KCA COURSE DESCRIPTIONS

Contents

Preschool

PreK/4 yr olds

Curriculum: *My Father's World: Voyage of Discovery*
Length: Fall & Spring Semesters
Description: KCA's PK4 course provides a biblical foundation with lots of hands on fun in a developmentally and age-appropriate way based on how young children grow and learn spiritually, socially, emotionally, physically, and cognitively. KCA teachers meet children where they are in their unique God-designed development, allowing for achievable goals while encouraging challenge and independent exploration. Children will explore God's world through faith-building read-alouds, hands-on manipulatives, science projects, math, art, music, and biblical messages woven throughout the school year.

Elementary School

Kindergarten

Curriculum: *My Father's Word: God's Creation from A-Z*
Length: Fall & Spring Semesters
Description: A year-long hands-on learning adventure for young children, this complete kindergarten curriculum ideally contains all necessary subjects. The first two weeks focus on the Creation story from Genesis, followed by 26 hands-on, thematic units that focus on the wonders of God's creation. The sun, moon, rocks, vegetables, elephants, butterflies, and dinosaurs are just a few of the exciting topics the course will explore.

Brain Training (K-12th)

Curriculum: various sources - no curriculum to purchase (The basis for this course is Dianne Craft's *Brain Integration Therapy*.)
Length: Fall & Spring Semesters

Description: Using physical movement to make the brain connections -- this is the focus of brain training. The class itself will seem like a physical education class of sorts, but in reality the focus is cross hemispheric exercises coupled with kinesthetic and oral activities that stimulate brain connections to form and keep neuropathways open for learning information. This proven therapy has helped students improve their academic skills as well as physical coordination for sports. All this in a fun atmosphere that encourages students to embrace an academic challenge and rise to achievement while minimizing frustration.

Language Arts (1st-4th)

Curriculum: All About Reading 1st-4th
Length: Fall & Spring Semesters
Description: All About Reading actively involves students in the learning process. This is a truly multisensory program with students learning through sight, sound and touch. All About Reading cover the five key components of phonological awareness, phonics and decoding, fluency, vocabulary and comprehension. Everything is taught in context, allowing students to apply what they have learned right away. All About Reading engages students in thinking, processing, comparing, and learning. Students who use the All About Reading method tend to feel a sense of excitement in learning as they think, explore and grow in their abilities.

Math (1st-4th)

Curriculum: Saxon Math
Length: Fall & Spring Semesters
Description: Saxon Math offers an engaging and interactive approach to covering new state standards. Its seamless Write-in Student Edition ensure that students can access content at appropriate levels of depth and age.

Science (K-4th)

Curriculum: A Reason for Science
Length: Fall & Spring Semesters
Description: In this science course, we will explore the natural world using tools, hands-on activities based on the National Science Education Standards. We will learn about classification, environments, weather, changes in matter, spatial relationships, and more. As we learn these concepts and ideas, we will also be learning about God and His ways in all of our studies.

Spanish/Music (K-5th)

Curriculum: Assorted Sources
Length: Fall & Spring Semesters
Description: Students will learn to listen to and speak elementary Spanish taught by a native speaker. They will practice, play, tap, and sing basic Spanish phrases and songs while learning a second language.

Middle School

Brain Training (K-12th)

Curriculum: various sources - no curriculum to purchase (The basis for this course is Dianne Craft's *Brain Integration Therapy*.)
Length: Fall & Spring Semesters
Description: Using physical movement to make the brain connections -- this is the focus of brain training. The class itself will seem like a physical education class of sorts, but in reality the focus is cross hemispheric exercises coupled with kinesthetic and oral activities that stimulate brain connections to form and keep neuropathways open for learning information. This proven therapy has helped students improve their academic skills as well as physical coordination for sports. All this in a fun atmosphere that encourages students to embrace an academic challenge and rise to achievement while minimizing frustration.

Language Arts (5th-6th)

Curriculum: Institute of Excellence in Writing
Length: Fall & Spring Semesters
Description: Using the writing process, students will consistently improve writing skills beginning with basic one paragraph writing, developing through the year to three, then five & possibly seven paragraph essays. They will complete the year with the ability to write critiques, and all this based on the interesting topics.

