



reaching higher ground

NORTH GEORGIA HOMESCHOOL ENRICHMENT [NGHE] FALL 2017 CATALOG



classes begin august 14!



May 1, 2017

Dear Homeschooling Parents,

We would like to take this opportunity to thank you for your interest in joining the North Georgia Homeschool Enrichment (NGHE) family.

NGHE, started in 2004, is committed more than ever to bringing you creative and practical enrichment opportunities for your students. This semester, we are continuing to expand our STEAM (Science/Technology/Engineering/Arts/Mathematics) offerings with new classes that include:

- * Exploring Creation with Astronomy
- * Origami: Between the Folds
- * Music: Build It!
- * WMDs: the Wonders of Mass Distraction
- * Rube Goldberg Machines
- * Robot Battles

Our team has been developing other great classes that your students will enjoy:

- * Cakes & Candies
- * Ancient History & Mysteries
- * Engines Cranked - Small Engine Repair
- * U.S. Smart: 50 States
- * and, much more!

We are committed to providing a productive and satisfying experience for your child during the school year. Our program takes pride in its qualified and dedicated staff. These educators welcome your input, and are committed to the success of each student.

If there is anything we can do to assist you or your child, please do not hesitate to call. Our goal remains to provide an environment where your student will thrive!

Cheering you on!

Alex Perez
Director
North Georgia Homeschool Enrichment

For in Him, you have been enriched in every way--with all kinds of speech and with all knowledge.
1 Corinthians 1:5



2017-2018 Class Calendar

FALL 2017 SEMESTER

August

14 - *first day of class*

21

28

September

04 (no classes for Labor Day)

11

18

25 (no classes for Fall Break)

October

02

09

16

23

30

November

06

13

20 (no school for Thanksgiving Break)

27

December

04 - Last Day for Elementary &
Middle School Students

11 - HS Math/Science Only

18 - HS Math/Science Only (Last Day)

SPRING 2018 SEMESTER

January

22 - *first day of class*

29

February

05

12

19 (no classes - President's Day Holiday)

26

March

05

12

19

26

April

02 (no classes for Spring Break)

09

16

23

30

May

07 - Last Day for Elementary &
Middle School Students

14 - HS Math/Science Only

21 - HS Math/Science Only (Last Day)



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1 Corinthians 1:5*

NGHE CLASSES BY GRADE

	10.00 AM	11.00 AM	12.30 PM	01.30 PM	02.30 PM	03.30 PM
K-2	Cakes & Candies JR/ MINI	Fun with Espanol!	A(rt) in STEAM MINI	Exploring Creation with Astronomy MINI	Dinosaur!	*****
K-2	JumpStart!	R.I.S.E. - Readiness in Scientific Exploration MINI	Hands-On Econ: PlayDough Economics MINI	Passport to the World MINI	*****	*****
K-2	ORIGAMI JR/MINI	*****	*****	SING! the Songs of Disney	*****	*****
3-5	Cakes & Candies JR/ MINI	Archery JR	American Sign Language (ASL) INTRO	A(rt) in STEAM JR	Dinosaur!	Flying Things
3-5	ORIGAMI JR/MINI	Controlled Chaos: the Improv Experience JR.	ChefMaster! JR - Mediterranean	American Sign Language (ASL) ADVANCED	Ancient History & Mysteries JR	Hot Shots! Mobile Phone Photography
3-5	Math Mastery	Fun with Espanol!	CRANKED! Small Engine Repair	Creative Writing JR	Basketball & Beyond! JR	LEGO Thinkers JR
3-5	R.I.S.E. - Readiness in Scientific Exploration JR	Mindstorm LEGO Robotics	CrossFit & Beyond! JR	Game On! Extended Play	Jewelry Making	UPCYCLED! Trash to Treasure
3-5	Teaching Kids To CHOOSE LOVE - (BOYS ONLY Class)	Teaching Kids To CHOOSE LOVE - (GIRLS ONLY Class)	Exploring Creation with Astronomy JR	Hands-On Econ: PlayDough Economics JR	LIFE IN SPACE: the International Space Station	Video Game Design JR (INTRO)
3-5	Young Actor's Academy JR, The	*****	Passport to the World JR	Rube Goldberg Machines	MUSIC:BUILD IT!	*****
3-5	Young Mavericks: Entrepreneur Academy	*****	*****	SING! the Songs of Disney	Talk Like TED Public Speaking	*****
3-5	*****	*****	*****	*****	WMD's : the Wonders of Mass DISTRACTION	*****
6-8	Archery	2D & 3D Digital Animation	American Sign Language (ASL) INTRO	American Sign Language (ASL) ADVANCED	A(rt) in STEAM	Ancient History & Mysteries
6-8	Drawn Together - Illustration Studies (INTRO)	All Fired Up: Clay & Glass Fusion	Beyond Pictures: Leaps into Fiction	Controlled Chaos: the Improv Experience	ChefMaster! - Mediterranean	Basketball & Beyond!
6-8	Drones! Drones! Drones! - Advanced	American Short Stories Journey: Stepping Stones to Heritage and Analysis:	Book Club - Middle School	CrossFit & Beyond!	Creative Writing	Flying Things

	10.00 AM	11.00 AM	12.30 PM	01.30 PM	02.30 PM	03.30 PM
6-8	GameMaker Mobile Games	Cakes & Candies	CRANKED! Small Engine Repair	Game On! Extended Play	Fun with CSI Forensics	Hot Shots! Mobile Phone Photography
6-8	Rite of Passage: Novel Adventures	Drones, Drones, Drones! (INTRO)	Digital Cinematography	KABOOM! Science with Fire, Explosions & More!	Jewelry Making	LEGO Thinkers JR
6-8	Spanish (INTRO)	Math EDGE: Algebra	Drawn Together: Illustration Studies (ADVANCED)	Rube Goldberg Machines	LIFE IN SPACE: the International Space Station	Robot Battles
6-8	Teaching Kids To CHOOSE LOVE - (BOYS ONLY Class)	Mindstorm LEGO Robotics	Game On! Board Game Design	SING! the Songs of Disney	Math EDGE: Fractions, Decimals, and Percents	U.S. Smart: 50 States
6-8	Young Mavericks: Entrepreneur Academy	Origami	Physical Science [2-Hour/28 Weeks]	Video Game Design (ADVANCED)	MUSIC:BUILD IT!	UPCYCLED! Trash to Treasure
6-8	*****	Teaching Kids To CHOOSE LOVE - (GIRLS ONLY Class)	R.I.S.E. - Readiness in Scientific Exploration	*****	Talk Like TED Public Speaking	Worship Leader Bootcamp
6-8	*****	*****	Young Actor's Academy	*****	Video Game Design (INTRO)	*****
6-8	*****	*****	*****	*****	WMD's : the Wonders of Mass DISTRACTION	*****
HS	Archery	2D & 3D Digital Animation	American Sign Language (ASL) INTRO	American Sign Language (ASL) ADVANCED	A(rt) in STEAM	Hot Shots! Mobile Phone Photography
HS	Biology [2-Hour/32-Weeks]	All Fired Up: Clay & Glass Fusion	Beyond Pictures: Leaps into Fiction	Controlled Chaos: the Improv Experience	ChefMaster! - Mediterranean	Math EDGE: Geometry
HS	Drawn Together - Illustration Studies (INTRO)	American Short Stories Journey: Stepping Stones to Heritage and Analysis:	CRANKED! Small Engine Repair	CrossFit & Beyond!	Chemistry [2-Hour/32-Weeks]	Robot Battles
HS	Drones! Drones! Drones! - Advanced	Cakes & Candies	Digital Cinematography	Game On! Extended Play	Fun with CSI Forensics	UPCYCLED! Trash to Treasure
HS	GameMaker Mobile Games	Drones, Drones, Drones! (INTRO)	Drawn Together: Illustration Studies (ADVANCED)	KABOOM! Science with Fire, Explosions & More!	Jewelry Making	Worship Leader Bootcamp
HS	Rite of Passage: Novel Adventures	Math EDGE: Algebra	Game On! Board Game Design	Rube Goldberg Machines	Math EDGE: Fractions, Decimals, and Percents	*****

	10.00 AM	11.00 AM	12.30 PM	01.30 PM	02.30 PM	03.30 PM
HS	Spanish (INTRO)	Mindstorm LEGO Robotics	Young Actor's Academy	Video Game Design (ADVANCED)	Video Game Design (INTRO)	*****
HS	Young Mavericks: Entrepreneur Academy	Origami	*****	*****	*****	*****

