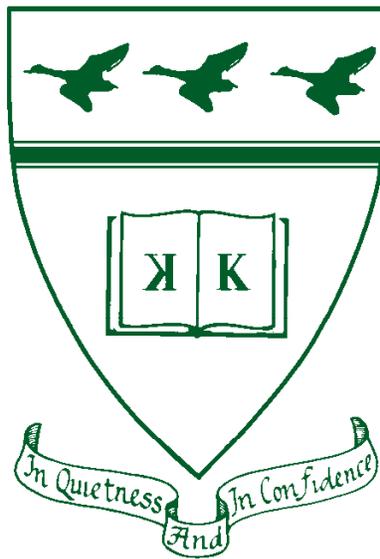


# THE KILDONAN SCHOOL



## UPPER SCHOOL CURRICULUM GUIDE

2011-2013



# **The Kildonan School Mission Statement**

The mission of The Kildonan School is to empower students with dyslexia to reach their academic potential and to equip them for future success. Our threefold mission remains consistent. We strive to remediate skills in reading, writing, and spelling, to provide intellectually stimulating subject matter courses in mathematics, literature, science, and social studies, and to foster confidence.

The academic program is unique in that it revolves around intensive, daily one-on-one Orton-Gillingham tutoring for each student. The language training instructor is responsible for devising a sequential learning program in language skills in accordance with Dr. Samuel T. Orton's principles and with his belief that, "...such disorders should respond to specific training if we become sufficiently keen in our diagnosis, and if we prove ourselves clever enough to devise the proper training methods to meet the needs of each particular case." Orton-Gillingham tutoring is multi-sensory, direct, and effective. The tutorial setting makes it possible to tailor the teaching to the unique brain of each individual. The instructor is also responsible for inculcating orderly study habits; students are held accountable for daily independent reading and writing assigned to reinforce the skills taught during the tutorial. Students learn to work through periods of frustration and even temporary failure. Ultimately, the goal is for students to become independent learners.

Subject matter courses in mathematics, history, literature, and science are designed to meet the learning style of students with dyslexia. Visual, auditory, and kinesthetic presentations supplement textbooks. Class size is small; courses stimulate thinking and provide opportunities for creativity. The approach to mathematics is closely aligned with language training both in its logical, sequential approach and its daily assignments. Reading and writing demands are reduced or removed entirely from other content courses while the student is building reading and writing skills. Classes are structured to ensure that success is possible even for the student with minimal skills.

Enhanced confidence is achieved through activities, such as the arts, athletics, and community life. Involvement in extracurricular activities that capitalize on the innate strengths of the dyslexic often leads to lifelong interests. Leadership and service opportunities provide additional means for personal and social growth. Students become confident, experience greater success, and gain the courage to invest increasing effort in their personal and academic achievement.

Central to the success of the program is a faculty committed to the philosophy of the school and willing to implement its goals and ideals. Faculty members respect students as individuals and encourage them to put forth their best efforts. While most students are expected to graduate from high school and enter college, the more severely dyslexic achieve functional mastery of the language.

## **Introduction**

The Kildonan School was founded in 1969 by Diana Hanbury King to serve the needs of dyslexic students of average to above-average intelligence.

The academic program at Kildonan seeks to aid students in developing their skills in thinking and problem solving, listening, speaking, reading, spelling, writing, and mathematics. Language skills are taught most explicitly and systematically in the daily, individualized Orton-Gillingham Language Training session with the student's tutor. In addition to athletic and arts options, other courses are selected from each of the academic departments: History, Literature, Mathematics, and Science. As in Language Training, subject matter courses are taught in a multisensory fashion and accommodate the specific learning styles of our student body while they investigate topics and meet objectives expected in a college-preparatory program. Constructivist and inquiry-based learning opportunities help to prepare our students for careers in the 21<sup>st</sup> century. The average class size is eight students.

The Kildonan School holds a permanent charter from the New York State Board of Regents. It is accredited by the New York State Association of Independent Schools and holds membership in the National Association of Independent Schools. Additionally, our academic and teacher-training programs are accredited by the Academy of Orton-Gillingham Practitioners and Educators.

This course description book is intended to provide the reader with a brief overview of the curriculum our Upper School faculty has created in its effort to provide high standards of academic study, a modern and varied selection of offerings, and classes which are optimally responsive to the needs of dyslexic students. Our goal is to assist our students in developing self-esteem, self-advocacy, and a positive commitment to pursue a lifetime of learning.

**\*\*Course material and topics described herein may change in response to teacher expertise, interdisciplinary work across departments, and/or student needs.**

## **Contact Information**

For more information about The Kildonan School, our application for admission, or a tour, please contact:

**The Admissions Office**  
The Kildonan School  
425 Morse Hill Road  
Amenia, NY 12501  
(845) 373-2012  
admissions@kildonan.org

For more information about The Kildonan School academic program or course offerings, please contact:

**Robert A. Lane, Ed.D.**  
**Academic Dean**  
The Kildonan School  
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(845) 373-8111  
rlane@kildonan.org

For information on graduation requirements or for transcript information, please contact:

**Patricia A. Roberts**  
**Registrar**  
The Kildonan School  
425 Morse Hill Road  
Amenia, NY 12501  
(845) 373-8111  
proberts@kildonan.org

## Orton-Gillingham Language Training

The goal of the Language Training Department is to improve students' language skills through multisensory instruction in the various elements of the English language. Tutoring sessions are fast-paced, active, and cognitive as students learn to apply logic and knowledge about the English language rather than guessing when reading and writing. Visual, auditory, kinesthetic, and tactile activities are incorporated to enhance memory and application of learned elements. Although the Orton-Gillingham approach is primarily a phonics-based approach for reading and spelling, other elements are incorporated to provide instruction at various levels of language instruction.

Rather than a strict system or curriculum, Orton-Gillingham is an approach that presents language in a logical manner. Sessions are individualized for the needs of each learner based on the teacher's understanding of his or her learning style, strengths and weaknesses, and knowledge base. Information is presented directly and explicitly so that students are never left guessing; knowledge is never simply assumed. Students are only held accountable for what has been taught and practiced. The elements of the language are taught as they were originally organized by Anna Gillingham in her and Bessie Stillman's groundbreaking *The Gillingham Manual*. We begin with the simplest and most common elements of the language and gradually work toward the more complex. Always, the emphasis is on approaching the language cognitively; students learn the history of the language and the rules and generalizations that make approximately 80% of the language predictable. They are encouraged to apply their knowledge of phonics and spelling rules to reason out reading and spelling words rather than guessing or relying on their visual memory.

The Orton-Gillingham approach is, by nature, structured, sequential, and cumulative but flexible. The elements of the language are introduced systematically, and we begin instruction with reading and writing sounds in isolation. Those sounds are then blended into syllables and words, and other elements of the language are then added. Review of previously learned material is essential for the development of automaticity, and tutors constantly "spiral back" while introducing new material. Higher level language skills, such as vocabulary, grammar, expository writing, and reading comprehension are introduced, as needed, in a similar structured, sequential, and cumulative way. Gradual introduction of new material as the student works to develop fluency with previously learned material allows the student to experience success in each lesson. The Orton-Gillingham approach is described by the Academy of Orton-Gillingham Practitioners and Educators as emotionally sound because it engenders success, and students begin to view learning as a positive experience.

The content of the tutorial generally includes handwriting, phonics, reading (e.g., word attack in isolation, oral reading, and silent reading comprehension), spelling, vocabulary, grammar, and expository writing. At The Kildonan School, we acknowledge three stages of word attack. The beginning stage includes elements such as unequivocal vowel and consonant sounds, digraphs, blends, and open, closed, silent-e, and vowel-r syllables. While elements in the first stage are generally learned and applied by rote, the second stage of word attack requires increased use of

logic and reasoning; it includes phonemes that have multiple spellings (e.g., the five most common ways to spell the long /i/ sound are i, i-e, igh, y, and y-e), phonemes that have multiple sounds (e.g., the three sounds of ea), syllable division rules, spelling rules and generalizations, and consonant-le syllables. The advanced stage is the study of morphology; students learn the Anglo-Saxon, Latin, Greek, and French elements of the language, such as prefixes, roots, suffixes, and connectives, that are essential for reading, spelling, and understanding advanced, multisyllabic words.

