (Ages 9-14)

**So You Want to be a YouTube?**
This fun-filled class will allow your creativity and imagination to shine as you learn the skills needed to successfully create your own YouTube channel. Students will learn what ideas and trends are most marketable, how to record content for their channels, and how to make their videos discoverable. Students will need access to a device that can record video with audio such as a phone, tablet, webcam, or DSLR camera. They will also need a computer to edit their video on. The instructor will use free editing software in the class. The class will be taught by Jared Anderson, Adjunct Faculty Professor in the Graphic Arts/Video Department, Lone Star College-Kingwood. (Ages 13-18)

**Web Page Development**
Students will use the fundamentals of web page development, explore applicable software, and discover how web pages are used in business and leisure. The class will be taught by Priscilla Smith, Adjunct BCIS Professor, Lone Star College-Kingwood. (Ages 14-17)

**101 Amazing Science Facts**
Believe it or Not! From the tiny to the far away, from strange creatures to weird physics, impress your friends and family or beat them at trivia games with your knowledge about the amazing world of science. The class will be taught by Carrie Decker, Adjunct Faculty Professor in the Geology Department, Lone Star College-Kingwood. (Ages 9-13)
101 Amazing Science Facts
Amaze and impress your friends and family with 101 Amazing Science Facts and the stories behind them. Beat your friends at the games of Jeopardy and Trivial Pursuit with all these facts you never knew you didn't know! (Ages 8-10) Supplies list: 5-balloons, 1-pure baking soda (16 oz.) (1 lb.), 1-regular vinegar (16 fl. oz.), 1-corn starch (16 oz.) (1 lb.), 3-bottles of food coloring (3-different colors, e.g., red, blue, green) (0.75 oz./bottle), 1-roll scotch tape, 1-roll ribbon (25 yd.) Thickness (1/8 to 3/8 inch), 2-3 drinking straws, 1-bottle of water (17 fl. oz.) (thin bottles) e.g., Crystal Geyser OR Nestle Pure Life 1-can soda drink (12 fl. oz.) e.g. Coke or off-brand soda, 1-egg (if possible), 2-ziplock sandwich size bags, 4-blank sheets of printing paper (8.5 x 11 inch). The class will be taught by Ronald Albright, Adjunct Faculty Professor in the Geography Department, Lone Star College-Montgomery. (Ages 8-10)

College Prep: Writing
Sharpen those writing skills so you can excel in college English class. This course will be dynamic and interactive. Campers will need paper and pen or pencil (or preferably word processing program). The class will be taught by Rashda Mady, Adjunct Faculty professor in the English as a Second Language Department, Lone Star College-Montgomery. (Ages 14-18)

Conquer Multiplication
Practice and gain hands-on experience through interaction with a teacher in a small group in a variety of fun activities. Students will focus on multiplication facts 0 through 12. Supply list: paper and pencils. The class will be taught by Margaret Young, Adjunct Faculty Professor in the Developmental Math Department, Lone Star College-Montgomery. (Ages 7-12)

Jump Start Trigonometry
Enjoy word problems, algebra, and get introduced to the world of geometry, trigonometry and analysis. (Ages 14-18) Supply list: paper and pencils. The class will be taught by Margaret Young, Adjunct Faculty Professor in the Developmental Math Department, Lone Star College-Montgomery. (Ages 14-18)

Mad Scientist
Enter the Mad Scientist's "lab" to discover the wonders of science through a variety of exciting hands-on activities and experiments that develop curiosity, inspire creativity, and enhance problem-solving skills. (Ages 9-12) Supplies list: 5-balloons, 1-pure baking soda (16 oz.) (1 lb.), 1-regular vinegar (16 fl. oz.), 1-corn starch (16 oz.) (1 lb.), 3-bottles of food coloring (3-different colors, e.g., red, blue, green) (0.75 oz./bottle), 1-roll scotch tape, 1-roll ribbon (25 yd.) (1/8 to 3/8 inch thickness), 2-3 drinking straws, 1-bottle of water (17 fl. oz.) (thin bottles) e.g., Crystal Geyser OR Nestle Pure Life 1-can soda drink (12 fl. oz.) e.g., Coke or off-brand soda, 1-egg (if possible), 2-ziplock sandwich size bag, 4-blank sheets of printing paper (8.5 x 11 inch). The class will be taught by Ronald Albright, Adjunct Faculty Professor in the Geography Department, Lone Star College-Montgomery. (Ages 9-12)