NGHE CLASS DESCRIPTIONS

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
2D & 3D Digital Animation	<p>The principles of animation are universal, no matter what media is used to create it. In this class, students learn the principles of classical animation that serve as a foundation for creating their 2D & 3D animations. Students gain a firm understanding of the principles of motion and the animation process, and animate using industry-standard techniques.</p> <p>This course covers the basic principles of animation, and provides students with the basic understanding of timing. Students learn the fundamentals of weight and its direct relation to timing. They also learn to animate (move and talk) basic animals and humans. Students are introduced to the animation toolsets in Maya, Adobe Animate, Gimp, and more.</p> <p>Students must bring their own laptop or rent a classroom laptop from NGHE (\$40/Semester)</p>	11.00 AM	Murray, J.	TECHNOLOGY			*	*	\$140/\$10 SEMESTER
A(rt) in STEAM	<p>Art and Science greatly overlap. Much like scientists, engineers and inventors, artists use imagination, observation, exploration, problem solving, trial and error and geometric/mathematical principles in their creative works. Art masters like Leonardo DaVinci were not only great painters, but scientific masters and innovative thinkers! The paint and pottery glaze colors we have today are direct results of scientific experiments with color pigments and chemical reactions.</p> <p>This fun and informative class cultivates creative thinking while developing skills related to color theory, lines, shapes, textures/patterns and composition. This is a multimedia art study which incorporates, drawing, watercolor, acrylic, collage, pastel, pottery, glass fusion, print making and art history. In addition to teaching core art skills, our goal is also foster, innovate thinking, problem solving skills, mathematical aptitude and self-confidence.</p>	02.30 PM	Teague, J.	ART: VISUAL			*	*	\$130/\$30 SEMESTER
A(rt) in STEAM JR	<p>Art and Science greatly overlap. Much like scientists, engineers and inventors, artists use imagination, observation, exploration, problem solving, trial and error and geometric/mathematical principles in their creative works. Art masters like Leonardo DaVinci were not only great painters, but scientific masters and innovative thinkers! The paint and pottery glaze colors we have today are direct results of scientific experiments with color pigments and chemical reactions.</p> <p>This fun and informative class cultivates creative thinking while developing skills related to color theory, lines, shapes, textures/patterns and composition. This is a multimedia art study which incorporates, drawing, watercolor, acrylic, collage, pastel, pottery, glass fusion, print making and art history. In addition to teaching core art skills, our goal is also foster, innovate thinking, problem solving skills, mathematical aptitude and self-confidence.</p>	01.30 PM	Teague, J.	ART: VISUAL			*		\$130/\$30 SEMESTER
A(rt) in STEAM MINI	<p>Art and Science greatly overlap. Much like scientists, engineers and inventors, artists use imagination, observation, exploration, problem solving, trial and error and geometric/mathematical principles in their creative works. Art masters like Leonardo DaVinci were not only great painters, but scientific masters and innovative thinkers! The paint and pottery glaze colors we have today are direct results of scientific experiments with color pigments and chemical reactions.</p> <p>This fun and informative class cultivates creative thinking while developing skills related to color theory, lines, shapes, textures/patterns and composition. This is a multimedia art study which incorporates, drawing, watercolor, acrylic, collage, pastel, pottery, glass fusion, print making and art history. In addition to teaching core art skills, our goal is also foster, innovate thinking, problem solving skills, mathematical aptitude and self-confidence.</p>	12.30 PM	Teague, J.	ART: VISUAL	*				\$130/\$30 SEMESTER

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
All Fired Up: Clay & Glass Fusion	Students engage in an exploration of kiln fired clay and glass. Students learn a variety of hand-building pottery techniques: slab building, coiling, and pinch pots. Textural and glaze enhancements are also covered. In addition to clay work, students learn the art of glass fusion. They explore safe glass-cutting practices, types of fusible glass and two fusion-firing methods. Students can create fused glass plates, vases, votive holders, wind chimes and more!	11.00 AM	Teague, J.	ART: VISUAL			*	*	\$130/\$30 SEMESTER
American Short Stories Journey: Stepping Stones to Heritage and Analysis:	Explore the wild, conquer bedlam through exploration of American Literature: Seventh and eighth graders, join us on this path to learning who we are as a country, as individuals, as Americans, as we study classic American short stories and gain critical reading skills of analysis, writing, and communication. Utilizing writing, group activities, games, and presentations, we will converse with Poe, London, Jackson, Irving, Vonnegut, Bradbury, Cade Bambara, Tan and the like, as we connect with our own life's transitions, exploring new short stories, each Monday.	11.00 AM	Ham-Kucharski, D.	LITERATURE			*	*	\$140/\$10 SEMESTER
American Sign Language (ASL) ADVANCED	This is an overview of American Sign Language (ASL), its basic vocabulary, structure, syntax and grammar. Students focus on mastering the basics of fingerspelling, numbers, colors, facial grammar and sentence structure; students also learn conversational/cultural behaviors necessary to hold a beginning-level conversation in ASL, with deaf/hard-of-hearing native users of the language. Introductory information about deaf culture is presented, along with deaf humor, to provide students with a broad picture of language and culture. PREREQUISITE: American Sign Language (ASL) INTRO	01.30 PM	Larsen, C.	SIGN LANGUAGE		*	*	*	\$130/\$10 SEMESTER
American Sign Language (ASL) INTRO	This is the introduction to American Sign Language (ASL), its basic vocabulary, structure, syntax and grammar. Students focus on mastering the basics of fingerspelling, numbers, colors, facial grammar and sentence structure; students also learn conversational/cultural behaviors necessary to hold a beginning-level conversation in ASL, with deaf/hard-of-hearing native users of the language. Introductory information about deaf culture is presented, along with deaf humor, to provide students with a broad picture of language and culture.	12.30 PM	Larsen, C.	SIGN LANGUAGE		*	*	*	\$130/\$10 SEMESTER
Ancient History & Mysteries	This ancient history class investigates the origins and development of ancient societies of major western and non-western civilizations through the Christian worldview. Included are the societies of the Near East, Africa, the ancient Hebrew civilization, Greece, Rome, and the classical civilizations of India and China. For each of these societies, emphasis is placed on the major contributions, achievements, and beliefs that have influenced civilizations across the centuries to the present day. This course stresses the special significance of geography in the development of the human story and provides the opportunity to study the everyday lives of people living in vastly different areas of the world. The course content focuses on the people in ancient societies; their problems and accomplishments; their social, economic, political structures, and belief systems; the tools and technology they developed; the arts they created; the architecture; the literature they produced; their explanation for natural phenomena.	03.30 PM	Fallin, C.	HISTORY			*		\$130/\$30 SEMESTER

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
Ancient History & Mysteries JR	This ancient history class investigates the origins and development of ancient societies of major western and non-western civilizations through the Christian worldview. Included are the societies of the Near East, Africa, the ancient Hebrew civilization, Greece, Rome, and the classical civilizations of India and China. For each of these societies, emphasis is placed on the major contributions, achievements, and beliefs that have influenced civilizations across the centuries to the present day. This course stresses the special significance of geography in the development of the human story and provides the opportunity to study the everyday lives of people living in vastly different areas of the world. The course content focuses on the people in ancient societies; their problems and accomplishments; their social, economic, political structures, and belief systems; the tools and technology they developed; the arts they created; the architecture; the literature they produced; their explanation for natural phenomena.	02.30 PM	Fallin, C.	HISTORY		*			\$130/\$30 SEMESTER
Archery	This 14-session course is designed for the beginning or novice archer and uses recurve indoor target bows and equipment. The purpose of the course is to introduce students to the basic techniques of target archery emphasizing the care and use of equipment, range safety, stance and shooting techniques, scoring and competition.	10.00 AM	Mullins, K.	PHYSICAL FITNESS			*	*	\$130/\$10 SEMESTER
Archery JR	This 14-session course is designed for the beginning or novice archer and uses recurve indoor target bows and equipment. The purpose of the course is to introduce students to the basic techniques of target archery emphasizing the care and use of equipment, range safety, stance and shooting techniques, scoring and competition.	11.00 AM	Mullins, K.	PHYSICAL FITNESS		*			\$130/\$10 SEMESTER
Basketball & Beyond!	<p>There is an amazing opportunity through youth sports to teach kids how to succeed in life. In Basketball and Beyond!, students are challenged to redefine society's mainstream ideas of what it means to be successful (i.e. wealth, fame, etc.) and establish more value-based aspirations, standards, and life principles. In the process, students also receive the training to become better basketball players, regardless of skill level. Anyone who enjoys the game or could benefit from building life-skills is encouraged to participate.</p> <p>In addition to learning key basketball skills, Basketball and Beyond! teaches students how to have healthy standards for and expectations of themselves (what is "success?"), prepare for the future and learn from the past, discover, embrace and develop their talents and gifts, be authentic, face challenges and strengthen weaknesses, and so much more!</p> <p>Suggestion: Take CrossFit & Beyond! JR (12:30 PM) to strengthen and condition!</p>	03.30 PM	Hines, S.	PHYSICAL FITNESS			*		\$130/\$10 SEMESTER
Basketball & Beyond! JR	<p>There is an amazing opportunity through youth sports to teach kids how to succeed in life. In Basketball and Beyond!, students are challenged to redefine society's mainstream ideas of what it means to be successful (i.e. wealth, fame, etc.) and establish more value-based aspirations, standards, and life principles. In the process, students also receive the training to become better basketball players, regardless of skill level. Anyone who enjoys the game or could benefit from building life-skills is encouraged to participate.</p> <p>In addition to learning key basketball skills, Basketball and Beyond! teaches students how to have healthy standards for and expectations of themselves (what is "success?"), prepare for the future and learn from the past, discover, embrace and develop their talents and gifts, be authentic, face challenges and strengthen weaknesses, and so much more!</p> <p>Suggestion: Take CrossFit & Beyond! (1:30 PM) to strengthen and condition!</p>	02.30 PM	Hines, S.	PHYSICAL FITNESS		*			\$130/\$10 SEMESTER