Instruction in the other areas proceeds in a similar manner, from the most basic elements to the more advanced. For example, at the beginning stage, grammar instruction would include parts of speech and kinds of sentences; in the advanced stage, it would include adjective, adverb, and noun clauses and verbals. Expository writing begins with writing lists, sentences, and basic paragraphs. It proceeds to expanded paragraphs and different kinds of paragraph development (persuasion, definition, process), with the end goal being longer, more sophisticated pieces such as five paragraph essays and research papers.

Because of the comprehensive curriculum and individualized instruction, students end the year with improved reading and writing skills and the self-confidence that develops when they are allowed to experience success.

## **Assistive Technology**

The Kildonan School has a well-developed tutorial program that uses the Orton-Gillingham approach to remediate a student's difficulties with language. That program has proven to be a successful method for most students. Nevertheless, there are some students who need more than remediation to reach their potential in classes, communicate effectively, and/or survive in an increasingly complex world.

The rapid development of technology has proven to be a great asset to dyslexic students. Current computer operating systems and software help them read, write, organize ideas, and synthesize information in ways that may have been impossible for them in the past. Both the Windows and Macintosh operating systems have built-in tools to assist users with learning differences. In addition, software such as Dragon NaturallySpeaking, MacSpeech Dictate, Kurzweil 3000, Inspiration, and Microsoft Word have made the demands of language-based activities more reasonable for them.

Most students who are identified for the Assistive Technology Program will take a comprehensive, half-year course to learn the basic functions of the above software and how to apply the programs to their subject matter work. Each student will meet individually with an instructor on a daily basis. Monday through Thursday will be devoted to learning the software, and Friday will be used to apply the programs to weekend assignments. The student will earn a grade of Pass or Fail and receive credit for a passing grade. Upon completion of the course, students will remain in the AT program but will be expected to take responsibility for their use of the technology.

The course is divided into six units:

Unit 1: Writing Process

Unit 2: Active Reading

Unit 3: Study Skills

Unit 4: Research Report

Unit 5: Regents Competency Test (RCT) in Writing

Unit 6: Assistive Technology Devices

\*It is understood that a working knowledge of operating systems and file management will be gained throughout the duration of the course.

## **The Middle School Program**

The Middle School Program at Kildonan attempts to balance challenging curricular goals with an understanding of the unique intellectual, social, emotional, and physical needs of seventh and eighth graders who learn differently. The faculty nurtures and support students in their development of critical thinking skills, creativity, ability to use good reason and judgment, care and concern for others and their environment, and personal independence. Kildonan has a strong commitment to fostering self-esteem, self-discipline, individual responsibility, and respect in all of our students. Academically, teachers seek to aid students in strengthening the skills and study habits they need to achieve greater success in their transition into high school. Students in Grades 7 and 8 are enrolled in a full complement of courses from each of the academic departments. The following are descriptions of those courses and their content.

### **Seventh Grade**

#### **Art 7: Two-Dimensional Design/Color and Drawing** (*half-year course*)

The design portion of this course will establish a common visual language as students begin to build an understanding of evaluating and creating two-dimensional images. They will experience and discuss the importance of the conceptual, visual, and relational elements of known works of art and the work they create. When drawing, the emphasis will be placed on perceptual drawing from life. Students will work with a range of black and white media as the elements of drawing are investigated through specific problems. Color theory based on Josef Albers' work will be discussed and students will solve problems to help them understand color interactions as they relate to design and drawing. A wide range of media will be used in this course, and each media choice will be appropriate to the problems being solved.

#### **Art 7: Three-Dimensional Design and Installation** (*half-year course*)

The design portion of this course will establish a common visual language as students begin to build an understanding of evaluating and creating three-dimensional objects. Students will experience and discuss the importance of the conceptual, visual, relational, and constructional elements of known works of three-dimensional art and the works they create themselves. They will be introduced to the elements of three-dimensional form through a sequence of specific problems. The installation portion of this course will be thematic in nature and draw inspiration from areas of study within the academic community. Students will be involved in working on ongoing three-dimensional constructions that are site-specific within the Kildonan campus. Students will engage in a collaborative process that includes planning, the acquisition and organizing of materials, and construction. The various materials used in this course will be appropriate to the problems being solved and may involve some of the following media: plastic, wood, paper, plaster, clay, metal, and recycled matter.

### **History 7: Geography and the Eastern Hemisphere**

In this course, students study the physical features of the earth and its atmosphere and develop a greater understanding of how geography affects human interaction. In the fall term, students explore the five themes of geography and learn how to read and construct maps. In addition, students debate what constitutes culture. During the winter term, the class investigates Islam with a focus on the Iranian Revolution. Students use primary and secondary sources to research other Islamic countries. While studying Russia, India, and China and their influential rulers, students examine the qualities of strong political leadership. Throughout the year, students learn how to discuss and analyze current events and draw independent conclusions from different viewpoints and sources.

### **Literature 7**

This course emphasizes the development of active listening and analytical skills through discussion and in-class examination of literary works. The teacher reads the core texts aloud to the class and supplements reading with multi-sensory instruction and collaborative activities. As students advance in their language skills through individual tutoring sessions, the writing demands in literature also increase. Different genres and the elements of vocabulary are introduced throughout the year. The literary works studied in this course vary each year depending on a number of factors, but some main titles from recent years include *Arash the Archer*, *Lost Horizon*, *Treasure Island* by Robert Louis Stevenson, Chinese folk tales, and excerpts from *Joy Luck Club* and *Persepolis*.

### **Mathematics 7**

In this course, students are expected to master the principles and skills of arithmetic -- including the four basic operations with whole numbers, decimals, fractions, and percents -- and apply their understanding to solving problems. Throughout this course, it is emphasized that mathematics and the search for pattern are intertwined, and students are encouraged to solve all types of problems that require thinking skills as well as arithmetic ability.

### **Science 7: Earth Science**

This course is designed to provide an introduction to astronomy, meteorology, cartography, geology, and oceanography. Starting with the universe, the class then studies our galaxy, the solar system, and the planet Earth. Students will explore topics ranging from the atmosphere to the nature of Earth's geological structure. Experimentation and collaboration are central to the course.

## **Eighth Grade**

### **Art 8: Two-Dimensional Design/Color and Drawing** (*half-year course*)

The design portion of this course will establish a common visual language as students begin to build an understanding of evaluating and creating two-dimensional images. They will experience and discuss the importance of the conceptual, visual, and relational elements of known works of art and the work they create. When drawing, the emphasis will be placed on perceptual drawing from life. Students will work with a range of black and white media as the elements of drawing are investigated through specific problems. Color theory based on Josef Albers' work will be discussed and students will solve problems to help them understand color interactions as they relate to design and drawing. A wide range of media will be used in this course, and each media choice will be appropriate to the problems being solved.

### **Art 8: Three-Dimensional Design and Installation** (*half-year course*)

The design portion of this course will establish a common visual language as students begin to build an understanding of evaluating and creating three-dimensional objects. Students will experience and discuss the importance of the conceptual, visual, relational, and constructional elements of known works of three-dimensional art and the works they create themselves. They will be introduced to the elements of three-dimensional form through a sequence of specific problems. The installation portion of this course will be thematic in nature and draw inspiration from areas of study within the academic community. Students will be involved in working on ongoing three-dimensional constructions that are site-specific within the Kildonan campus. Students will engage in a collaborative process that includes planning, the acquisition and organizing of materials, and construction. The various materials used in this course will be appropriate to the problems being solved and may involve some of the following media: plastic, wood, paper, plaster, clay, metal, and recycled matter.

### **History 8: The United States**

This course is a study of the history of the United States from the first people who came and settled in the new world up to the present time. The study begins with early native cultures and the impact of European exploration and settlement on the continent. Next students investigate the establishment of the new republic while focusing on the challenges it faced, the growth it made, and the sectional divisions that nearly destroyed the nation. Finally, the class studies the emergence of the nation as an industrial and imperial power while experiencing prosperity and depression at home, two world wars overseas, and facing the new challenges of modern times. Geography, political philosophy, and current events are common themes throughout the course. The use of multimedia, assigned readings, group activities, creative projects, discussions, and debates are part of a multi-sensory approach incorporated into the classroom experience.

## **Literature 8**

This course continues the work on the active listening, reading, writing, and analytical skills started in the seventh grade curriculum. Students are expected to listen carefully to each work, follow along in their copy of the text, and respond to it during class. In addition, they relate thematic elements from the literature to their own lives through daily journal entries. Students participate in weekly quizzes during which they are expected apply their knowledge of course vocabulary and literary terms. The literary works studied in this course vary each year depending on a number of factors, but some main titles from recent years include *To Kill a Mockingbird* by Harper Lee, *Of Mice and Men* by John Steinbeck, and *The Crucible* by Arthur Miller.