Math (5th-6th)

Curriculum: Saxon Math
Length: Fall & Spring Semesters
Description: For over 30 years, Saxon Math™ has been delivering proven results for students. The Saxon Math curriculum has an incremental structure that distributes content throughout the year. This integrated and connected approach provides deep, long-term mastery of the content and skills. Students have time to understand and practice the lesson and master previous concepts.

Science (5th-6th)

Curriculum: Exploring Creation with Chemistry and Physics
Length: Fall & Spring Semesters
Description: In this course, students will study how the universe functions through this exploration of matter and energy; lessons cover atoms and molecules, pH levels, types of mixtures, mechanics, laws of motion, dynamics of motion, energy, waves, light, machines, magnets, and more. Experiments, notebooking activities, "what do you remember?" narration

questions, projects, and experiments help to reinforce concepts as students study God's creation with a biblical perspective.

History (5th-6th)

Curriculum: Story of the World
Length: Fall & Spring Semesters
Description: Don't just read about history - experience it through textbook study, hands on activities, and map and geography work. We will be focusing on giving the child an enthusiasm for history, an understanding of major cultures, and knowledge of the chronological order of historical events.

High School (7th – 12th)

Bible Class

Curriculum: #Live Fully
Length: Fall & Spring Semesters
Description: Instead of viewing faith as just one part of life, students learn to integrate their relationship with God into every area of their lives. Our goal for the #LiveFully course is nothing short of transformation in the lives of students as they gain confidence and clarity to live as "salt of the earth" and "light of the world" in this complex yet changing culture.

Brain Training (K-12th)

Curriculum: various sources - no curriculum to purchase (The basis for this course is Dianne Craft's *Brain Integration Therapy*.)
Length: Fall & Spring Semesters
Description: Using physical movement to make the brain connections -- this is the focus of brain training. The class itself will seem like a physical education class of sorts, but in reality the focus is cross hemispheric exercises coupled with kinesthetic and oral activities that stimulate brain connections to form and keep neuropathways open for learning information. This proven therapy has helped students improve their academic skills as well as physical coordination for sports. All this in a fun atmosphere that encourages students to embrace an academic challenge and rise to achievement while minimizing frustration.

English I, II, III, IV

Curriculum: Institute of Excellence in Writing
Length: Fall & Spring Semesters

Description: Using the writing process, students will consistently improve writing skills beginning with basic one paragraph writing, developing through the year to three, then five & possibly seven paragraph essays. They will complete the year with the ability to write critiques, and all this based on the interesting topics.

Pre-Algebra

Curriculum: Saxon Algebra 1/2
Length: Fall & Spring Semesters
Description: Description: For over 30 years, Saxon Math™ has been delivering proven results for students. The Saxon Math curriculum has an incremental structure that distributes content throughout the year. This integrated and connected approach provides deep, long-term mastery of the content and skills. Students have time to understand and practice the lesson and master previous concepts.

Algebra I

Curriculum: Algebra 1: An Incremental Development, 3rd Edition
Scientific calculator is required for this course; TI-30XIIS is recommended.
Length: Fall & Spring Semesters
Description: This course is the study of problem solving through the use of mathematical concepts. Algebra is not difficult; algebra is just different! With practice, algebra becomes a familiar exercise. Students will practice algebra skills by completing sets of exercises, which will render calculations 'automatic.' This proven study method will allow students to progress through higher level mathematics courses with a firm foundation in fundamental algebra. The maintenance of course notebook, participation during class period, and completion of daily exercises will be required of all students in this course.

Algebra II

Curriculum: Algebra 2: An Incremental Development
Scientific calculator is required for this course; TI-30XIIS is recommended.
Length: Fall & Spring Semesters
Description: Algebra 2 is a continuation of the study of the behavior and interrelationships of numbers. Algebra is not difficult, only different. With proper practice and self-discipline, the concepts become familiar; no longer confusing. Topics include algebra, geometry and an introduction to trigonometry. Successful completion of this course will prepare the student for Advanced Math 1. Students are required to maintain a course notebook, participate during class period, complete IXL assignments (online) and textbook exercises.