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
Beyond Pictures: Leaps into Fiction	Through the use of mock up social media, online tools, journal writing, and fun activities, fourth, fifth, and sixth graders will imagine, explore, and enter the world of fiction with beginning steps into chapter books and short stories. Readers will take adventures with the Brothers Grimm, ride a Boxcar with the Boxcar Children, talk with animals who yearn for a voice in <i>Trumpet of the Swan</i> , and giggle with fictional peers in <i>Tales of a Fourth Grade Nothing</i> . Young readers will begin the steps toward understanding how to read a passage and see how it is reflected in their own lives.	12.30 PM	Ham-Kucharski, D.	LITERATURE		*			\$140/\$10 SEMESTER
Biology [2-Hour/32-Weeks]	In this comprehensive course, students investigate the chemistry of living things: the cell, genetics, the structure and function of living things, and ecology. The program consists of in-depth lessons including extensive animations, an associated reference book, collaborative explorations, virtual laboratories, and hands-on laboratory experiments students can conduct at home. Topics include the scientific method, characteristics of living things, energy, organic compounds, and water. Students review the structure and function of living things, the cell, genetics, DNA, RNA, and proteins. They review digestive, respiratory, nervous, reproductive, and muscular systems; and ecology and the environment. Required texts are: Exploring Creation with Biology 2nd Edition (Apologia) ISBN-13: 978-1932012545 Solutions and Tests for Exploring Creation with Biology (2nd Ed -Apologia) ISBN-13: 978-1932012552	10.00 AM	Rivers, S.	SCIENCE				*	\$500/\$25 YEAR (32 WEEKS) 2-HOUR CLASS
Book Club - Middle School	This class is for the upper elementary to middle school student who enjoys reading and discussing novels. Students should be motivated, independent readers or have support at home in reading around 100-200 pages per week (audiobooks are fine) from popular and classic juvenile fiction novels. Each week we will discuss our reading in a relaxed, book club format. We will explore narrative elements (character, setting, theme, plot, conflict, point of view), author's purpose, and theme. We will cover much of what might be expected from a Middle School Literature class. Students will help choose our book selections each session, drawn from award winning and classic literature. Some of the books we may choose to read are <i>The Lightning Thief</i> by Rick Riordan, <i>The Bridge to Terabithia</i> by Katherine Patterson, <i>Tuck Everlasting</i> by Natalie Babbitt, <i>The Giver</i> by Lois Lowry, <i>Ender's Game</i> by Orson Scott Card, <i>Maniac Magee</i> by Jerry Spinelli, and more.	12.30 PM	Osborn, E.	LITERATURE			*		\$130/\$10 SEMESTER
Cakes & Candies	Students will learn the basics of cake decorating. We will learn how to use several decorating tips. Our final project will be decorating mini-cakes to take home. Prepares you for entry-level cake decorator jobs in bakeries or cake shops or to establish your own business. Topics include, variety of icing, piping, and designing leafs and flowers.	11.00 AM	Osborn, E.	CULINARY			*	*	\$130/\$25 SEMESTER
Cakes & Candies JR/MINI	Students will learn the basics of cake decorating. We will learn how to use several decorating tips. Our final project will be decorating mini-cakes to take home. Prepares you for entry-level cake decorator jobs in bakeries or cake shops or to establish your own business. Topics include, variety of icing, piping, and designing leafs and flowers.	10.00 AM	Osborn, E.	CULINARY	*	*			\$130/\$25 SEMESTER

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
ChefMaster! - Mediterranean	<p>In Chefmaster!, students focus on “why” foods are prepared the way they are, what history may exist behind the food or method of cooking and begin creating associations to which the students may relate. The two-hour long class delves into the science of cooking and teaches why food reacts the way it does in different situations and what the best approach is to obtaining the desired results.</p> <p>This semester will concentrate on preparing appetizers, main course, and desserts originating from the Mediterranean region. Cuisine from Italy, France, Monaco, Greece, Israel, and others will be touched upon.</p> <p>While continuing to stress kitchen safety and healthy choices, students math skills are also challenged by measurement (both weight and volume), as well as reading and understanding directions. Basic chemistry and biology of food reaction are introduced, such as what makes bread rise or why different temperatures are chosen for different foods or methods of cooking.</p> <p>Many opportunities for experimentation are offered at this level. Students are encouraged to experience different flavor and texture combinations and put their own spin on recipes. Advanced cutting (including knives suitable for purpose) and knife safety are taught. Some kitchen tools used are the electric mixer, safety can opener, thermometer, measuring and cutting devices.</p> <p>**A special liability waiver must be signed by the parents**</p>	02.30 PM	Ribiero, C.	ART: CULINARY			*	*	\$250/\$150 SEMESTER 2-HOUR CLASS
ChefMaster! JR - Mediterranean	<p>Chefmaster JR. is a hands-on cooking and nutrition class for 3rd-5th grade. Our kids cooking classes introduce youth to the pleasures of preparing and enjoying "real food" that is both nutritious and delicious - an essential step toward health and well-being.</p> <p>This semester will concentrate on preparing appetizers, main course, and desserts originating from the Mediterranean region. Cuisine from Italy, France, Monaco, Greece, Israel, and others will be touched upon.</p> <p>Students learn basic cooking skills, the joy of eating and cooking with fresh fruits and vegetables, meats and other whole foods, and how to become empowered and conscious consumers in a marketplace that spends millions to persuade children to eat high-calorie, low-nutrient products.</p> <p>**A special liability waiver must be signed by the parents**</p>	12.30 PM	Ribiero, C.	ART: CULINARY		*			\$150/\$75 SEMESTER

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
Chemistry [2-Hour/32-Weeks]	<p>Through the study of chemistry, high school students will learn the science behind things they observe everyday! Chemistry explains properties of the food we eat, the beverages we drink, the medicines we take, the fibers we wear, and fuels in the cars we drive. Chemistry is a foundation to understanding the world around us and fundamental to other sciences such as biology, physics, geology, and environmental science.</p> <p>This full-year laboratory course makes chemistry come alive through hands-on activities, guided inquiry, and student projects. Each lab will feature a short discussion followed by active investigations, providing students with practical experience in laboratory techniques, data collection, scientific observations, and lab safety.</p> <p>Effort: Students should expect to spend 2-3 outside of lab class each week on assigned reading, prelab questions, and short assignments.</p> <p>Grading: The instructor will provide qualitative feedback on the student's class participation, preparation, and understanding of the material for the parent to assign a grade in the context of the student's overall study of this and related topics.</p>	02.30 PM	Rivers, S.	SCIENCE				*	\$500/\$50 YEAR (32 WEEKS) 2-HOUR CLASS
Controlled Chaos: the Improv Experience	<p>Controlled Chaos is all about the art of improv - but more importantly, confidence!</p> <p>Through this class, students build self control, develop critical thinking skills, and gain confidence to perform in front of large groups without feeling self conscious. The objective of Controlled Chaos is to create a "judgment-free zone" to allow the students to explore and grow without the fear of rejection.</p> <p>Controlled Chaos has a "Who's Line Is It Anyway?" vibe and students work towards an end-of-semester showcase full of games, fun, and awesome improv techniques!</p>	01.30 PM	Mandato, E.	ART: DRAMA			*	*	\$130/\$15 SEMESTER
Controlled Chaos: the Improv Experience JR.	<p>Controlled Chaos is all about the art of improv - but more importantly, confidence!</p> <p>Through this class, students build self control, develop critical thinking skills, and gain confidence to perform in front of large groups without feeling self conscious. The objective of Controlled Chaos is to create a "judgment-free zone" to allow the students to explore and grow without the fear of rejection.</p> <p>Controlled Chaos has a "Who's Line Is It Anyway?" vibe and students work towards an end-of-semester showcase full of games, fun, and awesome improv techniques!</p> <p>Suggestion: Take The Young Actors Academy (10am) to build theater skills and experience!</p>	11.00 AM	Mandato, E.	ART: DRAMA		*			\$130/\$15 SEMESTER
CRANKED! Small Engine Repair	<p>Did you take your toys apart when you were 5? How about making a Go Kart run? Do you think that you might like to build a Hover Craft? Ever want to build racing engines?</p> <p>Students learn the science and theory behind the combustion engine as well as the practical exercise of tearing down an engine and rebuilding it. Students will be able to describe engine components and the basic four stroke engine operation after disassembling and reassembling a mower engine.</p> <p>Explore engines and fundamental mechanical principles economically. Safety principles will also be taught and stressed during the course. A small basics kit for small engine repair will be assigned to each student that they can take home at semester's end.</p>	12.30 PM	Martinson, Y.	MISCELLANEOUS		*	*	*	\$140/\$35 SEMESTER