Math all Around us
Learn fun facts about math that are all around us. Discover the math in nature, and how we use that in our mathematical formulas. Campers will need paper and pencils. The class will be taught by Sharieka Crawford, Adjunct Faculty in the Accounting Department, Lone Star College-Montgomery. (Ages 8-14)

Physics in Life
Enjoy learning about mechanics, properties of matter, heat, electricity, and light. Discussions, home experiments and online simulations will make this a fun interactive class. (Ages 13-18) Supply list: 5 balloons, string, 1 AA battery, cell phone, 5 small washers, 5 straws, flashlight, 30 pennies, masking tape, parking pen, pencil, scissors, ruler, 20 paper clips, piece of heavy paper (will not let light pass through), 5 pieces of white paper, 5 index cards, notebook, cellophane tape, large pot, or bucket, table salt (2 cups), small plastic grocery bag, aluminum foil, 5 toothpicks, 2 liter bottle of soda or water, 1 large round jar w/lid, 1 small round jar w/lid, clear water glass, 6 heavy books, table. The class will be taught by Gregory Steinbach, Adjunct Faculty in the Education Department, Lone Star College-Montgomery. (Ages 13-18)

Preparing for Job Search
Learn how to write a cover letter, search for a job, and prepare for your first job interview. Students will use up-to-date technologies and learn some fun tips and tricks, and how to be as well prepared as possible! The class will be taught by Ronald Albright, Adjunct Faculty Professor in the Geography Department, Lone Star College-Montgomery. (Ages 14-18)
LSC-North Harris
Online Course Descriptions

Bubbly Oozy Science
Learn and use scientific methods to explore the world around you, using ordinary kitchen ingredients to create kid-safe solutions that bubble, ooze, foam, and fizz. Supply list will be provided at the time of registration. Altamic Lewis, LSC-North Harris, Biology Professor, will teach the class. (Ages 9-12)

Cake Boss
Learn the fundamentals of cake decorating and how to make some delicious cakes and icings. You will be able to make sweet treats to share with family and friends. You’re the boss! A supply list will be provided at the time of registration. Nicole Rich, LSC-North Harris, Math Professor will teach the class. (Ages 9-12)

Candy Creations
How sweet it is to learn how to make scrumptious, delicious confectionery treats. A supply list will be provided at the time of registration. Nicole Rich, LSC-North Harris, Math Professor will teach the class. (Ages 9-12)

Junior Docs
Is caring for others a passion of yours? Explore the intriguing and exciting world of doctors. From dentists to veterinarians, learn what doctors do to treat and care for their patients. A supply list will be provided at the time of registration. Altamic Lewis, LSC-North Harris, Biology Professor, will teach the class. (Ages 9-12)

Lights, Camera, Action!
Experience the fun of singing your favorite hits, becoming an actor or actress, and performing the choreography of your favorite rock groups. A supply list will be provided at the time of registration. Miguel Burke, LSC-North Harris, First Year Experience Professor, will teach the class. (Ages 9-12)

Real Math for Real Life
Why do we have to learn our “times tables?” Just can’t get fractions and decimals? Don’t miss this chance to master math by discussing cooking, shopping, planning parties, running your own small business and balancing checking accounts. Learn to understand credit, saving, spending and budgeting using the “mighty” dollar. A supply list will be provided at the time of registration. Julie Perkins, LSC-North Harris, First Year Experience Professor, will teach the class. (Ages 9-12)
Billionaire Business & Banking
This course is an interactive financial literacy curriculum for high school students. Students will learn the basics of good money management and the skills needed to create a brighter financial future. Students will learn in a fun, innovative, and creative way. Elizabeth McKinley, LSC-Tomball BMGT-Marketing Professor, will teach the class. (Ages 10-18)

Conquer Multiplication
This class is for students that have been introduced to multiplication, but have yet to master them. The course is designed to help students master multiplication facts 0-12 by means of patterns, hands-on strategies, games, and take-aways for future reference during the school year. Thereafter, students will explore multiple ways to do multi-digit multiplication. Beverly Mackie, LSC-Tomball DEV Math Professor, will teach the class. (Ages 9-12)

I'm a SAVAGE...at Discovering Careers
Designed for learners in middle and high school, this course will help you explore a variety of career fields based on your interest, personality, skill, and readiness level. Participants will engage in sessions that will equip them to learn critical elements of today’s workplace. Paula Fuller, LSC-Tomball LifePath Professor, will teach the class. (Ages 12-18)