## **Mathematics 8**

This course introduces students to mathematical ideas that rely upon and support the arithmetic skills they learned in Math 7, such as graphing, using positive and negative integers, statistics and probability, ratio and proportion, and basic geometry.

## **Science 8: Introduction to Physical Science**

This course covers the basic concepts of chemistry and physics. In the chemistry portion, students study scientific measurement, matter (including phases, chemical and physical changes, and characteristic properties), the periodic table of the elements, and the structure of atoms, compounds, and molecules. The physics component consists of direct and indirect measurements, forces, simple machines, work, and mechanical advantage.

**\*\* The following pages are examples of curriculum maps for some middle school courses. Topics and material may vary slightly depending on current events and changes in course themes. The maps are an overview by term of each course.**

Term Concepts	Texts	Reading/Writing Expectations	Activities/Discussion Expectations
<p><b>Term I</b></p> <p><b>Themes:</b></p> <p>love revenge pride</p> <p><b>Literary Devices:</b></p> <p>conflict setting theme personification symbolism</p>	<p>- <i>The Crucible</i> by Arthur Miller</p>	<p>- students will read along silently as teacher reads aloud</p> <p>-write daily journal entries</p> <p>- write list responses to homework and test questions</p> <p>-write complete sentence responses to homework and test questions</p> <p>-write basic paragraph responses to homework and test questions</p>	<p>-daily journal entries focusing on the themes of the literature</p> <p>-participate in class discussions centered around the themes of the literature</p> <p>-complete skeleton notes for each chapter, including vocab., lit. terms, and plot summary</p> <p>-participate in various multi-sensory activities based on the literature</p> <p>-be able to articulate an informed opinion about literature</p> <p>-gain an appreciation for others' opinions about literature</p>
<p><b>Term II</b></p> <p><b>Themes:</b></p> <p>courage injustice prejudice</p> <p><b>Literary Devices:</b></p> <p>conflict foreshadowing theme symbolism act, scene</p>	<p>- <i>Of Mice and Men</i>, by John Steinbeck</p> <p>- selected American short stories</p>	<p>- students will read along silently as teacher reads aloud</p> <p>-write daily journal entries</p> <p>- write list responses to homework and test questions</p> <p>-write complete sentence responses to homework and test questions</p> <p>-write basic paragraph or expanded paragraph responses to homework and test questions</p>	<p>-daily journal entries focusing on the themes of the literature</p> <p>-participate in class discussions centered around the themes of the literature</p> <p>-complete skeleton notes for each act, including lit. terms and act summary</p> <p>-participate in various multi-sensory activities based on the literature</p> <p>-be able to articulate an informed opinion about literature</p> <p>-gain an appreciation for others' opinions about literature</p>
<p><b>Term III</b></p> <p><b>Themes:</b></p> <p>friendship prejudice pride</p> <p><b>Literary Devices:</b></p> <p>personification imagery conflict theme foreshadowing onomatopoeia</p>	<p>- <i>To Kill a Mockingbird</i>, by Harper Lee</p> <p>- selected poems</p>	<p>- students will read along silently as teacher reads aloud</p> <p>-write daily journal entries</p> <p>- write list responses to homework and test questions</p> <p>-write complete sentence responses to homework and test questions</p> <p>-write expanded paragraph responses to homework and test questions</p> <p>-complete written exercises using poetic devices such as rhyme, alliteration, simile, etc.</p>	<p>-daily journal entries focusing on the themes of the literature</p> <p>-participate in class discussions centered around the themes of the literature</p> <p>-complete skeleton notes for each chapter, including vocab., lit. terms, and plot summary</p> <p>-participate in various multi-sensory activities based on the literature</p> <p>-be able to articulate an informed opinion about literature</p> <p>-gain an appreciation for others' opinions about literature</p> <p>-be able to identify symbolic elements in poetry</p> <p>-gain an appreciation for poetry as a literary form</p>

# MATH 7

PRIMARY TEXTBOOK: Teacher-prepared worksheets

	<u>CONCEPTS</u>	<u>TOPICS</u>	<u>CRITICAL CONTENT</u>	<u>MATERIALS</u>
<b>FALL TERM</b>	Pattern	Sequences	Identifying Patterns Applying Pattern to Determine What Number Comes Next	Teacher-prepared Worksheets Multiplication Tables
	Pattern	Place Value	Reading and Writing Numbers up to Hundred Trillions Place	
	System	Base 10 Number System	Standard Numerals & Expanded Form Periods	
	Pattern Order	Rounding and Estimating Comparing and Ordering	Standard Rules for Rounding Front-end Estimation Compatible Numbers	<b>ASSESSMENT</b> Daily Assignments Periodic Quizzes Unit Tests Term Exam
	Pattern Quantification	Operations with Whole Numbers	Importance of Place Value when Performing Operations Long Division Algorithm	
	Pattern Quantification	Operations with Decimals	Extension of Patterns already covered Multiplication & Division by Multiples of 10	
<b>WINTER TERM</b>	Pattern	Metric System	Bases and Exponents	<b>MATERIALS</b> Teacher-prepared Worksheets Rulers
	Measurement	Divisibility Rules	Estimating and Measuring Lengths Converting from one unit to another	<b>ASSESSMENT</b> Daily Assignments Periodic Quizzes Unit Tests Term Test
	System	Factors and Prime Numbers	Factor Trees, Prime Factorization Venn Diagrams, Using GCF to Simplify Fractions	
	Quantification	Greatest Common Factor	Equivalent Fractions	
		Fractions		

## MATH 7 (cont.)

PRIMARY TEXTBOOK: Teacher-prepared worksheets

<u>CONCEPTS</u>	<u>TOPICS</u>	<u>CRITICAL CONTENT</u>	<u>MATERIALS</u>
<b>SPRING TERM</b> Pattern Quantification	Multiplying & Dividing Fractions and Mixed Numbers	Converting from Top-Heavy Fractions to Mixed Numbers and <i>vice versa</i> Reciprocals Reducing (Simplifying) Fractions	Teacher-prepared Worksheets Multiplication Tables Fraction/Decimal Conversion Tables (created in class)
Pattern Quantification	Least Common Multiples Adding, Subtracting, and Comparing Fractions	Using Venn Diagrams to find LCM Solving Problems requiring addition, subtraction, and comparison of fractions and mixed numbers	<b>ASSESSMENT</b> Daily Assignments Unit Tests Quizzes Term Exam
Ratio and Proportion Pattern Quantification Problem Solving	Ratio, Rate, and Proportion	Introduction to ratio, rate, and proportion Solving problems using proportions by cross-multiplying or by equivalent fractions	
Pattern System Ratio Quantification	Introduction to Percent Converting from Percents to Fractions to Decimals	Definition of Percent Finding Percent of a number by converting percent to either a fraction or decimal	

# History 7

Unit Content Term 1	Sample Concepts	Sample Objectives	Sample Activities
Five Themes of Geography	<ul style="list-style-type: none"> <li>Place</li> <li>Location</li> <li>Movement</li> <li>Region</li> <li>Human Environment Interaction</li> </ul>	<ul style="list-style-type: none"> <li>knowing that every place on earth has a specific location and how that place related to others</li> <li>evaluating the positive and negative interactions humans have on their environments</li> </ul>	<ul style="list-style-type: none"> <li>Kildonan versus NYC as a place</li> <li>Study of U.S. exports and imports</li> <li>Proposal to correct a negative interaction</li> </ul>
Research Unit	<ul style="list-style-type: none"> <li>evaluating and using different types of primary and secondary sources</li> </ul>	<ul style="list-style-type: none"> <li>determining if a source is primary or secondary</li> <li>evaluating a source for historical accuracy</li> </ul>	<ul style="list-style-type: none"> <li>editing a wikipedia entry</li> <li>examining old photographs vs. new photographs of Kildonan</li> </ul>
What is Culture	<ul style="list-style-type: none"> <li>elements of culture, types of government, types of economies, religion, social classes, language, clothing, buildings, food, music etc.</li> </ul>	<ul style="list-style-type: none"> <li>understanding the culture is made up of complimentary and contradictory elements</li> </ul>	<ul style="list-style-type: none"> <li>SIRS culture project</li> <li>Venn diagram of systems of governments</li> <li>World map shading</li> </ul>

