

# Middle School Course Catalog 2011-2012

iQ Academy California - Los Angeles

## 7<sup>th</sup> Grade Core Courses

### Language Arts 7

*Prerequisite: Language Arts 6*

#### Core, 1 Year

Through this exciting course students will engage in an interactive, hands-on array of reading and writing activities designed to enhance and integrate literacy across all content areas: science, social studies, math, art, and more. Students will develop effective communication skills through listening, speaking, and writing via activities designed to strengthen vocabulary, improve grammar, and reinforce reading comprehension through strategy instruction. Students will gain a greater appreciation for literature while recognizing the application of new life-skills through reading and writing activities designed to teach and incorporate fun at the same time. Colorful and interactive activities will motivate and facilitate better reading and writing skills to keep students constantly engaged. Teacher-to students, student-to-self, and peer-to-peer assessments will serve as constant benchmarks that facilitate the higher-order, problem solving and collaborative skills required to meet academic and career expectations for years to come.

### Math 7

*Pre-requisite: Math 6*

#### Core, 1 Year

Students will learn 7th grade math topics outlined in this course drawing from a variety of sources, including hands on activities, interactive lessons, and practical math applications.

### Science 7

*Prerequisite: Science 6*

#### Core, 1 Year

This course will provide students with enlightenment and instruction on the nature of science, using a discovery process to teach the scientific method, and the use of metric measurements in scientific investigations. It covers the study of the universe, stars, constellations, and objects in the solar system. Movement and pathways of the earth and moon are investigated, with natural paths uncovered as students discover just how large the universe really is. Next, students will discover how earth materials are formed and what they can teach us about Mother Earth's past as they investigate the natural processes that shape its ecosystem, the landscape and the creation of different environments on earth. The course then covers basic concepts of force, motion, and equilibrium. Concepts of human biology are also uncovered, with emphasis on body systems and those amazing functions that contribute to our wellness. Agricultural science and its impact on biotechnology is introduced, along with its effect on human

interaction with the earth. Finally, the basics of environmental science are covered, and through the use of stunning photography and lively animation, students will interact with endangered species, learn about natural resource use, environmental health, pollution, and biodiversity.

### Social Studies 7

*Prerequisite: Social Studies 6*

#### Core, 1 Year

Students will be taken through the disciplines of world history, landform and geography, money and economics, the powers and parallels of political science, sociology, and anthropology. Through hands-on tutorials and interaction with animation that brings this history to life, students will acquire the skills necessary to study and understand world cultures, while examining their unique physical features using state-of-the-art electronic geographic tools. Beginning with the mysteries of the ancient empires of the Americas, students will discover and understand the fall of the Roman Empire, the rise of the Franks in Europe, and uncover the enchanting Kingdom of Ghana. Students will be taken through Revolutionary Europe, then to the Industrial Revolution, nationalism and Imperialism, and on to World Wars I and II. They'll discover the wonders of Colonial India, become informed about the United Nations as a peacekeeping and political force, the politics of the war in Vietnam, and past and current issues in the Middle East. Finally, they'll discover modern Africa and understand its history, to end with a broad but compelling introduction to the Information and Space Ages.

### Health 7

#### Elective, 1 Semester

This course is designed to teach lifetime health and wellness knowledge in order to prevent various psychological and physical disorders. Students will learn health information and practices, as well as experience implementing their newfound skills and knowledge. They will acquire the skills necessary to handle peer pressure, recognize unhealthy and risky behaviors and how to prevent and avoid them, and develop strategies for improving personal and community health. Students will gain an understanding of the relationships that influence one's health, as well as refusal and coping skills that play a major part in personal health, as well. Quizzes, discussion sessions among peers, projects, and interactions will be assessed weekly to gauge content understanding. After completion of this course, the student will understand and have experience practicing lifelong skills for lifelong health and wellness.

## 7<sup>th</sup> Grade Core Courses

### **Physical Education 7**

#### **Elective, 1 Year**

Through this online Physical Education course students will be exposed to many diverse activities and will learn a wide variety of fitness concepts that they will be able to use in their everyday lives. Students will learn lifelong skills such as rock climbing, orienteering, and ping-pong along with stress management concepts through Yoga and Pilates. Students will develop a sense of self-esteem and accomplishment through completion of fitness tests, attaining personal goals set, and learning to care for their body. Integrated assignments will show students that content areas of science, social studies, math, and English are littered throughout physical education and apply in our everyday activities. Quizzes, discussion boards, projects, and physical activity will be assessed weekly to gauge content understanding. After completion of this course students will have the knowledge to stay fit and stay active well beyond middle school.