Menu Master
Learn to create dishes that will impress your friends and family, all while fostering a life-long love of working in the kitchen. Skills taught will include basic to intermediate culinary skills, kitchen safety, creating a menu and executing your menu ideas with perfection in time for your family meals. Students can find most materials needed in their family kitchen, such as: mixing bowls, wooden spoons, a spatula, measuring cups and spoons, a cutting board, a cookie sheet, potholders, kitchen towels, a vegetable peeler, and a chef's knife. Celeste Matthews, LSC-Tomball Music Professor, will teach the class. (Ages 10-18)

Preparing for a Job Search
In this course, students will learn to identify career values, goals, objectives and how to get the job of their dreams. Students will learn tricks in how to tell their story through a tailored eye-catching resume, a creative cover letter, creating a portfolio to send, and insight into mastering the job interview. We will also cover how to identify the right companies to apply to and conduct a job search. Elizabeth McKinley, LSC-Tomball BMGT Marketing Professor, will teach the class. (Ages 10-18)

Shopping Math
Will sharpen math skills for the real world through interactive games and activities. The class will include activities in counting money, making change, shopping within a budget, and better buys and good sales. Beverly Mackie, LSC-Tomball DEV Math Professor, will teach the class. (Ages 8-11)

TikTok Career Connection
The world of work is changing and you must be ready to adapt to the digital workplace. Designed for high school students, especially those in the 11th and 12th grades, this course will equip you with the needed skills and practices to successfully launch your career. Paula Fuller, LSC-Tomball LifePath Professor, will teach the class. (Ages 16-18)
At-Home “Art”  
Want to make art in the comfort of your own home? Join this class to explore creating 2-D and 3-D "art" using standard art materials (paints and paintbrushes, paper, scissors, glue, etc.) and items found around the house (odds and ends, kitchen supplies, food items)! It will be an adventure in creativity and expression. No prior experience needed, create at your own level. The class will be taught by Rhonda Sheldon, Adjunct Biology Professor, LSC-University Park. (Ages 9-12)

Candy Creations  
How sweet it is to learn how to make scrumptious, delicious confectionery treats using simple ingredients and utensils around the kitchen. A supply list will be sent prior to class sessions. This fun and interactive course involves the use of a stove, microwave, and other heating elements; parental supervision is advised. Let's get together and create candy masterpieces with Christine Barr! Items to be created: rock candy, tiger fudge, rocky road candy, Oreo truffles, turtle candies, chocolate cherry mice, sweet potato candy, chocolate coconut haystacks, key lime fudge, gummies, Kids’ Toffee, candy bar truffles, truffles, peanut butter fudge, candy play dough, and salted caramel. The class will be taught by Christine Barr, Adjunct English Professor, LSC-University Park. (Ages 12-17)

Computer Animation & Graphics using Blender  
This five-week course provides an overview of modeling, animating, and rendering 3D graphics using the popular Blender open source application. This course begins with a detailed overview of the application and its functions, Next we will walk through the process of how to create and edit basic objects, work with modifiers and subdivision surfaces, and apply materials and textures. This course also details the process of creating 3D scenes, setting up and using cameras, animating objects, and assembling basic character rigs. Needs for Course: Only thing that is needed for course is a Windows laptop, a mouse with a scroll, and the ability to download the Blender software online @ https://www.blender.org/. The application is free. The class will be taught by Arthur Lattimore, Adjunct Computer Technology Professor, LSC-University Park. (Ages 9-13)

Digital Drawing (Multimedia)  
This class focuses on the basics of digital sketching, drawing, and illustration. From ideation sketches to finished illustrations, students will traverse the drawing process digitally using Autodesk Sketchbook, and a digital drawing tablet. Students will need access to the internet, a computer or tablet, Autodesk Sketchbook (free), a pressure-sensitive computer drawing pad (Cintiq, Wacom, etc.), or a tablet with a pressure sensitive stylus (iPad Pro, Galaxy Tab etc.). The class will be taught by Christopher Thompson, Adjunct Arts Department Professor, LSC-University Park. Ages (14-18)