Unit Content Term 2	Sample Concepts	Sample Objectives	Sample Activities
Islam and Iran	<ul style="list-style-type: none"> <li>understanding the beginnings of Islam</li> <li>understanding the beliefs of Islam</li> <li>The Islamic Revolution in Iran</li> <li>Modern Day Iran</li> </ul>	<ul style="list-style-type: none"> <li>defining cultural changes brought about by the Islamic Revolution</li> <li>analyzing the clashes that often occur between Islam and modernism</li> </ul>	<ul style="list-style-type: none"> <li>discussion about censorship in Iran</li> <li>analysis of pictures of Muslims all over the world</li> <li>journal entry: day in the life of an Iranian woman</li> </ul>
<i>Persepolis</i>	<ul style="list-style-type: none"> <li>Westernization in Iran</li> <li>Secret Police/Protests</li> <li>gender roles in Iran</li> <li>politics of oil</li> </ul>	<ul style="list-style-type: none"> <li>defining the issues that caused the rise of the Ayatollah</li> <li>discuss how a war affects a country's youth</li> </ul>	<ul style="list-style-type: none"> <li>Read excerpts from <i>Persepolis</i></li> <li>t-chart Sunni versus Shiite Islam</li> <li>Watch current event clips</li> </ul>
Research Unit	<ul style="list-style-type: none"> <li>Research on another country with Islam as the dominant religion</li> </ul>	<ul style="list-style-type: none"> <li>understanding that historical research comes from a variety of sources</li> </ul>	<ul style="list-style-type: none"> <li>creation of a keynote presentation</li> <li>analysis of primary and secondary sources</li> </ul>

# History 7

Unit Content Term 3	Sample Concepts	Sample Objectives	Sample Activities
China	<ul style="list-style-type: none"> <li>• Communism</li> <li>• Mao</li> <li>• dictatorship</li> <li>• purges</li> </ul>	<ul style="list-style-type: none"> <li>• identifying the ways that Mao manipulated and controlled citizens</li> <li>• comprehend the challenges and changes facing modern day China</li> </ul>	<ul style="list-style-type: none"> <li>• creation of Mao propaganda</li> <li>• SIRS study on China</li> <li>• DBQ on modern day China</li> </ul>
Russia	<ul style="list-style-type: none"> <li>• Feudalism v. Communism</li> <li>• Stalin</li> <li>• Cold War politics</li> </ul>	<ul style="list-style-type: none"> <li>• understanding what life was in Russia pre-1900</li> <li>• comparing and contrasting Mao with Stalin</li> </ul>	<ul style="list-style-type: none"> <li>• map skills</li> <li>• mock trial of a blacklistee</li> <li>• study of AIDS growth in Russia</li> </ul>
India	<ul style="list-style-type: none"> <li>• Hinduism</li> <li>• Buddhism</li> <li>• colonization</li> <li>• non violent protests</li> <li>• caste system</li> </ul>	<ul style="list-style-type: none"> <li>• compare and contrast colonization of India to U.S.</li> <li>• defining the beliefs of Gandhi</li> <li>• analyzing the social divide in modern India</li> </ul>	<ul style="list-style-type: none"> <li>• Indian art project</li> <li>• Discussion of “Any Other Name”</li> <li>• map skills</li> <li>• Religion t-chart</li> <li>• What is India project</li> </ul>

Introduction to Physical Science: Grade 8

	Fall Term	Winter Term	Spring Term
Content	<p>Scientific inquiry - students conduct a series of investigations that illustrate the process of scientific inquiry and the importance of variables.</p> <p>Physical interactions such as magnetism, electricity and motion are introduced</p> <p>Students complete individual science fair projects</p>	<p>Students study physical interactions such as magnetism, electric circuits, elasticity and static electricity more in closer detail.</p> <p>Motion and speed is addressed through experimentation and graphing.</p> <p>In correspondence with 8th grade history, students study inventions of the Industrial Revolution such as steam power and the telegraph.</p>	<p>Chemical interactions are the focus of the term including the states of matter and an introduction to the Periodic Table of the Elements.</p> <p>Students learn how to identify chemical changes when chemicals are mixed and when materials are burned.</p> <p>Students conduct experiments with indicators to understand more about acids and bases.</p>
Assessment	<p>Science Fair Project</p> <p>Lab reports</p> <p>Class participation</p> <p>Weekend assignments</p> <p>Term practical exam</p>	<p>Presentation of Project at Fair</p> <p>Lab reports</p> <p>Class participation</p> <p>Weekend assignments</p> <p>Term exam</p>	<p>Lab reports</p> <p>Class participation</p> <p>Weekend assignments</p> <p>Term practical exam</p>
<b>Overarching skills for the year</b>	<p>Measurement - Estimation and precision</p> <p>Metric System</p> <p>Data collection</p> <p>Data analysis</p>	<p>Data reporting</p> <p>Research and citing source</p> <p>Interpreting diagrams</p> <p>Graphing</p>	

## The High School Program

### Guidelines for High School Course Assignment and Selection (Grades 9-12)\*

Course requirements for each department are given below:

<u>Department</u>	<u>Required Credits</u>	
<b>Arts / Independent Study / Internship</b>	Total	4 (0.5 credit each)
<b>History</b>	Total	4
Global Studies I		
Global Studies II		
United States History		
Government & Economics		
<b>Literature</b>	Total	4
<b>Mathematics</b>	Total	4
<b>Athletics / Physical Education / Sports</b>	Total	2 (0.5 credit per year)
<b>Science</b>	Total	4
Health and the Human Body		
Biology		
(Elective Lab Science Course)		
(1 other Elective Science Course)		
<b><u>Total Credits Needed for Graduation</u></b>		<b><u>22</u></b>

To remain in good standing, a student must enroll in a minimum of 5 credits per year. The Academic Dean and the Department Heads will assign a student to classes based on previous coursework, grade level, skill level, and courses needed to fulfill graduation requirements. Students may make requests for elective courses at the end of the previous school year by submitting a written request to the Academic Dean. Requests will be considered by the Dean and the appropriate Department Head during scheduling. It must be noted that course offerings are subject to change based on enrollment and teacher availability.

\* The Headmaster and the Academic Dean reserve the right to alter any of the requirements listed in this guide as may be deemed necessary.

*In order to obtain a New York State local diploma, students must also pass the New York State Regents Competency Tests (RCTs) in Reading, Writing, and Math or attain a minimum score on the Scholastic Aptitude Test (SAT) of 390 Verbal and 400 Math (as of June 25, 2010, these New York State requirements have not changed).*

## Typical Program of Courses for High School Students

<b>Grade 9</b>	<b>Credits</b>
Language Training	0
Global Studies I	1
World Literature I	1
Math 9, Pre-Algebra, Algebra I, or Algebra IA	1
Health and the Human Body	1
2 half-year Arts Electives	1
Athletics/Physical Education/Sports	0.5

<b>Grade 10</b>	<b>Credits</b>
Language Training	0
Global Studies II	1
World Literature II	1
Basic, Geometry, Algebra I, Algebra IA, or Algebra IB	1
Biology	1
2 half-year Arts Electives	1
Athletics/Physical Education/Sports	0.5

<b>Grade 11</b>	<b>Credits</b>
Language Training	0
United States History	1
American Literature	1
Algebra IB, Algebra II, Business Math, Geometry, or Advanced Algebra & Trigonometry	1
Chemistry or another Science Elective	1
2 half-year Arts Electives	1
Athletics/Physical Education/Sports	0.5

<b>Grade 12</b>	<b>Credits</b>
Language Training	0
Government & Economics	1
Senior Literature	1
Algebra II, Business Math, Geometry, Advanced Algebra & Trigonometry, or Pre-Calculus	1
Physics or another Science Elective	1
2 half-year Arts Electives	1
Athletics/Physical Education/Sports	0.5

## High School Course Descriptions

### Arts

The Studio Art program offers courses that involve both the conceptual and material aspects of art making. They introduce the practices of the artist and the creative process as well as promoting a willingness to surrender to the unanticipated possibilities of a work of art as it unfolds. Courses do not teach technique in a formulaic manner but, rather, emphasize ways of seeing and conceptualizing the processes entailed in making art. The aim of the studio art program is to explore ways of seeing, thinking, and problem solving that are relevant to a variety of intellectual undertakings within the artist's studio and beyond.