### **Art 7**

#### **Elective, 1 Semester**

Journey through time and place while examining some of the greatest masterpieces created. In this course, students will explore world regions and study the unique art and architecture that defines the Medieval and Renaissance periods. From Leonardo da Vinci to the Taj Mahal, participants will learn the fundamental concepts of art, how to look at and evaluate art, and the intended function of art museums through hands-on activities, discussions, written assignments, and objective assessments.

### **Music Appreciation 7**

#### **Elective, 1 Semester**

Through this online Music Appreciation course students will be exposed to many diverse activities and will learn a wide variety of musical concepts they will be able to use in their everyday lives. Students will learn foundational skills such as performing, listening, analyzing, and responding to music. Students will develop a sense of self-esteem by accomplishing activities that require higher critical thinking skills especially developed for their grade level. Integrated assignments incorporate other content areas of study such as: science, social studies, and math. The content studied will directly apply to other areas of study providing students with an additional enrichment experience they'll be able to take with them for a lifetime. Quizzes, discussion boards, projects, and performance activities will be assessed weekly to gauge content understanding. After completion of this course, students will have the knowledge to reflect on musical periods and styles, understand music's role in history, analyze and evaluate music, develop criteria necessary for making critical judgments and informed musical choices, as well as enhance their overall musicianship.

## 8<sup>th</sup> Grade Core Courses

### **Language Arts 8**

*Prerequisite: Language Arts 7*

#### **Core, 1 Year**

Students will learn to read critically with full comprehension across genres and be able to communicate through effective writing. As students develop critical reading and writing skills, they will make important life connections through the variety of material they study. Additionally, students will practice vocabulary, grammar, and listening skills with each weekly lesson. All material will be connected to a universal theme for each unit: Tolerance, Determination, Social Justice, Times of War, Search for Self, and Cultural Traditions. As students encounter a variety of text structures and multi-media, they will be able to see how these different aspects connect to one large idea and see how these large ideas connect across other content areas being studied. Each student will be required to engage in activities and assessments that require critical thinking skills and that meet rigorous academic expectations. As students complete this course, hopefully they will see the relevance that this course has in their daily life and future academic and career goals.

### **Math 8**

*Pre-requisite: Math 7*

#### **Core, 1 Year**

This course builds upon the essential skills or arithmetic as they apply to algebra. Real numbers and linear equations, linear inequalities, factoring, fractions, graphing and some elements of geometry are stressed.

### **Science 8**

*Prerequisite: Science 7*

#### **Core, 1 Year**

This course provides a rigorous and comprehensive foundation for the 8th grade student about to enter high school science. It covers the relevant topics in all the major disciplines, building on prior knowledge and expanding on subjects introduced earlier in middle school. Students begin with a review of the scientific process and get more into depth with the idea of critical analysis of theories and experimental research. They will move on to discuss principles of physical science and energy. In the life science portion of the course, students will cover structure and function of organisms, genetics, and evolution, and tenets of ecology. This will flow into the

## 8<sup>th</sup> Grade Core Courses

environmental science topics including earth's cycles and environmental problems. A brief discussion of the solar system will also be covered. Students will learn about the assigned topics through interactive activities, experimentation, discussion, and engaging text and animations. Graded assignments will be stimulating and thought-provoking, hopefully paving the way for future interest in the scientific disciplines: environmental health, pollution, and biodiversity.

### **Social Studies 8**

*Prerequisite: Social Studies 7*

#### **Core, 1 Year**

Eighth grade students will build on their concepts of geography, civics, and political societies beginning with the world as it was in the 1500's followed by the natural unfolding of events from the explorations, the establishment of the colonies, the colonial era leading up to the causes of and including the French and Indian War and The Revolutionary War. The development of American government from a confederation to a constitutional one, the launching of the Republic, through the War of 1812, the growth and development of the nation through the Louisiana Purchase and the Lewis and Clark exploration on through Manifest Destiny and the Mexican War will follow. Students will explore the changes in the nation from immigration and abolition issues to the Civil War and Reconstruction, westward expansion, to the development of the U.S. as a world power and into World War One. They will explore the 1920's, the Great Depression and World War Two.

### **Health 8**

#### **Elective, 1 Semester**

This course is designed to provide the student with the knowledge and skills that will enable him or her to achieve and maintain a healthful lifestyle. The student will learn health information and practices necessary to understand and manage many aspects of their physical, social, intellectual, spiritual, and emotional health throughout adolescence into adulthood.