Great Debaters  
The Great Debate--Becoming US President: Students will learn about debate through the lens of a presidential hopeful including the process to become president from launching a campaign to Inauguration Day. Lessons will cover the basics of debating including positive and negative debating skills and practice structuring arguments through regular class debates. Learners will leave this class with knowledge of classic debate and argument structure. The class will be taught by Sydecia Zenon, Adjunct Professor in the Speech Department, Lone Star College-University Park. (Ages 14-18)

Hands-on Science in the Kitchen  
Do you want to understand how chefs make, and use foams? Did you know that eggs cook best at a temperature much lower than the boiling point of water? Have you ever prepared your own flavored ice cream? This class will explore some of the secret science behind modern cooking, but also will make you discover that when you play in the kitchen, you act as a scientist! You will become an experimental scientist in your very own laboratory; your kitchen! By following along with the recipes of the day, taking precise measurements, and making skillful observations, you will learn to think like both a chef and a scientist. And best of all, you get to eat your experiments. What supplies do you need for this course? A math-ruled lab book, pens and an internet connected video camera and mic (laptop or smart phone), most of the utensils found in a kitchen (such as pots & pans, wooden spoons, metal forks, egg beater; towels, aluminum foil, etc.), most of the grocery items found in a kitchen (such as pickles, salt, white vinegar, cooking oil, or flour), some inexpensive veggies and fruits (such as potatoes, red cabbage, lemons, or apples), and access to a freezer and to a gas or electric range. You will receive a list of supplies for each week of class the Saturday before. The class will be taught by Emanuela Ene, Adjunct Physics Professor, LSC-University Park. (Ages 12-17)

Continue to the next page for more LSC-University Park class offerings.
LSC-University Park
Online Course Descriptions

Introduction to Programming with Apple Swift
Interested in a career in software development? This class teaches fundamental programming skills using Apple’s Swift programming language. We’ll cover the essential aspects of coding in a new language developers use to create apps for Apple computers and devices. This course will be taught online using video conferencing. Students are required to have an Apple computer supporting Mac OS Catalina (10.15.3 or later) or an iPad (supporting iPad OS 13.1 or later), a broadband internet connection, a microphone, speakers and ideally a camera. Students will get assistance downloading and setting up Apple’s “Swift Playgrounds” app during class. The class will be taught by Herb Garcia, WSI Oil & Gas Professor, LSC-University Park. (Ages 14-18)

Let’s Discover the Smithsonian Learning Lab Workshop
Students will use critical thinking skills to engage in works from the world-famous Smithsonian Institute using artifacts, works of art, print and video media using the new Smithsonian Learning Lab. Students will "share in the expansive community of knowledge and learning with a trained Smithsonian Institute teacher." Access to the Lab is free. No supplies needed. Student work can be submitted electronically. The teacher will provide access and guidance in using content of the lab. The class will be taught by Averil Mitchell Robinson, Adjunct Professor, Developmental English, Lone Star College-University Park. (Ages 10-15)

Math All Around Us
The sessions are highly interactive; they involve an introduction to each topic using a variety of teaching tools, followed by questions and answer. Next, we move into activities that demonstrate and illustrate the topic and applications of math concepts. Finally, wrap-up with an assignment that enforces the topic during the rest of the week until the next meeting where they will share. There is a workbook that will be needed: Young Boss – Math All Around Us, An Entrepreneurial Workshop for Youth ISBN: 9798644050604. The class will be taught by Marcia Lawson, Adjunct Math Professor, LSC-University Park. (Ages 9-10)

Science Experiments 101
Have fun with a series of at-home experiments while learning the science behind everyday activities. From exploring evaporation and the water cycle, to adventuring into the explosive world of acids and bases, students have fun with several different science experiments. The class will be taught by Crystal Higgs, Adjunct Biology Professor, LSC-University Park. (Ages 9-12)

So You Want to be an Architect?
Students will discover who an architect is including education, training and career opportunities. They will produce two- and three-dimensional drawings that represent a small building. A variety of software and other media will be used to document in Portfolio Learning Outcomes which include: 1) Describe some basic functions of an architect. 2) Explain some basic stages of architectural design. 3) Explain the concepts of sustainable and environmentally friendly designs. 4) Produce two- and three-dimension freehand sketches of various architectural subjects. 5) Use the tools of Autodesk Home Styler to produce a building model. 6) Produce Floor Plans, Elevations and 3D Camera Views of the building. The class will be taught by Terry Zimmerman, Adjunct Computer Technology Professor, LSC-University Park. (Ages 12-15)