#### **Two-Dimensional Design/Color and Drawing**

The design portion of this course will establish a common visual language as students begin to build an understanding of evaluating and creating two-dimensional images. They will experience and discuss the importance of the conceptual, visual, and relational elements of known works of art and the work they create. When drawing, the emphasis will be placed on perceptual drawing from life. Students will work with a range of black and white media as the elements of drawing are investigated through specific problems. Color theory based on Josef Albers' work will be discussed and students will solve problems to help them understand color interactions as they relate to design and drawing. A wide range of media will be used in this course, and each media choice will be appropriate to the problems being solved.

#### **Three-Dimensional Design and Installation**

The design portion of this course will establish a common visual language as students begin to build an understanding of evaluating and creating three-dimensional objects. Students will experience and discuss the importance of the conceptual, visual, relational, and constructional elements of known works of three-dimensional art and the works they create themselves. They will be introduced to the elements of three-dimensional form through a sequence of specific problems. The installation portion of this course will be thematic in nature and draw inspiration from areas of study within the academic community. Students will be involved in working on ongoing three-dimensional constructions that are site-specific within the Kildonan campus. Students will engage in a collaborative process that includes planning, the acquisition and organizing of materials, and construction. The various materials used in this course will be appropriate to the problems being solved and may involve some of the following media: plastic, wood, paper, plaster, clay, metal, and recycled matter.

## **Advanced Studio Art**

*(Prerequisite: Two-Dimensional Design and Drawing or Three-Dimensional Design and Installation)*

This course is designed for students who have completed entry level courses and have a strong understanding of and desire to pursue their artistic vision. In addition to the instructor posing specific problems for the class, students will be expected to formulate independent projects leading to the development of their work. Group discussion of works of art and critiques of student work will play an important role in the development of critical thinking skills and the ability to evaluate and explore ones own work as well as the work of others.

## **Introductory Photography**

This course is an introduction to black and white photography. Students will learn the basics of how to operate a manual SLR 35mm camera. A large portion of course time will be spent learning how to process film accurately to produce quality images. The history of photography will be introduced and discussed. Both practical and technical processes, as well as constructive critiques will be used to evaluate each student's progress.

## **Advanced/Digital Photography**

*(Prerequisite: Introductory Photography or permission of instructor)*

This course will take two directions. First, the exploration and development of an individual photographic language using latent image production. Technical aspects of exposure, developing, and printing are taught as integral to the formation of a personal visual esthetic. Digital photography will also be introduced in this course. Scanning and digital capture systems will be used. Digital color prints will be produced using Photoshop and inkjet printing. Students will also be exploring the documentary value of color information and the ability of computer photo programs to idealize our experience of reality.

## **Portfolio Management**

*(By permission of art department faculty)*

This course is designed to advise advanced students who are planning to pursue art after leaving Kildonan. They will be assisted in the process of finding and applying to programs that would best suit their interests. Art department faculty will guide students as they build well rounded portfolios in preparation for applying to college level art programs. Group critiques will be held as well as individual assessments as their portfolios grow.

## **Application of Modern Multimedia I**

In this course, students learn and apply the following five technologies: advanced WEB browsing and internet usage theory, QuickTime file production and manipulation, QuickTime Virtual Reality (both panorama and object movies) assembly and generation, basic digital video edition,

and WEB server concept and application. At the end of the course, students will put together a mini WEB server from which their QuickTime clips, VRs, and videos will be accessible.

## **Application of Modern Multimedia II**

*(Prerequisite: Application of Modern Multimedia I)*

In this course, students will continue to develop their knowledge of web server theory and apply those skills in building a web/file server. The course will also provide the opportunity for advanced learning in the last half of the course, which will be devoted to independent projects that allow individual students to further explore and master areas of particular interest.

## **Robotics**

Students are provided with an engaging program to learn STEM concepts utilizing the LEGO Mindstorms NXT Robots. Students learn how to program basic robot behaviors using motors and rotation, sound, light, touch and ultrasonic sensors. Fifteen in-depth research lessons are based on real-world robots. Students start by learning basic robot building instructions, programming and movement then move on to working with sensors and more complex robot behaviors. Twelve in-depth research projects cover key STEM concepts, step-by-step programming instructions, and many challenge questions to reinforce key educational outcomes.

## **iOS**

Objective-C is the language for developing iPhone and iPad applications. This class teaches the fundamentals of the programming language. It includes an introduction to XCode, the software development tool for Objective-C; C++ underlying concepts; program control flow and functions; object-oriented programming concepts and practice, including object handling within Objective-C; memory management in Objective-C; and an in-depth review of the Foundation classes.

## **History**

There are three main goals of the History and Social Studies curriculum at Kildonan: to acquire familiarity and competence with geography and chronology; to develop a continuum of skills from being able to understand and create narrative exposition, through competent analysis of various texts and visual materials, to synthesis and support of a thesis; and to engage students in activities and explorations that will help them understand themselves and the interconnected world in which they live.

At all levels of the curriculum, multisensory activities are designed so that students can use their strengths as learners to reinforce skills that are being developed in the language tutorial. Assignments can be responded to at the appropriate skill level for each individual. All students are expected to engage in critical and creative thinking, learn to solve problems cooperatively, and develop facility in communicating ideas and information.

### **Global Studies I**

This course is designed to give students the opportunity to analyze, investigate, and study ancient civilizations around the world including Mesopotamia, Egypt, India, China, Greece, the Roman Empire, and the origins of Medieval Europe. Within each topic of study, students focus on political systems (e.g., monarchies, dictatorships, democracies), infrastructure (e.g., transportation, plumbing, communication), geography (e.g., how it affected the civilization), religion (e.g., polytheism vs. monotheism), and law. Every member of the class is encouraged to follow current events and actively participate in class discussions to investigate themes present in both ancient and modern times. Students practice research techniques, write analytically, and develop creative ways to present information such as Keynote and SMARTboard presentations in order to complete a variety of assignments and projects.

### **Global Studies II**

This course is a study of world history from the Renaissance in Europe to the present time. The study begins with a quick review of early regional civilizations, then turns to Europe, with changes in religious, scientific, economic, and philosophical ideas, leading to explorations of new worlds and revolutions at home. The study shifts to Asia with a focus on India, China, and Japan encountering foreign invasions but maintaining their own cultures. European imperialism in Africa and Asia becomes the next focal point as the competition for colonies led to the first world war. Finally, an examination of the factors leading to the second world war, the aftermath of the war, and the modern world enable students to assess the effects of past events on their own lives. Geography, political philosophy, and current events are common themes throughout the course. The use of multimedia, assigned readings, group activities, creative projects, discussions, and debates will be part of a multi-sensory approach that is incorporated into the classroom experience.

## **United States History**

The present state of the United States is the product of centuries of experimental domestic and foreign policy. The social ramifications of this evolving government are represented by a national identity as well as international perception. Students will use a mixture of assigned readings, multimedia presentations, class discussion, cooperative groups, and multi-sensory activities to achieve the following objectives; identify and explain the foundation of beliefs and values which formed the United States, define and exemplify nationalism & sectionalism in the nation's past, present, and possible future, classify and compare the effects of imperialism throughout US history, describe the rise of the US to a world power, observe the transformation of international opinion over the past three centuries, and examine the economic, social, and cultural patterns from the nation's inception to the present.

## **Government & Economics**

This course surveys the evolution of "Western" capitalism, how it affects the development of American government and economics, as well as other parts of the world; the African continent and modern Europe in particular. It compares and contrasts democracies with totalitarian regimes, as well as examples of societies bordering on governments so dysfunctional as to be virtually anarchic, attempting to determine the effect capitalism and colonialism may have had on their chaotic development. Emphasis will be placed on a current events strand investigating the repetitive nature of human events and the contemporary climate of United States, European, and African politics, especially in terms of their geopolitical relationships.

## Literature

The primary goal of the Kildonan Literature Department is to foster an appreciation of literature in students who have a history of struggling with the written word. In essence, literature classes allow students with dyslexia or a language-based learning difference the opportunity to approach books from a new light. Each text is presented orally, and students are never required to read out loud in front of the class, though students may volunteer to do so. Literature classes have the luxury of being able to focus solely on the text.

Because Kildonan is unique in providing one-to-one language training to each student, literature classes do not stress spelling, grammar, or other mechanics that normally find a place in English curricula. Using a multisensory and constructivist approach, classes focus on the development of critical thinking, speaking, and writing skills; the intricacies of character development and author motivation; an introduction and eventual mastery of literary terms and contextual vocabulary; and areas in which students can make connections to their own lives. Each student's individual needs are assessed and understood by his or her teacher, and, if necessary, the teacher will provide modifications based on individual reading and writing levels. While the specifics of each class vary, students are generally assessed through class participation, group projects, quizzes and tests, weekly independent assignments, and a term exam.