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
Creative Writing	What could your dog tell you about relationships? How do dragons learn to fly? Do your socks miss you when you leave? Doppelgangers and anthropomorphism are just a couple of the tools we'll use to write our wild and witty stories. Sprinkle in a bit of poetry, some opinion, a tall tale or two, and scintillating dialogue, and we'll have a semester full of creative fun. We will practice writing from many different angles, while learning how to make our pieces POP! We may even absorb a few grammar, spelling, and style tips along the way. Each week our middle school scribes will write (in class and at home), edit, and share ideas. Recommended for students 12 – 15 years old.	02.30 PM	Calupca, C.	ENGLISH			*	*	\$130/\$20 SEMESTER
Creative Writing JR	This class is especially for upper elementary students: both those who love to write pages and pages at a sitting, and those who struggle to get three words on the paper. We will write stories about all kinds of wild stuff, from dragons to superheroes, stinky socks to magic bubbles. The goal is to make writing a fun and relaxed experience for students while building confidence and sparking creativity. Every week we will imagine, write, edit, share, and encourage one another's efforts. Recommended for students 9 – 11.	01.30 PM	Calupca, C.	ENGLISH		*			\$130/\$20 SEMESTER
CrossFit & Beyond!	CrossFit and Beyond! is a program that is designed with the specific functions of jumping, squatting, pushing, pulling, running and climbing that students find themselves doing in everyday life. It is a program aimed at developing fitness levels to optimize the enjoyment of their lives. To put it more simply, CrossFit and Beyond! helps students grow healthy and strong, and through that, to love every minute of the day. The program is also a great way to develop general athletic skills as a means of generating improvement in other sports. Classes are designed to incorporate elements of GYMnastics, body weight movements, running and jumping to ensure that kids develop overall improvement in and a love for fitness. This type of advancement transfers over to all sports!	01.30 PM	Mullins, K.	PHYSICAL FITNESS			*	*	\$140/\$10 SEMESTER
CrossFit & Beyond! JR	CrossFit and Beyond! is a program that is designed with the specific functions of jumping, squatting, pushing, pulling, running and climbing that students find themselves doing in everyday life. It is a program aimed at developing fitness levels to optimize the enjoyment of their lives. To put it more simply, CrossFit and Beyond! helps students grow healthy and strong, and through that, to love every minute of the day. The program is also a great way to develop general athletic skills as a means of generating improvement in other sports. Classes are designed to incorporate elements of GYMnastics, body weight movements, running and jumping to ensure that kids develop overall improvement in and a love for fitness. This type of advancement transfers over to all sports!	12.30 PM	Mullins, K.	PHYSICAL FITNESS		*			\$140/\$10 SEMESTER
Digital Cinematography	For this class, students should have basic computer knowledge (software knowledge not required). Students can sign up as film makers and/ or actors. Students create professional short film or TV show with a story idea of their choosing. Film makers learn the full production pipeline from start to finish such as script writing, storyboard artist, camera operator, director, and video editors. Actors gain skills for collaborating in performances based upon shot size and angle, emotional and physical continuity, strength, hitting marks, and crew skills (participating in film duties) to help finish the team project. This class is great for any student who wants to broaden their knowledge in the field of film making or acting. Students must bring their own laptop or rent a classroom laptop from NGHE (\$40/Semester)	12.30 PM	Murray, J.	TECHNOLOGY			*	*	\$140/\$20 SEMESTER

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
Dinosaur!	<p>Dinosaurs are reptiles that have lived on Earth many years ago to the present. Modern birds are one kind of dinosaur because they share a common ancestor with non-avian dinosaurs. Non-avian dinosaurs (all dinosaurs besides birds), which are now extinct, varied greatly in shape and size. Some weighed as much as 80 tons and were more than 120 feet long. Others were the size of a chicken and weighed as little as 8 pounds. All non-avian dinosaurs lived on land. Some may have gone into the swamps and lakes for food, but they did not live entirely in water. Meat-eaters walked on two legs and hunted alone or in groups. Plant-eaters walked on either two or four legs and grazed on plants. The feature that distinguishes dinosaurs from other reptiles is a hole in the hip socket. This feature allowed dinosaurs to walk upright. Pterosaurs, or flying reptiles, and plesiosaurs, ocean-dwelling reptiles, did not have this feature and were not dinosaurs.</p> <p>We will explore what we can about dinosaurs: what they were like and how they behaved; which were herbivores, carnivores, or both; we learn</p>	02.30 PM	Prashanth, S.	SCIENCE	*	*			\$130/\$30 SEMESTER
Drawn Together - Illustration Studies (INTRO)	<p>Taught by a seasoned Atlanta Art Institute instructor, this class is for students who might be interested in pursuing a career in Graphic Design, Illustration, Comic Book Art or Animation.</p> <p>This advanced art class covers concept design, layout, typography, illustration and story boards. Through exercises and projects, students explore 20th century artists and learn how to take a project from concept through completion.</p> <p>Students explore corporate identity, package design, ads, flip books and magazine layouts as well. Incorporate all of the elements of design into a comprehensive final piece that they can use in their portfolios.</p> <p>Suggestion: Take "A(rt) in STEAM" to complement the art appreciation experience!</p>	10.00 AM	Faass, K.	ART: VISUAL			*	*	\$130/\$10 SEMESTER
Drawn Together: Illustration Studies (ADVANCED)	<p>Taught by a seasoned Atlanta Art Institute instructor, this class is for students who might be interested in pursuing a career in Graphic Design, Illustration, Comic Book Art or Animation.</p> <p>This advanced art class covers concept design, layout, typography, illustration and story boards. Through exercises and projects, students explore 20th century artists and learn how to take a project from concept through completion.</p> <p>Students explore corporate identity, package design, ads, flip books and magazine layouts as well. Incorporate all of the elements of design into a comprehensive final piece that they can use in their portfolios.</p> <p>Suggestion: Take "A(rt) in STEAM" to complement the art appreciation experience!</p> <p>PREREQUISITE: Drawn Together: Illustration Studies (Spring 2017 Semester)</p>	12.30 PM	Faass, K.	ART: VISUAL			*	*	\$130/\$20 SEMESTER

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)	
Drones, Drones, Drones! (INTRO)	<p>Why buy when you can build? For the same price as an entry level drone, this class teaches students to build their own mini quadcopter drone and leave with the skills and knowledge to keep it decked out.</p> <p>The course provides all the parts needed to build a drone that students can then adapt for flight, aerial videography, impressive acrobatics, or whichever technology hack they have in mind. Students learn about each component and how they work together - giving them the basis to develop their own applications.</p> <p>Take-aways include: a custom mini quadcopter, knowledge on how to assemble; basic soldering skills; parts list and reference materials</p> <p>Each drone is robust and cost-effective to maintain, and is sure to inspire imaginations - widening horizons in the growing drone culture! From this class, students develop the NGHE Drone Team competes in local competitions with fellow builders.</p>	11.00 AM	Martinson, Y.	TECHNOLOGY				*	*	\$150/\$65 SEMESTER
Drones! Drones! Drones! - Advanced	<p>After you've built your mini quadcopter in Drones!Drones!Drones! Intro, you will be ready to delve deeper into the details of customizing a quadcopter, flying a drone with proper certification, and utilizing your flight skills to tap into the expanding job field for those with flying skills!</p> <p>Students will work in teams to build and modify an intermediate level drone - carbon fiber frame, brushless motors, programmable flight controller, and more.</p> <p>They will learn:</p> <ul style="list-style-type: none"> ▪ How to program a flight controller while learning how each component works in easy to use terms. ▪ Quadcopter flight: Basic through Advanced FPV ▪ Video Documentation: Equipment and techniques ▪ The skills to build any multi-rotor type they desire! <p>Note: Drones do not go home with the students at semester's end.</p> <p>The students will also learn about the careers where drone knowledge and skills are taking many fields to the next level: real estate, surveying, public safety, search and rescue, cinematography, topography and more.</p> <p>PREREQUISITE: Drones!Drones!Drones! Intro</p>	10.00 AM	Martinson, Y.	TECHNOLOGY				*	*	\$150/\$20 SEMESTER
Exploring Creation with Astronomy JR	<p>Explore the vastness of the universe with Exploring Creation with Astronomy, 2nd Edition from Apologia. Your student will study the basics of the field of astronomy, the sun, moon, planets, asteroids & meteors, the Kuiper Belt and Dwarf Planets, galaxies, and more through conversational lessons written directly to students. These "star-studded" lessons in astronomy will keep kids interested and engaged every week!</p> <p>Required Textbook: Exploring Creation with Astronomy Textbook (2nd Edition) ISBN-13: 9781940110585</p>	12.30 PM	Root, J.	SCIENCE				*		\$130/\$25 SEMESTER