Advanced Math

Curriculum: Advanced Mathematics: An Incremental Development, Second Edition
Calculator: TI-30XIIS

Length: Fall & Spring Semesters (2 years)
Description: Advanced Math is a four-semester course that covers all pre-requisite material for college-level calculus. The philosophy of this curriculum: students retain what they do. Understanding of concepts comes after practicing methods of solution. Advanced Math success is dependent upon student diligence in the completion of daily assignments, which will include completion of all problems in every section of the text.
Prerequisites for Advanced Math are the successful completion (grade C or better) of both Saxon Algebra I and Saxon Algebra II.

General Science

Curriculum: Exploring Creation with General Science by Dr. Jay L. Wile (Second edition)
Length: Fall & Spring Semesters
Description: This course provides a broad overview of science presented from a biblical viewpoint. The course is rigorous – requiring memorization of terms and concepts. The study of science requires the integration of previously mastered skills in reading comprehension, writing, and problem solving. Each of the sixteen modules will be covered in a period of two weeks, during which the student will spend a minimum of one-half hour per day – in addition to class attendance – reading, studying, answering problems and study guide questions and writing lab reports. The areas of study include: The Scientific Method, applied science and technology, archaeology, geology, paleontology, fossils, DNA and the Five-Kingdom classifications of life, and the human body. Experimental labs are performed throughout this course.

Physical Science

Curriculum: Exploring Creation with Physical Science by Dr. Jay L. Wile (Second edition)
Length: Fall & Spring Semesters
Description: Physical Science provides a broad overview of science presented from a biblical viewpoint. The course is rigorous; integrating skills in reading comprehension, writing, and problem solving. Each of the sixteen modules will be covered in approximately two weeks, requiring an average of one hour per weekday – in addition to class attendance – reading, studying, answering questions, and writing lab reports. Areas of study include: Scientific Method, applied science and technology, archaeology, geology, paleontology, fossils, biological classifications of life, and the human body. Experimental labs are performed during class time throughout this course.

Biology

Curriculum: Exploring Creation with Biology by Dr, Jay Wile (2nd edition)
Length: Fall & Spring Semesters
Description: This course provides a broad overview of God's creation, presented from a biblical viewpoint. The course is rigorous – requiring memorization of terms and concepts. The study of high school level science requires the integration of previously-mastered skills in reading

comprehension, writing, and problem solving. Each of the sixteen modules will be covered in a period of two weeks, during which the student will spend a minimum of one hour per day – in addition to class attendance – reading, studying, answering problems and study guide questions and writing lab reports. The areas of study include: definition of life, microorganisms, fungi, life-sustaining chemistry, cell structure and function, cell reproduction, genetics, evolution, ecosystems, animals (invertebrates, arthropods, and vertebrates), plant anatomy, physiology, and reproduction, and a final module on reptiles, birds, and mammals. Many currently socially accepted theories are also addressed and 'set straight' by scientific truth, including Darwin's theory of evolution. Experimental labs are included throughout this course with four dissections performed during the second semester.

Chemistry

Curriculum: Dr. Jay Wile's Discovering Design with Chemistry
Length: Fall & Spring Semesters
Description: Description: High school chemistry is the math-based study of atoms and molecules, acids and bases, chemical reactions and thermodynamics, and many other interesting topics. While the prerequisite is Algebra 1, the math used in this course is only a small fraction of Algebra 1. If your student is competent with multiplying and dividing fractions, converting between standard notation to scientific notation, and can rearrange basic algebraic equations such as and , solving for x, y, or z, then they can handle the math of this course. KCA will administer a pre-test, and students will have the opportunity to study and re-take the test if necessary. The twice weekly format for this course will allow time for plenty of math practice. In addition, chemistry is a study of patterns, so the approach to many different problems is the same. Students must bring a calculator to every class. The inexpensive option is a TI-30Xa, about $10, and the expensive option is the TI-84 Plus, which is the calculator used in KCA math classes. Students may use either of these calculators. *Casio calculators are not allowed*. The overall goal is to de-mystify the study of chemistry. It does require a lot of work, but it is not impossibly hard. If students can learn to appreciate the elegance of the subject, then there are many exciting career options awaiting them, including pharmaceuticals, industrial chemistry, materials science, biochemical science, and beyond.