While texts are presented orally in the majority of classes, some senior level courses ask students to complete independent reading outside of class and write papers of more length and substance. Senior level classes are developed to help prepare students for the demands of college. Advanced writing skills and MLA format are practiced in all Junior and Senior level classes.

### **World Literature I**

This course explores foundational works of literature, spanning from antiquity to Medieval Europe. Through careful analysis and critical dialogue, the class will examine a range of literary genres in an effort to understand the building blocks of much of modern literature. The course will include introductions to ancient philosophy, mythology, and theater, as well as epics and satires. Students are asked to develop analytical and rhetorical skills through routine discussion and debate, they also are asked to explore literary themes and topics in analytical writing projects each week. In addition, they participate in discussions and study major events in World History that place the works in an appropriate context. The texts used for this course include excerpts from *The Republic* by Plato, *Romeo and Juliet* by Shakespeare, *Oedipus Rex* and *Antigone* by Sophocles, excerpts from *Metamorphoses* by Ovid, and *The Canterbury Tales* by Geoffrey Chaucer, as well as short works and essays.

## **World Literature II**

As a continuation of the work begun in World Literature I, this course covers significant texts by international authors often taught in high school curricula, with an emphasis on British literature; many of the works share the common theme of, “individual in society.” Texts and areas covered in the yearlong survey of major international works have included *Beowulf*, *Othello*, *Things Fall Apart*, *Siddhartha*, *The Kite Runner*, *The Ministry of Fear*, and a variety of short stories and poems. Students are asked to explore literary themes and topics in analytical writing projects and essays each week.

## **American Literature**

This course offers a chance for students to develop critical thinking skills as manifested through discussion and writing. Instructors of the course have often used short stories by Poe, Hawthorne, Anderson, and Hemingway as well as core texts such as *The Sun Also Rises*, *The Great Gatsby*, *Twelve Angry Men*, *On the Road*, and *Black Boy*. Traditionally, the course has focused primary attention on the expatriates of 1900 to 1945. In addition, the students complete a unit in the spring that introduces them to the basics of poetry explication. An advanced section of this course is sometimes offered and includes independent reading assignments and increased writing demands.

## **Senior Literature**

This course takes the goal of studying allusive material to the college level. An emphasis is placed on discussion and essay writing skills. Students write several essays such as research and critical analysis papers and are expected to employ proper MLA citation and documentation. An advanced section of this course is usually offered and includes independent reading assignments, increased writing demands, and greater expectations regarding class discussion. Some titles studied in the past include Edith Hamilton's *Mythology*, *The Odyssey*, *Frankenstein*, *Death and the Maiden*, *Slaughterhouse Five*, *Hamlet* or *MacBeth*, and *Persepolis*.

## Mathematics

The main goals of the Mathematics department are to provoke, stimulate, exercise, and improve both intuitive and logical thinking; to foster mathematical skills, minimally at the level of high school competency; to provide the mathematical prerequisites for further study or work; and to appreciate and enjoy the pleasure of mathematics. The mathematics program is designed to meet the needs of all our students, no matter what their skill level may be. We offer courses appropriate to students who have yet to master basic operational skills as well as to mathematically inclined students who are capable of excelling in a mainstream high school curriculum.

Development of mathematics skills is a central part of a Kildonan education. To foster and support mathematical competence, course assignments are given daily.

### **Basic Math I**

This course is designed for students who have exhibited a history of significant difficulty with math. The pace of the course is tailored to meet the needs and progress of the students. Content includes work on place value, estimation, calculation, and problem solving using the four basic arithmetic operations. Fractions are approached through divisibility rules, factoring, and Venn Diagrams. It is hoped that students succeeding in this course will improve their skills as they develop a conceptual framework for mathematical ideas.

### **Math 9**

This course is designed for students entering high school whose skills, as well as their grasp of concepts, require review and mastery before encountering the abstractions of Pre-Algebra and advanced math classes.

### **Pre-Algebra**

This is a standard high school math course that prepares students for Algebra I the following year. Topics include the language of algebra, integers, rationals (fractions), solving one-step equations, proportion and percent, and applying algebra to geometry.

### **Algebra I**

This is a standard high school math course that includes topics such as operations, real numbers, equations, word problems, inequalities, factoring, rational expressions, and radicals.

### **Algebra IA**

This is a standard high school algebra course that is paced for students who have had difficulty with math in previous courses but who will continue to follow a mainstream math curriculum. Students in this class typically take two years to complete the traditional Algebra I curriculum.

More time is devoted to review of concepts and skills that were not mastered previously. At the same time, attention will be directed toward learning necessary algebraic concepts.

### **Algebra IB**

*(Prerequisite: Algebra IA or Algebra I)*

This course is the second year of a two-year sequential curriculum in high school algebra. As in Algebra IA, more time is devoted to review concepts and skills so that students can master basic algebra before enrolling in more advanced math courses. If there is time at the end of the year, students will also complete either a unit on probability and statistics or a unit on trigonometry.

### **Geometry**

*(Prerequisite: Algebra I)*

This is a standard high school course that covers topics such as tessellations, triangles, polygons, proof, constructions, area and volume, the Pythagorean Theorem, similarity, and circles.

### **Algebra II**

*(Prerequisite: Algebra I and Geometry)*

This is a standard high school course that covers the following topics: linear equations, polynomials, factoring, rational expressions, radicals and rational number exponents, the quadratic formula, complex numbers, coordinate geometry, and conic sections.

### **Advanced Algebra & Trigonometry**

*(Prerequisite: Algebra II)*

This course focuses on trigonometry, both as it applies to triangles and to circular functions. Topics include solving right triangles, applying both the law of cosines and sines, learning radian measure, drawing and interpreting graphs, and solving identities.

### **Business Math**

*(Prerequisite: 2 years of high school mathematics)*

This course uses a marina, once owned and managed by the instructor, as a takeoff point to explore the various aspects of math needed to run a business. Computer spreadsheets are used to clarify expenses and profit margins. Later in the year, topics such as payroll and business accounting procedures are covered.

### **Geometric Modeling**

Applying principles of geometry and trigonometry, such as similarity and ratio, students transform two-dimensional drawings into three-dimensional structures. A hands-on approach allows students to design plans that realistically provide the foundation for creating physical objects. There are daily assignments as well as projects to complete throughout the year.

## **Topics in Math**

This course concentrates on three major topics, one per term, each of which has important relevance to everyday life concerns: probability, proportion, and percent. Students will also prepare for the Regents Competency Test in Mathematics, which is administered in January.

## **Precalculus**

*(Prerequisite: Advanced Algebra & Trigonometry)*

This advanced course prepares students to learn calculus. Topics covered include coordinate geometry, polynomials, functions, exponents and logarithms, trigonometry, polar coordinates and complex numbers, conic sections, vectors and determinants, and sequences and series.

## **Calculus**

*(Prerequisite: Precalculus)*

Beginning with a thorough study of the limits of functions, this course introduces students to both differential and integral calculus, exploring both theory and applications.

## **Athletics / Physical Education / Sports**

The Physical Education Program is an integral part of The Kildonan School curriculum. Each day, students participate in an after-school sport that provides instruction and activities to help students develop the knowledge, motivation, and insights needed to maintain physical fitness levels throughout their lives.

The program has two levels of focus: to provide a healthy, structured environment for the development of interscholastic athletic competition and to provide a program for the development of a wide range of intramural activities.

The following is a list of the athletic activities offered, the seasons in which they are played, and their classification status. All intramural activities may not be offered every year.

### **Basketball**

Winter: Interscholastic

### **Biking**

Spring: Intramural

### **Equestrian**

All Seasons: Intramural

### **Fitness/Yoga**

All Seasons: Intramural

### **Golf**

Fall and Spring: Intramural

### **Hiking**

Fall: Intramural

### **Lacrosse**

Spring: Interscholastic

### **Ski Team**

Winter: Interscholastic

**Snowboarding**

Winter: Intramural

**Soccer**

Fall: Interscholastic

**Softball**

Spring: Intramural/Interscholastic

**Tennis**

Fall: Intramural

Spring: Interscholastic

**Weight Training**

All Seasons: Intramural

During the Winter term, the Ski/Snowboard program becomes a core element of the Kildonan experience. Each student in the Middle and Upper Schools participates in this instructional program on Thursdays, and at the end of the term the faculty and students attend a five-day ski trip at Killington Mountain in Vermont.