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
Exploring Creation with Astronomy MINI	Explore the vastness of the universe with Exploring Creation with Astronomy, 2nd Edition from Apologia. Your student will study the basics of the field of astronomy, the sun, moon, planets, asteroids & meteors, the Kuiper Belt and Dwarf Planets, galaxies, and more through conversational lessons written directly to students. These “star-studded” lessons in astronomy will keep kids interested and engaged every week! Required Textbook: Exploring Creation with Astronomy Textbook (2nd Edition) ISBN-13: 9781940110585	01.30 PM	Root, J.	SCIENCE	*				\$130/\$25 SEMESTER
Flying Things	Activities are broken down by age group and reinforce the material just learned through fun ideas that engage all learning styles; they’re based upon the classical grammar/logic/rhetoric stages. Review exercises cover the timeline and map work exercises; quizzes are cumulative reviews that go over material from the very beginning of the course; the semester-long tests are similar (though longer), covering materials from 2 quarters (one major time period). Quarter-end worksheets help students synthesize what they’ve learned and keep everyone straight! Suggested Schedules for different age groups are included, as well as plenty of reproducibles. Line-listed answers included. 636 pages, activity pages reproducible, softcover, three-hole-punched and perforated pages.	03.30 PM	Root, J.	SCIENCE		*	*		\$130/\$25 SEMESTER
Fun with CSI Forensics	A class to learn just exactly “Who Dunit?”. Students transform into detectives as they learn exciting concepts such as how to lift fingerprints, collecting evidence, and analyzing samples. At the conclusion of this course, students have the opportunity to investigate a mock crime scene and work in teams to solve the crime!	02.30 PM	Brown, D.	SCIENCE			*	*	\$130/\$30 SEMESTER
Fun with Espanol!	In Fun With Español!, young students learn Spanish in a fun and exciting with music and laughter - the most effective ways for kids to learn and grow especially when learning another language. Fun With Español! is designed to provide students with plenty of movement, music, and fun. This approach to teaching Spanish mimics native language acquisition – students having fun interacting with other students, while creating arts and crafts or singing along with their teacher! This is a natural process of learning, and it works, as well, for the second language as it works for native language learning. By simply being immersed and consistently talking, playing, singing and having lots of fun in Spanish, it has resulted in a rapid language learning program that kids love. With a no pressure environment, students love learning Spanish and feel comfortable using it. Fun With Español! provides students a foundation for learning a second language in a fun positive way.	11.00 AM	Ribiero, C.	FOREIGN LANGUAGE	*	*			\$130/\$10 SEMESTER

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
Game On! Board Game Design	<p>Over the past decade, board games have gained increased prominence within the game industry. With the growing popularity of Euro-style board games, such as Settlers of Catan, Pandemic, and Dominion, board games have seen an unexpected resurgence among gamers of all kinds. Designing for board games brings about different challenges than designing for video games, but the skills can be applied universally to make all of your games better.</p> <p>Game On! is designed to teach you the fundamental philosophies of game design and apply them in a hands-on manner using a step-by-step process that develops your 'game design muscles.' The tips, tools, and techniques taught in this course exist to provide the practical resources needed for your game design. In addition, the information this course provides is a grounded study for any real life application where inspiration must combine with perspiration to create a marketable product of art, craft, and science (all of which apply to making games).</p> <p>Suggestion: Enroll in Game On! Extended Play (1.30pm) to dig deeper into dozens of game genres from across the globe with actual hands-on play among game peers!</p>	12.30 PM	Stafford, M.	MISCELLANEOUS			*	*	\$130/\$10 SEMESTER
Game On! Extended Play	<p>Game On! Extended Play is a rich and in-depth complement to the Game On! Design class, and for anyone who is interested in discovering more of the history of board games. The "Game Design Muscles" of the brain are challenged even more when students are introduced to the collection of over 2500+ board games in "Mike the Game Guy's " arsenal. Week by week, Mr. Mike introduces a set of games categorized by either strategy, theme, goal, focus, interaction, immersion and so much more!</p> <p>Like the Game On! Game Design class, the information this course provides is a grounded study for any real life application where inspiration must combine with perspiration to create a product of art, craft, and science - all of which apply to games.</p> <p>Math, geography, and history are just a few of the cross-disciplinary learning challenges that will be experienced by Gamers!</p> <p>Suggestion: You should also take Game On! Board Game Design to learn more about the multi-billion dollar board game industry all while using strategy and design skills to build an actual game to take home!</p>	01.30 PM	Stafford, M.	MISCELLANEOUS		*	*	*	\$130/\$10 SEMESTER
GameMaker Mobile Games	<p>This exciting class teaches students how to create completely original games and applications without typing a single line of code through the use of logic and assets. Even if students have never programmed before or built apps before, by the end of this course, students are capable of building apps and submitting them to an online app store.</p> <p>Before students even start building an app, they are taken through what makes a good app, and the limitations they might face during development. Students learn how to design a good user interface (UI) and how an app runs. From there, students jump right into building apps: designing the interface, animating, timing, and much more.</p> <p>Students must bring their own laptop or request one for rental from NGHE (\$40/semester).</p>	10.00 AM	Romero, S.	TECHNOLOGY			*	*	\$150/\$10 SEMESTER

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
Hands-On Econ: PlayDough Economics JR	<p>Economic literacy is important because economics is such an integral part of daily existence. Individuals who understand basic economic concepts are better equipped to make the important decisions that every citizen requires. This very hands-on curriculum was created by the Council for Economic Education 30 years ago, and is still relevant today!</p> <p>Each lesson introduces an economic concepts such as: goods and services; production; scarcity; consumer; producer; trade; money; specialization; capital; saving and investing; market price; cost and profit; inflation; and gross national product. The unique feature of these lessons is the use of modeling clay in each lesson. This is not only motivating, but it also provides concrete learning experiences that promote learning for most elementary students.</p>	1.30 PM	Fallin, C.	ECONOMICS		*			\$130/\$20 SEMESTER
Hands-On Econ: PlayDough Economics MINI	<p>Economic literacy is important because economics is such an integral part of daily existence. Individuals who understand basic economic concepts are better equipped to make the important decisions that every citizen requires. This very hands-on curriculum was created by the Council for Economic Education 30 years ago, and is still relevant today!</p> <p>Each lesson introduces an economic concepts such as: goods and services; production; scarcity; consumer; producer; trade; money; specialization; capital; saving and investing; market price; cost and profit; inflation; and gross national product. The unique feature of these lessons is the use of modeling clay in each lesson. This is not only motivating, but it also provides concrete learning experiences that promote learning for most elementary students.</p>	12.30 PM	Fallin, C.	ECONOMICS		*			\$130/\$20 SEMESTER
Hot Shots! Mobile Phone Photography	<p>The ubiquity of cell phone photography has had a widespread impact on the tradition, practice, and purposes of photography, as well as concepts of art and what art should be for.</p> <p>In this class, we discuss the growing need of cell phone photography, It is a great tool for all of us to visually document life events and celebrations. We will study the basics of photography through the cell phone discussing phone/camera basics, composition, lighting, and so much more. We will also touch the subjects of creative effects and editing to share the final product with friends and family. Alongside these discussions, students will create works of art utilizing the experimental, documentary, and social potentials of cell phone photography.</p> <p>It is recommended that your student have a cell phone with an 8-megapixel (min.) camera for class use. They will also need the ability to download and install a free camera app onto their phone to learn how to control when the camera is in a manual settings mode. A portfolio of the student's will be compiled for display at semester-end event and for viewing online! You will be amazed with their talents.</p>	03.30 PM	Kimberley, R.	ART: VISUAL		*	*	*	\$130/\$20 SEMESTER
Jewelry Making	<p>This introductory class is intended for those with no previous experience. It provides a great opportunity to explore, experiment and develop the basic jewelry-making skills essential for building a lasting foundation for this craft.</p> <p>You are introduced to jewelry styles of rosette appliqué, chokers, looming, basic stringing and beading, cold connections and so much more! Your supply fee includes the starter kit with materials and basic tools to get started with your new jewelry creations.</p>	02.30 PM	Osborn, E.	ART: VISUAL		*	*	*	\$130/\$30 SEMESTER