### **Physical Education 8**

#### **Elective, 1 Year**

Through this online Physical Education course students will be exposed to many diverse activities and will learn a wide variety of fitness concepts that they will be able to use in their everyday lives. Students will learn lifelong skills such as rock climbing, orienteering, and ping-pong along with stress management concepts through Yoga and Pilates. Students will develop a sense of self esteem and accomplishment through completion of fitness tests, attaining personal goals set, and learning to care for their body. Integrated assignments will show students that content areas of science, social studies, math, and English are littered throughout physical education and apply in our everyday activities. Quizzes, discussion boards, projects, and physical activity will be assessed weekly to gauge content understanding. After completion of this course students will have the knowledge to stay fit and stay active well beyond middle school.

### **Art Appreciation 8**

#### **Elective, 1 Semester**

Journey through time and place while examining some of the greatest masterpieces created. In this course, students will explore world regions and study the unique art and architecture that defines the Medieval and Renaissance periods. From Picasso to Hiroshige, participants will learn the fundamental concepts of art, how to look at and evaluate art, and the intended function of art museums through hands-on activities, discussions, written assignments, and objective assessments.

### **Music Appreciation 8**

#### **Elective, 1 Semester**

Through this online Music Appreciation course students will be exposed to many diverse activities and will learn a wide variety of musical concepts they will be able to use in their everyday lives. Students will learn foundational skills such as performing, listening, analyzing, and responding to music. Students will develop a sense of self-esteem by accomplishing activities that require higher critical thinking skills especially developed for their grade level. Integrated assignments incorporate other content areas of study such as: science, social studies, and math. The content studied will directly apply to other areas of study providing students with an additional enrichment experience they'll be able to take with them for a lifetime. Quizzes, discussion boards, projects, and performance activities will be assessed weekly to gauge content understanding. After completion of this course, students will have the knowledge to critically analyze music, use proper music terminology to describe musical concepts, create music of their own, and enhance their musicianship.

# Electives

## Computer Fundamentals\*

### Elective, 1 Year

In this introductory course, students learn how to use Microsoft Word, Excel, and PowerPoint 2000 to create, analyze, edit, share and publish information for a variety of audiences and purposes. Through step-by-step tutorials and a project-based approach to learning, students become familiar with the key concepts and basic skills of today's information technology sector.

## Spanish I\*

### Elective, 1 Year

Spanish I has been carefully designed to meet the standards of the American Council on the Teaching of Foreign Languages (ACTFL). These standards call for a method of teaching that focuses on successful communication through speaking, writing, reading, and listening, as well as a thorough grounding in aspects of culture. Each unit embodies all of these standards in accordance with the theories described in this document. Unit activities blend different forms of communication and culture to ensure that the student meets all standards. Course strategies include warm-up activities, vocabulary study, reading, threaded discussions, multi-media presentations, self-checks, practice activities and games, oral and written assignments, projects, quizzes, and exams. Learning activities in each unit are focused upon a specific theme.

## French I\*

### Elective, 1 Year

French I has been carefully designed to meet the standards of the American Council on the Teaching of Foreign Languages (ACTFL). These standards call for a method of teaching that focuses on successful communication through speaking, writing, reading, and listening, as well as a thorough grounding in aspects of culture. Each unit embodies all of these standards in accordance with the theories described in this document. Unit activities blend different forms of communication and culture to ensure that the student meets all standards. Course strategies include warm-up activities, vocabulary study, reading, threaded discussions, multi-media presentations, self-checks, practice activities and games, oral and written assignments, projects, quizzes, and exams. Learning activities in each unit are focused upon a specific theme.

## Algebra I\*

*Prerequisite: Pre-Algebra or similar course*

### Elective, 1 Year

The purpose of this course is to allow the student to gain mastery in working with and evaluating mathematical expressions, equations, graphs, and other topics in a year long algebra course. Topics included are real numbers, simplifying real number expressions with and without variables, solving linear equations and inequalities, solving quadratic equations, graphing linear and quadratic equations, polynomials, factoring, linear patterns, linear systems of equality and inequality, simple matrices, sequences, and radicals. Assessments within the course include multiple-choice, short answer, or extended response questions. Also included in this course are self-check quizzes, audio tutorials, and interactive games.

*\* Available for students in Grades 7 and 8 with counselor approval.*



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