## **Science**

The Science program at Kildonan has three central goals: to stimulate student interest in scientific investigation; to promote an understanding and awareness of science sufficient to allow students to make informed, rational, and justifiable decisions based on observable data; and to promote developing language and mathematical skills through appropriately challenging content material.

Students engage in inquiry-based investigations that allow them to learn scientific phenomena through direct experience. Exploratory lab projects, computer technology, and the natural resources of the Kildonan campus are all integral to the program. The multisensory method of instruction used in every class promotes an environment of active exploration within the structured learning environment.

In the Fall term, students prepare a science fair project to present at the annual fair held before winter break. Student projects explore topics within their current course of study and are intended to reinforce scientific inquiry methods and encourage independent work habits. Science teachers make time within the curriculum for students to complete their work on their projects during class time.

Most of the high school level science courses require a weekly 45-minute laboratory where students explore scientific phenomena further.

### **Health and the Human Body**

This required course is designed to have students explore various health and wellness related topics in the context of scientific investigation and biological study. It provides an overview of basic human anatomy and physiology, integrating the scientific study of body systems with topics such as human growth and development; personal, consumer and community health; injury prevention and safety; alcohol, tobacco, and other drugs; nutrition and physical fitness; environmental health; family living; and communicable and chronic diseases. Students conduct a series of dissections to further their understanding of anatomy.

### **Biology**

This required course is designed to further student conceptual knowledge in the biological sciences. Students engage in hands-on, inquiry-based activities geared toward promoting an understanding of biology from a human perspective. The course is organized into themes such as evolution; homeostasis; relationships in living systems; reproduction and inheritance; development; and ecology. The emphasis given to the human experience helps students relate biological concepts to their lives and the thematic approach gives students the opportunity to

investigate topics at a deeper level. Students in this course conduct controlled experiments throughout the year and learn to write a formal laboratory report.

### **Chemistry**

The first term of this course is dedicated to a study of basic mathematical and scientific concepts such as the scientific method, characteristics of matter, precision and accuracy in measurement, and the mole concept. The second two terms then build upon this knowledge with a study of the periodic table, chemical equations and calculations involving reactions, gas laws, the composition of the atom, and chemical bonding. Experimentation and demonstrations throughout the term help reinforce concepts and require students to use computation skills to analyze results.

### **Physics**

This course examines basic vector mathematics and kinematics. Fundamental concepts of physics such as motion, speed, velocity, acceleration, power, and force are studied. Areas of exploration may include optics and light, electricity, sound, and magnetism. Throughout the course, students engage in inquiry-based investigations of these concepts.

### **Environmental Science**

This course emphasizes the interconnectedness of the Earth's systems and the impacts humans have on those systems. The first term is dedicated to a study of geology, oceanography, hydrology, and the atmosphere. Students then discuss energy flow and the cycling of matter, ecosystems, renewable and nonrenewable resources, and environmental quality. With this knowledge base, students analyze environmental issues and seek to make informed decisions about those issues. The class makes use of the Kildonan campus and its environs for field studies.

### **Psychology**

The first term of the year is dedicated to a basic introduction to the science of psychology, including a survey of the various fields within the science, founders of the discipline and their theories, enduring issues, and the process of scientific study. The course will then proceed to cover specific topics such as cognition and language, intelligence, and social psychology. In the spring term, students will design and conduct independent experiments.

### **Forensics**

This course teaches students about applied science, logical reasoning, and how science is incorporated with the law. Students will learn and perform field experiments in areas such as evidence collecting, blood, semen, and saliva analyses, DNA matching, GSR detection, arson and accelerants, toxicology testing, and trace evidence analysis. Students will also learn how to process information and evidence in forming reconstructions of crimes.

**\*\* The following pages are examples of curriculum maps for some middle school courses. Topics and material may vary slightly depending on current events and changes in course themes. The maps are an overview by term of each course.**

Concepts	Topics	Critical Content	Assessment
Modeling Symmetry Observation Hypothesizing Analyzing Predicting Measuring	<b>Fall Term</b> Matter and Energy Atomic Structure Chemical Formula Periodic Table	<ul style="list-style-type: none"> <li>• Definition of Chemistry</li> <li>• Applying the scientific method</li> <li>• Metric System (conversions)</li> <li>• Exploring matter</li> <li>• Atomic structure and behavior</li> <li>• Identifying and analyzing chemical reactions</li> <li>• Development of Periodic Table</li> <li>• Properties of elements in the Periodic Table</li> </ul>	Weekend assignments Quizzes Labs Term exam Science fair project
Inferring Organizing Cause and effect	<b>Winter Term</b> Mathematics of Chemistry	<ul style="list-style-type: none"> <li>• Mole Interpretation</li> <li>• Stoichiometry</li> <li>• Solutions</li> <li>• The Mole</li> <li>• Formula from Percent Composition</li> <li>• Gram molecular mass from gas density</li> <li>• Effects of solute and solvent</li> <li>• Calorimetry</li> </ul>	Weekend assignments Quizzes Labs Term exam Science fair presentation
	<b>Spring Term</b> Properties of Gases Acids and Bases Thermodynamics	<ul style="list-style-type: none"> <li>• Physical properties of gases</li> <li>• Gas laws</li> <li>• Gas stoichiometry</li> <li>• Kinetic molecular theory</li> <li>• Graham's Law and diffusion</li> <li>• Properties of acids and bases</li> <li>• Acid-Base Reactions</li> <li>• Energy and Heat</li> <li>• Measuring heat transfer</li> </ul>	Weekend assignments Quizzes Labs Term exam

## Global Studies I

### Term 1 - Fall

<b>Content</b>	<b>Objectives</b>	<b>Concepts</b>	<b>Activities</b>
Unit 1: Understanding History	Explain how history influences present and future cultures, including the students' lives.  Discuss the influence of geography on demographic patterns.	Places & Regions, Physical Systems, Environment, Human Systems, Change, Immigration & Migration, Diversity	Research and present findings using primary documents from different time periods examined throughout the school year.
Unit 2: Nomadic and Neolithic Life	Describe the customs and beliefs of early civilizations.  Define the trading relationship between early civilizations.  Evaluate the difference of Nomadic and Neolithic cultures	Environment, Culture, Needs & Wants, Movement of People & Goods, Identity, Human Rights, Diversity, Interdependence	Examine and classify the use of resources it took to survive as a Nomad or Neolithic person.  Research the findings of the oldest human being ever found.
Unit 3: Mesopotamia	Examine the early cultures  Research importance of geographic surroundings, specifically in river valley civilizations	Environment & Society, Factors of Production, Choice, Belief Systems	Read select articles about archeological finds in Mesopotamia.
Unit 4: Babylon	Examine early writings and structured law  Identify the structure of an organized civilization with government	Identity, Conflict, Justice, Human Rights, Citizenship, Civic Values	Organize basic government principles  Debate rights of the masses vs rights of the individual

### Global 1: Term 2 - Winter

<b>Content</b>	<b>Objectives</b>	<b>Concepts</b>	<b>Activities</b>
Unit 5: Egypt	Compare the power of Pharaoh's with other Monarchies.  Identify polytheistic cultures.	Belief Systems, Nation-State, Political Systems, Government, Civic Values, Economic systems, Conflict	Create a story in hieroglyphics using the Rosetta stone.  Compare and contrast the life of a pharaoh and the life of a slave.

## Global Studies I

<b>Content</b>	<b>Objectives</b>	<b>Concepts</b>	<b>Activities</b>
Unit 6: Greece	Examine and compare government structures of city-states  Evaluate Grecian literature as primary documents.	Identity, Needs & Wants, Urbanization, Science & Technology, Political Systems, Government Principles.	Debate whether city-states make good government  Read select classic Greece literature
Unit 7: Rome	Compare Caesar's power to the power of the Senate  Evaluate the impact of Roman infrastructure throughout western civilization.	Belief Systems, Identity, Justice, Government, Conflict	Research elements that made the Roman empire vast and strong.