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
JumpStart! Early Development Program [4.5 Hour/Full Year]	<p>JumpStart! is a fun, hands-on, unit-study based learning program for grades K-2 that features beloved children's literature from Five in a Row (http://fiveinarow.com). Carefully chosen books create the backdrop for learning language arts, history, geography, social studies, science, math, music, art, and so much more!</p> <p>In Fall 2017 of JumpStart, ALL NEW books are read and cross-discipline activities that relate to the literature are done each Monday from 10:00 AM-2:30 PM. There's also time for PE activities and lunch with all the JumpStart friends that they make.</p> <p>Let our enthusiastic and caring teachers give your young student a great start to their week through a thoughtful trek of unit lessons that will help help them connect one area of life to another. Unit studies are a great way to hold the younger student's attention for longer periods of time and expand their learning in such fun ways they will forget they are "in school"!</p> <p>**JumpStart! Unit Studies is a year-long, 4.5 hour immersive program from 10:00 AM - 2:30PM for Grades K-2**. (Note: there is also a scheduled lunch and P.E. during this time).</p>	10.00 AM	Rausch, S. Maclean, L.	EARLY DEVELOPMENT	*				\$900/\$100 YEAR 4.5-HOUR CLASS
KABOOM! Science with Fire, Explosions & More!	<p>"Don't try this at home, kids!" All the best experiments that include fire, fizzing, foaming, explosions, and more. Students discover and analyze the more spectacular chemical reactions through science experiments that make science fun, memorable, and a great learning opportunity.</p> <p>Larger scale experiments are performed with fire and explosions.</p>	01.30 PM	Martinson, Y.	SCIENCE			*	*	\$140/\$30 SEMESTER
LEGO Thinkers JR	LEGO© building is a great way to excite students about problem solving and innovative thinking, and LEGO© Thinkers is a fantastic way to engage students in engineering challenges. Each week our young engineers are presented with a new building challenge to develop individual problem solving skills, critical thinking, teamwork, and engineering skills, all while having FUN!	03.30 PM	Brown, D.	ENGINEERING		*	*		\$130/\$10 SEMESTER
LIFE IN SPACE: the International Space Station	<p>The International Space Station (ISS) is a technical marvel, unparalleled in scope and challenge. A permanent facility focused on studying the effects of long-duration exposure to microgravity, it is the necessary first step toward the global, cooperative effort needed to venture out to Mars and beyond. Truly an international effort, this Earth-orbiting laboratory draws upon the scientific and technological experience of 16 nations and will be a permanent orbiting laboratory enabling long-duration research in the unique microgravity environment of Earth's orbit.</p> <p>Through this exciting study is cross-disciplinary and beyond science and math. Other subjects touched upon are geography, language arts, social studies, technology, physical education, visual arts, and covers potential careers related to the ISS.</p>	02.30 PM	Root, J.	SCIENCE		*	*		\$140/\$25 SEMESTER

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
Math EDGE: Algebra	<p><i>Math EDGE: Algebra</i> offers a unique, proven way to introduce algebra to students. New concepts are explained in simple language, and examples are easy to follow. Word problems relate algebra to familiar situations, helping students understand abstract concepts. Students develop understanding by solving equations and inequalities intuitively before formal solutions are introduced.</p> <p>Students begin their study of algebra using only integers. Next, they discover rational numbers and expressions. Later lessons extend coverage to the real number system.</p> <p>Supply fee includes all student workbooks needed for this class.</p> <p>Math EDGE classes are designed to complement math studies at home and give students the “edge” to succeed!</p>	11.00 AM	Stafford, M.	MATH			*	*	\$300/\$60 YEAR
Math EDGE: Fractions, Decimals, and Percents	<p>Can math feel fragmented? The Math Mosaics class (no relation to the Math Mosaics Curriculum) builds a solid foundation by taking the math concept pieces, putting them together, and filling in the gaps to create a clear picture and understanding of these math concepts.</p> <p>There are pieces relating percents to decimals and fractions, comparing and ordering, solving multistep practical problems and determining the percent of increase or decrease for a give situation. Students are expected to understand the relationship between fractions, decimals and percents and that rational numbers can be expressed as fractions, decimals and percents.</p> <p>This class is great as a stand-alone, or supplemental class, for the developing student prior to taking Pre-Algebra/Algebra.</p> <p>Give your student “the edge” in Middle/High School math!</p>	02.30 PM	Stafford, M.	MATH			*	*	\$260/\$60 YEAR
Math EDGE: Geometry	<p>Here is a non-intimidating way to prepare students for formal geometry. <i>Math Mosaics: Geometry</i> introduces your student to a wide range of geometric discoveries as they do step-by-step constructions.</p> <p>Using only a pencil, compass, and straightedge, students begin by drawing lines, bisecting angles, and reproducing segments. Later they do sophisticated constructions involving over a dozen steps—and are prompted to form their own generalizations. When they finish, students will have been introduced to 134 geometric terms and will be ready to tackle formal proofs.</p> <p>This class can be done to provide an excellent supplement for high school students! Math Mosaics classes are designed to complement math studies at home and give students the “edge” to succeed!</p>	03.30 PM	Stafford, M.	MATH				*	\$260/\$60 YEAR

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
Math Mastery	<p>Excitement about the real world makes young students eager to develop their mathematical knowledge. In Math Mastery, connections are continually made to mathematical concepts previously learned and to their life experiences. This is a supplementary course for students looking to be challenged for a strong foundation in arithmetic.</p> <p>Topics include hands-on learning and applying math skills in everyday life for grades 3-4. Students learn together and work up some excitement for math in the "real world". Math topics include word problems, logical reasoning, measurement, geometry, spatial thinking, probability, statistics, calculators, estimation as well as developing problem-solving skills.</p> <p>Throughout the year, they learn to see the relationship between mathematics and real life. Learn and solidify math facts and processes through games and interaction. Through the use of online and board games for math, math manipulatives and many hands-on math activities, students learn math doesn't have to be boring. By the end of the year, students master the utilization of number sense concepts, develop automaticity of all basic math operations, gather, interpret and apply measurement, analyze and apply geometric concepts, and begin to explore algebraic expressions.</p>	10.00 AM	Stafford, M.	MATH		*			\$260/\$35 YEAR
Mindstorm LEGO Robotics	<p>This is a beginning course in robotics. We will be utilizing Lego Mindstorm kits, Robolab software and various Lego Robotics materials.</p> <p>The objective of this course is to introduce the student to basic programming as well as problem solving strategies. This course will involve students in the development, building and programming of a LEGO Mindstorm robot. Students will work hands-on in teams to design, build, program and document their progress. Topics may include motor control, gear ratios, torque, friction, sensors, timing, program loops, logic gates, decision-making, timing sequences, propulsion systems and binary number systems. Student designed robots will be programmed to compete in various courses as developed by First Lego League.</p>	11.00 AM	Romero, S.	TECHNOLOGY		*	*	*	\$140/\$10 SEMESTER
MUSIC:BUILD IT!	<p>Twang! Thwump! Buzzz! Have your kids learn music through hands-on building of musical instruments. We're not talking about paper plates and dried beans here! They will learn music theory, physics, math, fabrication and much more through the design and building of instruments made with REAL MATERIALS - like wood, plastic, vinyl, metal, and whatever the imagination desires!</p>	02.30 PM	Perez, A.	ART: MUSIC		*	*		\$130/\$30 SEMESTER
Origami	<p>Origami is the Japanese word for paper folding. ORI means to fold and KAMI means paper. Together, they form the word, "origami." It is an art form that has been handed down from parent to child through many generations. Origami involves the creation of paper forms usually entirely by folding. Animals, birds, fish, geometric shapes, puppets, toys and masks are among the models that even very young children can learn to make in just one sitting.</p> <p>In this innovative class, students will learn to apply the ancient Japanese technique of origami. Come and explore the basics of origami. Learn about the art of folding paper and see what figures you can make from just one piece of paper. Projects will be appropriate for age and beginner skill levels and, over time, will develop from there.</p>	11.00 AM	Prashanth, S.	ART: VISUAL			*	*	\$130/\$10 SEMESTER