Physics

Curriculum: Dr. Jay Wile's Exploring Creation with Physics
Length: Fall & Spring Semesters
Description: High school physics is primarily a study of mechanics – falling, flying, rotating, and orbiting things, both visible (such as artillery shells and planets) and invisible, such as electrons. Additionally, this course covers optics, electromagnetic waves, magnetism, and simple electric circuits. The prerequisite is completion of Algebra 2; however, this course has been successfully mastered by concurrent students of Algebra 2 who achieved a high grade in Algebra 1. Students should be competent with scientific notation, fraction manipulation, simple trigonometric functions, equations involving squares and square roots, and rearranging algebraic equations such as $v2=vo2+2a\cdot\Delta x$ to solve for "Δx" and $F = (G\cdot m\cdot n)/r2$ to solve for "r".

The twice weekly format for this course will allow time for plenty of math practice. Students must bring a calculator to every class. The inexpensive option is a TI-30Xa, about $10, and the expensive option is the TI-84 Plus, which is the calculator used in KCA math classes. Students may use either of these calculators. Casio calculators are not allowed. This is a challenging course, but very satisfying, as we learn to apply math to the things we see occurring around us every day. It is applicable to not only those students planning on going into physics or engineering, but also game programmers, who are required to take physics so that they can program lifelike motion in their scenarios, and anyone who wants a better understanding of how things work.

Anatomy and Physiology

Curriculum: Advanced Biology Human Body: Fearfully and Wonderfully Made, Second Edition, by Shannon and Yunis
Length: Fall & Spring Semesters
Description: This course is a college-preparatory class that provides an advanced study of the human body's 11 organ systems. The completion of this course, including labs, experiments, and dissections would count as an honors level class, which would prepare one for taking the CLEP test. Registration for this course requires the successful completion of Apologia Biology. Each of the sixteen modules will be covered in a period of two weeks, during which the student will spend a minimum of one hour per school day – in addition to class attendance – reading, studying, answering questions, or writing lab reports. The subjects include the following systems: Skeletal, Muscle, Nervous, Endocrine, Cardiovascular, Lymphatic, Digestion, Respiratory, Urinary, and Reproductive. Experimental labs are included throughout this course.

World History

Curriculum: Exploring World History Part 1 & 2, by Ray Notgrass, In Their Words
Length: Fall & Spring Semesters
Description: *Exploring World History* covers the most important events, issues, and people throughout time from a Christian perspective. Part 1 covers creation through the Middle Ages. Part 2 explores the Renaissance to present day. *In Their Words* contains original documents, speeches, poems, and stories from World History, providing students with an in depth understanding of the time.

American History

Curriculum: Exploring America by Ray Notgrass
Length: Fall & Spring Semesters
Description: This course is comprised of two primary texts and a volume of primary documents ("American Voices"). Each textbook unit is filled with conservational chapters and many full-color photographs of archival images, artifacts, and locations. In addition to reading the narrative about events, issues, and people, students will read original documents, speeches, poems, and stories in *American Voices*.

Government

Curriculum: Constitutional Literacy
Length: One Semester
Description: The Constitution is the cornerstone for American freedoms. It is expected that the people will enforce our leaders' duty to preserve, protect, and defend the constitution. How can we ensure the leaders and Supreme Court follow our law if we are not constitutionally literate. We must understand the history, weight, and importance of this unique document.

Economics

Curriculum: Whatever Happened to Penny Candy?
Length: One Semester
Description: A clear explanation of the economics needed for success. Topics include: money, its origin and history; the dollar, its origin and history; foreign currencies; creation of wealth; the role of profits; charity and self-reliance…and others.

Speech Boot Camp

Curriculum: Andrew Pudewa's Speech Boot Camp
Length: One Semester
Description: The purpose of this class is to empower students with the fundamental concepts and provide skill development in communication. Students will learn to research, prepare, and deliver speeches as well as identify areas of listening.

Personal Finance

Curriculum: Dave Ramsey's Personal Finance
Length: One Semester
Description: The rationale behind teaching finance to students is that personal finance is 80% behavior and 20% head knowledge. We believe that teaching teens how to take control of their money can help them avoid huge money mistakes down the road. They need to know that their financial decisions have long-term consequences. Students must learn how to budget, save, spend wisely, avoid debt, and give. Studies show that money problems are the leading cause of college students dropping out of school and of divorce in America.