## Global 1: Term 3 - Spring

<b>Content</b>	<b>Objectives</b>	<b>Concepts</b>	<b>Activities</b>
Unit 8: Influence of Christianity	Identify the organizational skills of the Christian church.  Compare influence of religion upon people with the effects of the decisions that people make due to religion.	Decision Making, Conflict, Organization, Human rights, Civic Values, Decision Making	Chart the spread of Christianity throughout the Roman empire.  Author newspaper articles based the spread of Christianity.
Unit 9: Medieval Europe	Distinguish between anarchy and structured government.  Identify the effect of a plague upon traditional medicinal society.	Conflict, Justice, Government, Human Rights, Needs and Wants, Science and Technology.	Create a Feudal social pyramid  Research primary documents that discuss the black plague

# GEOMETRY

PRIMARY TEXTBOOK: *GEOMETRY: A GUIDED INQUIRY* by Chakerian, Crabill & Stein

<u>CONCEPTS</u>	<u>TOPICS</u>	<u>CRITICAL CONTENT</u>	<u>MATERIALS</u>
Measurement Symmetry Proof Inductive Logic Deductive Logic	The Shortest Path	Reflection in a line Distance between points Distance from a point to a line Perpendicular lines Triangle Inequality Law Angle Properties	Ruler Protractor Teacher-prepared Worksheets
Pattern Quantification Logic Proof	Tiling the Plane (Tesselation)	Sum of Angles of a Triangle Parallel Lines Types of Angles Regular Polygons	
Proof Correspondence	Triangles	Congruence Types of Triangles	Daily Assignments 3 Chapter Tests
Proof Classification Logic	What is a Proof?	“If...Then” Statements and Converses Properties of Parallelograms Types of Quadrilaterals	Term Exam
Proof Precision	Constructions with Straightedge & Compass	Construction Techniques	<u>MATERIALS</u> Straightedge / Compass Calculator
Proof Measurement Quantification	Area and Volume	Properties of Area and Volume Finding Areas of Polygons Finding Volumes of Prisms and Pyramids	<u>ASSESSMENT</u> Daily Assignments 2 Chapter Tests Constructions Booklet Term Test

**FALL  
TERM**

**WINTER  
TERM**

# GEOMETRY

PRIMARY TEXTBOOK: *GEOMETRY: A GUIDED INQUIRY* by Chakerian, Crabill & Stein

<u>CONCEPTS</u>	<u>TOPICS</u>	<u>CRITICAL CONTENT</u>	<u>MATERIALS</u>
Proof Problem Solving Pattern Quantification	Pythagorean Theorem	30°-60°-90° Triangles 45°-45° Right Triangles Applying the Pythagorean Theorem Longest Diagonal of a Box	Calculator Teacher-prepared Worksheets Construction Tools
Ratio and Similarity Proof	Similar Figures	Similar Polygons Similar Triangles Corresponding Parts of Similar Triangles Ratio of Similarity	
Ratio and Similarity Proof	Perimeter, Area, and Volume of Similar Figures	Perimeters of Similar Polygons Areas of Similar Polygons Volumes of Similar Polygons Surface Area	<u>ASSESSMENT</u> Daily Assignments 3 Chapter Tests 1 Chapter Quiz Final Exam
Proof Ratio Quantification	Circles	Bend of an Arc Inscribed Angles Intersecting Chords, Extended Chords of Circles Tangent Lines to Circles Perimeter of a Circle Length of an Arc of a Circle Area of a Circle Area of a Sector of a Circle The Sphere	

SPRING  
TERM

Term Concepts	Texts	Reading/Writing Expectations	Activities/Discussion Expectations
<p>Term I</p> <p>Forgiveness vs. Repentance</p> <p>Justice vs. Injustice</p> <p>Revenge</p> <p>Appearance vs. Reality</p> <p>War</p> <p>Satire</p> <p>Author's Perspective</p>	<p><i>Death and the Maiden</i> by Ariel Dorfman</p> <p><i>Slaughterhouse-Five</i> by Kurt Vonnegut</p>	<p>-Expanded paragraph answers are required for each homework assignment.</p> <p>-All assignments require MLA format and a Works Cited page, including weekday and weekend assignments.</p> <p>-Two Five-paged papers in MLA format</p>	<p>For papers, students are required to:</p> <ul style="list-style-type: none"> <li>-Propose a paper topic in relation to the text</li> <li>-Create an outline based on paper proposal</li> <li>-Use outline to create a rough draft</li> <li>-Critique the work of a classmate</li> <li>-Create a final draft based upon multiple critiques and editing suggestions</li> </ul>
<p>Term II</p> <p>-Appearance vs. Reality</p> <p>-Revenge</p> <p>-Family</p> <p>-Perception of Women</p> <p>-Elizabethan Theater</p>	<p><i>Hamlet</i> by William Shakespeare</p>	<p>7-pg paper in MLA</p> <p>Students are required to:</p> <ul style="list-style-type: none"> <li>-Propose a paper topic in relation to the text</li> <li>-Create an outline based on paper proposal</li> <li>-Use outline to create a rough draft</li> <li>-Critique the work of a classmate</li> <li>-Create a final draft based upon multiple critiques and editing suggestions</li> </ul>	<p>Small Research papers (2-paged)</p> <p>Mini-Lessons/Presentations (20 min. Presentations for groups/pairs)</p>
<p>Term III</p> <p>-Religious Persecution</p> <p>-Graphic vs. Traditional Novel</p> <p>-Cultural Diversity</p> <p>-Anger</p> <p>-Human Condition</p> <p>-Outsider vs. Insider</p>	<p><i>Persepolis</i> by Marjane Satrapi</p> <p><i>Islam Explained</i> by Tahar Ben Jelloun</p> <p><i>Collected Poems</i> by Dylan Thomas</p> <p><i>Ten Little Indians</i> by Sherman Alexie (short stories)</p> <p><i>Toughest Indian in the World</i> by Sherman Alexie (short stories)</p>	<p>Ten-paged paper in MLA format; students required to:</p> <ul style="list-style-type: none"> <li>-Propose a paper topic in relation to the text</li> <li>-Create an outline based on paper proposal</li> <li>-Use outline to create a rough draft</li> <li>-Critique the work of a classmate</li> <li>-Create a final draft based upon multiple critiques and editing suggestions</li> </ul>	<ul style="list-style-type: none"> <li>-Group/Partner Keynote/Powerpoint</li> <li>-Presentations on Stereotypes</li> <li>-Partner Presentations on Dylan Thomas Poem with Class Lesson</li> <li>-Small Research papers (1-2 pages) on different philosophers and theories mentioned in <i>Persepolis</i></li> </ul>

## Grading Policy

In order to receive credit for a course, a student must pass the course for at least two out of the three terms. Students who fail the Spring Term may not receive credit for the entire course. In computing the final grade for courses, each term counts for one-third of the year grade. In order to receive a passing grade in Physical Education, students must participate every term.

Most courses use letter grades to indicate student achievement:

- A = Outstanding performance
- B = Good performance
- C = Satisfactory performance
- D = Poor performance
- F = Failing

The following system is used to translate test scores and numeric averages into letter grades for reports and transcripts:

<u>Point Grade</u>	<u>Letter Grade</u>	<u>Point Grade</u>	<u>Letter Grade</u>
≥ 93	A	67-69	D+
90-92	A-	63-66	D
87-89	B+	60-62	D-
83-86	B	≤ 59	F
80-82	B-		
77-79	C+		
73-76	C		
70-72	C-		

In addition to letter grades, all students receive academic reports which discuss student performance in every graded and non-graded course. Although not a part of the student's official Kildonan transcript, these reports are in many ways the most important part of the evaluation process as they provide the student, parents, faculty, and other professionals with an individualized, descriptive, and qualitative report of student achievement and progress in each area.

## **Independent Study**

Independent study is a credited course that provides the student with an opportunity to explore an area of study not specifically offered by the traditional Kildonan curriculum. Independent study credit is traditionally offered to students in the 11th and 12th grades, and no more than one full credit may be earned for an IS in one academic year.

Independent studies are appropriate for students who are ready to apply solid organizational, research, and independence skill. Students do not meet with their faculty advisor each day and may meet as little as once per week.

The course of study is designed jointly by a student and cooperating faculty member in order to establish the goals and objectives of the learning experience, course materials, and the assessment methods which will be used in evaluating student progress. Typically, IS students formally present their work to a class of students, another specific Kildonan population relevant to the topic, and the entire Upper School (e.g., one setting each term).

The application form for requesting an independent study is available from the Academic Dean and should be filled out jointly by the student and cooperating faculty member. The form must be approved and signed by the Academic Dean, the Department Head, the faculty supervisor, and the student. Independent study may not be used in lieu of a departmental graduation requirement or required course without special permission from the Academic Dean.