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
ORIGAMI JR/MINI	<p>Origami is the Japanese word for paper folding. ORI means to fold and KAMI means paper. Together, they form the word, "origami." It is an art form that has been handed down from parent to child through many generations. Origami involves the creation of paper forms usually entirely by folding. Animals, birds, fish, geometric shapes, puppets, toys and masks are among the models that even very young children can learn to make in just one sitting.</p> <p>In this innovative class, students will learn to apply the ancient Japanese technique of origami. Come and explore the basics of origami. Learn about the art of folding paper and see what figures you can make from just one piece of paper. Projects will be appropriate for age and beginner skill levels and, over time, will develop from there.</p>	10.00 AM	Prashanth, S.	ART: VISUAL	*	*			\$130/\$10 SEMESTER
Passport to the World JR	<p>Students pack up their bags for a super fun "A to Z" guided language tour with Passport to the World based on the award winning <i>Passport to the World</i> book by Craig Froman. Students embark on a unique journey around the world based on languages. Opening with an account of the Tower of Babel where the world's one and only language was split into a wide variety of language families, students go on to cover one language and a focus country for many letters of the alphabet.</p> <p>This class includes a "real" passport to stamp with each country's seal and lots of hands on fun as they sample foods, play games and make crafts from each country. Optional homework for students to create their own lapbook at home and extend their study are provided each week.</p>	12.30 PM	Prashanth, S.	GEOGRAPHY			*		\$130/\$20 SEMESTER
Passport to the World MINI	<p>Students pack up their bags for a super fun "A to Z" guided language tour with Passport to the World based on the award winning <i>Passport to the World</i> book by Craig Froman. Students embark on a unique journey around the world based on languages. Opening with an account of the Tower of Babel where the world's one and only language was split into a wide variety of language families, students go on to cover one language and a focus country for many letters of the alphabet.</p> <p>This class includes a "real" passport to stamp with each country's seal and lots of hands on fun as they sample foods, play games and make crafts from each country. Optional homework for students to create their own lapbook at home and extend their study are provided each week.</p>	01.30 PM	Prashanth, S.	GEOGRAPHY	*				\$130/\$20 SEMESTER
Physical Science [2-Hour/28 Weeks]	<p>A year-long course designed to allow students to explore the basic concepts of Physical Science. Students are introduced to the history and nature of science. The course includes an introduction to the fundamental concepts of Physics, Chemistry, Astronomy and Earth Science. Students are encouraged to explore the relationship between science and everyday life.</p> <p>Required textbook is <i>Exploring Creation with Physical Science</i> (Apologia) ISBN-13: 978-1932012774</p> <p>- This is a 2-hour long Class</p>	12.30 PM	Rivers, S.	SCIENCE			*		\$500/\$50 YEAR (28 WEEKS) 2-HOUR CLASS
R.I.S.E. - Readiness in Scientific Exploration	<p>R.I.S.E. prepares grade school students for middle school science classes. Students learn procedural practices, record step-by-step experiment observations, and record and interpret results - all part of the "Scientific Method".</p> <p>Each week, students do hands-on learning through ALL-NEW experiments. Experiments vary with age/grade level and abilities.</p> <p>Please inform NGHE of any student allergies.</p>	12.30 PM	Brown, D.	SCIENCE			*		\$140/\$25 SEMESTER

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
R.I.S.E. - Readiness in Scientific Exploration JR	<p>R.I.S.E. JR. prepares grade school students for middle school science classes. Students learn procedural practices, record step-by-step experiment observations, and record and interpret results - all part of the "Scientific Method".</p> <p>Each week, students do hands-on learning through ALL-NEW experiments . Experiments vary with age/grade level and abilities.</p> <p>Please inform NGHE of any student allergies.</p>	10.00 AM	Brown, D.	SCIENCE		*			\$140/\$25 SEMESTER
R.I.S.E. - Readiness in Scientific Exploration MINI	<p>R.I.S.E. MINI prepares grade school students for middle school science classes. Students learn procedural practices, record step-by-step experiment observations, and record and interpret results - all part of the "Scientific Method".</p> <p>Each week, students do hands-on learning through ALL-NEW experiments . Experiments vary with age/grade level and abilities.</p> <p>Please inform NGHE of any student allergies.</p>	11.00 AM	Brown, D.	SCIENCE		*			\$140/\$25 SEMESTER
Rite of Passage: Novel Adventures	<p>Navigate the Canadian wilds, explore a <i>Secret Garden</i>, communicate with the animals in <i>The Jungle Book</i>, explore the Mississippi River with <i>Tom Sawyer</i>, explore worlds beyond ours with <i>Hatchet</i> and <i>Call of the Wild</i>, in this course for seventh and eighth graders in which adventure will be analyzed through novels and discussion as we share in this journey toward adulthood and all of the wonder, self-reliance, and transformation that entails. We will write, share, engage, and discuss who we are in relationship to the texts we explore.</p>	10.00 AM	Ham-Kucharski, D.				*	*	\$130/\$20 SEMESTER
Robot Battles	<p>Do you love robots and have a passion for adventure? Then this is the perfect camp for you! Build, wire, and program your own robot to compete in games and battles. Customize your bot to complete an obstacle course, win a soccer game, and even challenge another robot in an ultimate robot fight! Learn valuable skills in coding, problem-solving, and engineering while designing your robot to meet every challenge.</p>	03.30 PM	Martinson, Y.	ENGINEERING			*	*	\$150/\$10 SEMESTER
Rube Goldberg Machines	<p>For the uninitiated, Rube Goldberg was an American Pulitzer Prize winning cartoonist, sculptor, author, engineer, and inventor, and his work is a classic example of the melding of art and science. Goldberg began his career as an engineer, and later became a cartoonist who drew elaborate illustrations of contraptions made up of pulleys, cups, birds, balloons, and watering cans that were designed to solve a simple task such as opening a window or setting an alarm clock.</p> <p>Check out an example here: https://youtu.be/WouOdkM_QBE</p> <p>An even more elaborate one here used for a music video: https://youtu.be/qybUFnY7Y8w</p> <p>Interestingly, Goldberg only drew the pictures, and never built any of his inventions. However, these pictures have since served as inspiration for makers and builders who want the challenge of making wild inventions to solve everyday problems.</p> <p>This class teaches them the basics of understanding simple machines. The fun, hands-on lessons can be easily understood by almost any grand level, ability, or background.</p>	01.30 PM	Brown, D.	ENGINEERING		*	*	*	\$140/\$20 SEMESTER

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
SING! the Songs of Disney	<p>Your student will develop fundamentals, reinforce performance concepts and fine-tune techniques with a fun hands-on session of singing.</p> <p>Enroll now and your crooner will be performing classic Disney songs (like Hakuna Matata, Let It Go, and A Whole New World) in both solo and ensemble formats. We are going to have great time singing and having a whole lot of fun doing it!</p>	01.30 PM	Osborn, E.	ART: MUSIC	*	*	*		\$130/\$10 SEMESTER
Spanish (INTRO)	<p>Students learn Spanish by focusing on the four key areas of foreign language study: listening, speaking, reading, and writing. The course represents an ideal blend of language learning pedagogy and online learning. Each unit consists of a new vocabulary theme and grammar concept, reading and listening comprehension activities, speaking and writing activities, multimedia cultural presentations, and interactive activities and practices which reinforce vocabulary and grammar.</p> <p>There is a strong emphasis on providing context and conversational examples for the language concepts presented in each unit. Students should expect to be actively engaged in their own language learning, become familiar with common vocabulary terms and phrases, comprehend a wide range of grammar patterns, participate in simple conversations and respond appropriately to basic conversational prompts, analyze and compare cultural practices, products, and perspectives of various Spanish-speaking countries, and take frequent assessments where their language progression can be monitored.</p> <p>The required textbooks are: Spanish 1 Student Text, Second Edition (BJU Press) - ISBN-13: 978-1-60682-061-2 Spanish 1 Student Activities Manual, Second Edition - ISBN-13: 978-1-59166-169-6</p>	10.00 AM	Ribiero, C.	FOREIGN LANGUAGE			*	*	\$130/\$10 SEMESTER
Talk Like TED Public Speaking	<p>What do filmmaker J.J. Abrams, architect Frank Gehry, musician Bono, food writer Mark Bittman, diplomat Madeline Albright, and actress Jane Fonda all have in common? Apart from being household names and among the best at their chosen professions, they've each shared their stories at TED, the annual conference launched in 1984 as a place where Technology, Entertainment and Design converge. Thirty years later, TED has broadened to cover a range of topics – from science to business to global issues – and has spawned the independently run TEDx events that help share ideas in communities around the world.</p> <p>“Ideas are the currency of the twenty-first century” and that those people who are exceptionally good at presenting their ideas are elevated in stature and influence in today's society.”</p> <p>This course gives introduction to the primary areas of study in the communication discipline, emphasis on developing communication competence and understanding communication processes. Topics covered include public speaking, interpersonal communication, and group communication.</p> <p>Students study and practice of preparing, delivering, and analyzing public speeches, as well as writing in ways that appeal to different audiences. Presenting in ways that are confident and credible are also emphasized to help students find their inner “TED”.</p> <p>Check out this TED talk: https://youtu.be/arj7oStGLkU</p> <p>The required textbooks: Sound Speech Student Text, Second Edition (BJU Press: ISBN-13: 978-1-60682-236-4) Talk Like TED (Carmine Gallo: ISBN-13: 978-1250061539)</p>	02.30 PM	Mandato, E.	SPEECH		*	*		\$130/\$10 SEMESTER

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
Teaching Kids To CHOOSE LOVE - (BOYS ONLY Class)	<p>Our world is a rough place for our kids, let alone everyone else. But we can teach our kids that whatever we face in life - the loss of a pet, bullying, or whatever is thrown our way - we can face it head on and choose LOVE as it is spoken in the book of Matthew (and other parts of the Bible)</p> <p>The foundation of this class is to teach your child that they are a unique and wonderful creation from God. Complemented by our hands-on "Dangerous Things" activity, we teach your girls about self worth, respect, and responsibility in the eyes of God.</p>	10.00 AM	Root, J.	MISCELLANEOUS		*	*		\$130/\$25 SEMESTER
Teaching Kids To CHOOSE LOVE - (GIRLS ONLY Class)	<p>Our world is a rough place for our kids, let alone everyone else. But we can teach our kids that whatever we face in life - the loss of a pet, bullying, or whatever is thrown our way - we can face it head on and choose LOVE as it is spoken in the book of Matthew (and other parts of the Bible)</p> <p>The foundation of this class is to teach your child that they are a unique and wonderful creation from God. Complemented by our hands-on "Dangerous Things" activity, we teach your girls about self worth, respect, and responsibility in the eyes of God.</p>	11.00 AM	Root, J.	MISCELLANEOUS		*	*		\$130/\$25 SEMESTER
U.S. Smart: 50 States	<p>Students need to participate in the study of the geography of the United States because the students need to learn about the physical properties of the country in which they live. When students understand the elements of geography and how they affect the lives of humans and animals.</p> <p>Studying geography provides students with the knowledge and understanding of the environment around them. Students learn through hands on projects, group discussion, visuals and creative aids. Join us for the fun!</p> <p>Goals:</p> <ul style="list-style-type: none"> ▪ Students will be able to correctly locate and label all fifty states and the corresponding state capitals. ▪ Students will develop map reading skills. ▪ Students enjoy learning about the history of the different states. ▪ and so much more! 	03.30 PM	Prashanth, S.	GEOGRAPHY			*		\$130/\$25 SEMESTER
UPCYCLED! Trash to Treasure	<p>From items forgotten in basements to cast-offs picked up at the thrift store, the Upcycle! Class shows you everyday upcycling tips to transform ordinary objects. This class will also teach your student secrets to distinguishing which items are worthy of upcycling and which are better left untouched. Master the art of "upcycling" all types of household items quickly, easily and inexpensively!</p> <p>Introduce your students to the difference between recycling and upcycling. Recycling is taking an item and using the materials in it again. For example, when plastic bottles are recycled into stuffing for winter jackets. Upcycling involves reusing an item in such a way that its value is increased. Students may have seen upcycling examples like wallets made from candy wrappers or rag rugs made from cast-off fabric scraps.</p> <p>Students will be required to bring certain items to epicycle from home.</p>	03.30 PM	Osborn, E.	MISCELLANEOUS		*	*	*	\$130/\$30 SEMESTER

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
Video Game Design (INTRO)	Students use software Autodesk Maya to create 3D environments for video games and 3D animation. Autodesk Maya is used by such game companies as Electronic Arts (Madden), Midway (Mortal Kombat), Nintendo (Metroid Prime), and Square Enix (Kingdom Hearts). Autodesk software is used for feature film animation such as Shrek, Life of Pi, and Transformers. Students must bring their own laptop or rent a classroom laptop from NGHE (\$40/Semester)	02.30 PM	Murray, J.	TECHNOLOGY			*	*	\$140/\$10 SEMESTER
Video Game Design (ADVANCED)	Students use Autodesk Maya and Unity for Video Game Design. Students create 3D Models, 3D Animations, and Game Assets for Unity Game Engine. Autodesk Maya is used to sharpen the students skills in making custom-made props for student's levels. Animation skills are essential for making characters walk, run, jump, crawl, and idle in place. Unity Game Engine is used to import all the custom-made props to create the students level. Intermediates Level 1: Train in Autodesk Maya only Intermediates Level 2: Train in both Autodesk Maya and Unity Students must bring their own laptop or rent a classroom laptop from NGHE (\$40/Semester)	01.30 PM	Murray, J.	TECHNOLOGY			*	*	\$140/\$10 SEMESTER
Video Game Design JR (INTRO)	Students use software Autodesk Maya to create 3D environments for video games and 3D animation. Autodesk Maya is used by such game companies as Electronic Arts (Madden), Midway (Mortal Kombat), Nintendo (Metroid Prime), and Square Enix (Kingdom Hearts). Autodesk software is used for feature film animation such as Shrek, Life of Pi, and Transformers. Students must bring their own laptop or rent a classroom laptop from NGHE (\$40/Semester)	03.30 PM	Murray, J.	TECHNOLOGY		*			\$140/\$10 SEMESTER
WMD's : the Wonders of Mass DISTRACTION	At NGHE, we believe that kids are more capable than they know, and to prove it, we give them real tools to solve real problems. By learning through doing, we strive to make mistakes and learn from them, collaborate and make friends, and try harder than usual. With wood, with metal, with cardboard, and sometimes with paint, Tinkerers work with one another as well as NGHE's professional tinkerer, Mr. Yanek, to team-design and team-create amazing projects that are often bigger than ourselves. These opportunities that might appear a distraction are actually their opportunity for wonderful discovery!	02.30 PM	Martinson, Y.	SCIENCE		*	*		\$140/\$30 SEMESTER
Worship Leader Bootcamp	Get together to learn & perform music from some of today's best Christian music. Proficiency in your instrument is desired. A final public performance of what we learned will be at the end of the course. Develop friendships through music and rock out for God! If you play drums, guitar, bass, keyboards or sing then WE WANT YOU!	03.30 PM	Perez, A.	ART: MUSIC			*	*	\$140/\$10 SEMESTER

CLASS	DESCRIPTION	TIME	INSTRUCTOR	CATEGORY	K-2	3-5	6-8	HS	COST Class/Supply (Classes Increase \$10 on July 14)
Young Actor's Academy	<p>The Young Actors Academy develops an appreciation and understanding of theater and acting, allowing them to glorify God through their abilities. Numerous opportunities are available for students to learn acting techniques and apply that knowledge.</p> <p>NGHE's theatre program is now better than ever! Students discover and develop their acting techniques through a series of modules designed to broaden their theatrical horizons. Modules include training and rehearsing monologues, scene work, theatre history, technical theatre, and much more to give students a full understanding of how theatre works.</p> <p>Students gain confidence speaking and performing in front of large groups using learned problem-solving skills as well as working collaboratively with their peers towards a goal. the Young Actor's Academy is a year-long, one-hour class and has a showcase after each semester to present the new skills learned throughout the year.</p> <p>NGHE drama teachers are comprised of practicing professionals, vocalists, and choreographers, who work with the cast to help them discover their God-given gifts!</p> <p>All Young Actor's Academy students are encouraged to take the accompaniment improv class - Controlled Chaos: The Improv Experience for the second hour of drama</p>	12.30 PM	Mandato, E.	ART: DRAMA			*	*	\$450/\$50 YEAR
Young Actor's Academy JR, The	<p>Young Actors Academy develops an appreciation and understanding of theater and acting, allowing them to glorify God through their abilities. Numerous opportunities are available for students to learn acting techniques and apply that knowledge.</p> <p>NGHE's theatre program is now better than ever! Students discover and develop their acting techniques through a series of modules designed to broaden their theatrical horizons. Modules include training and rehearsing monologues, scene work, theatre history, technical theatre, and much more to give students a full understanding of how theatre works.</p> <p>Students gain confidence speaking and performing in front of large groups using learned problem-solving skills as well as working collaboratively with their peers towards a goal. The Young Actor's Academy is a year-long, one-hour class and has a showcase after each semester to present the new skills learned throughout the year.</p> <p>NGHE drama teachers are comprised of practicing professionals, vocalists, and choreographers, who work with the cast to help them discover their God-given gifts!</p> <p>All Young Actor's Academy students are encouraged to take the accompaniment improv class - Controlled Chaos: The Improv Experience for the second hour of drama</p>	10.00 AM	Mandato, E.	ART: DRAMA		*			\$425/\$25 YEAR
Young Mavericks: Entrepreneur Academy	<p>Young Mavericks is a year-long class that transforms middle and high school students into real, confident entrepreneurs. Throughout the class, students develop business ideas, write business plans, conduct market research, create brand identity and, by year's end, pitch their plans to a panel of investors with the opportunity to win seed money to help launch and run their own real and fully formed business.</p> <p>Complete with dynamic guest speakers from the local business community and exciting behind-the-scenes trips to local companies, the fun, projects-based approach empowers students to take charge of their futures in a profound way.</p> <p>**This is a year-long course.**</p>	10.00 AM	Kimberley, R.	BUSINESS		*	*	*	\$300/\$50 YEAR