



2010-2011

# Curriculum Guide

A College Preparatory School  
Grades EC-12 Day and Boarding

### **Notice of Non-Discriminatory Policy**

Andrews Osborne Academy admits students of any race, color, religion, sexual orientation, national and ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the school. It does not discriminate on the basis of race, color, religion, sexual orientation, national, or ethnic origin in administration of its educational policies, admission policies, scholarship programs, and athletic and other school-administered programs.

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## **Preschool Vision Statement**

The Andrews Osborne Academy Preschool offers a stimulating environment for our youngest students by immersing them in an interdisciplinary curriculum at all levels of instruction. We value each child's uniqueness and encourage each child to work within his or her abilities toward individual achievement intellectually, physically, emotionally, socially, ethically and aesthetically. We strive to nurture creativity, foster an atmosphere of discovery and develop each child's self-esteem and positive feelings about others, the school and the world. Our faculty is committed to guiding each child toward increasing self-reliance, responsible decision-making and independent thinking.

AOA Preschool achieves this vision with each student through:

- A developmentally appropriate, child-centered program
- Public speaking and performing opportunities, examples have included: a Mother Goose puppet show, holiday programs and science fair presentations
- Social skills modeling and practice including learning to verbalize feelings, negotiate compromises and encourage others with kind words
- Play, both guided and free, used for social development and creative/imaginative development
- Integrated curriculum, both within the classroom and in co-curricular classes where specialists strive to connect their content with topics being taught in the classroom
- Community service
- Field trips that complement academic work

## **Curriculum Highlights**

*The preschool curriculum includes a wide variety of disciplines including Spanish, art, music, computer, library, and physical education. See page 11 for further description of these components.*

### **Early Childhood (EC) – Age 3:**

- Through circle time, stories, finger plays, movement, songs, centers and arts and crafts, three year-olds develop listening skills, social skills and reading readiness skills including letter recognition, left to right progression, vocabulary development and oral comprehension skills (predicting, interpreting and making connections to stories). Each week, a different letter becomes the central focus for circle, art and center activities.
- Students develop a sense of time by following daily schedules and routines and participating in daily calendar activities where they begin learning days of the week and months of the year. They develop number sense through multi-modal activities that focus on counting, matching, patterning, sorting, comparing, grouping and classifying.
- Students learn about many different holidays celebrated around the world. This knowledge is acquired through hands-on activities and creative play. One such holiday, celebrated in June, is the Korean holiday Tano Day or Day of Swings. The EC students decorate the school swings with festive red and white streamers. A swinging contest is held while everyone sings the Tano swing song. Another holiday focus is Thanksgiving. The way of life of Native Americans and the Pilgrims is explored as students prepare for a joint Thanksgiving Feast with the four year-olds, complete with costumes and traditional music.
- The science curriculum exposes students to a wide variety of scientific concepts including the change in seasons, planting, harvesting, plant life, animals (migration, hibernation, habitats), night and day, the sun and the moon, weather and the human heart. A highlight for students is the chance to view a real

octopus. A science center in the classroom reinforces concepts introduced, and field trips often relate to scientific concepts including a trip to a tree farm.

**Pre-Kindergarten – Age 4:**

- The Language Arts program focuses on speaking and listening skills, writing readiness and reading readiness. The children are given opportunities to follow multi-step directions, comprehend oral stories, and participate in group discussions. Vocabulary development and an introduction to phonological and phonemic awareness are important aspects of the program. Students are given many opportunities to develop fine and gross motor skills and hand-eye coordination, skills necessary for letter and word formation and the later development of handwriting.
- Math is integrated throughout the day as children practice counting, data collection and representation, measuring, patterning, addition, subtraction and problem solving that is relevant to their daily experiences. Number recognition, shape recognition, fractional concepts and calendar concepts are central to many center, circle and group activities.
- Building on their exposure to countries in EC, students continue studying world cultures while incorporating geography. They also learn about their local community with a special emphasis on community helpers. Field trips enhance students' understanding of their community and have included visits to fire stations, grocery stores and local farms. As mentioned above, the children learn about the way of life of Native Americans and the Pilgrims as they prepare for a joint Thanksgiving Feast with the three year-olds, complete with costumes and traditional music with rain sticks and drums.
- The science curriculum includes a science fair component where each student shares a simple experiment with the class and then, explains his/her experiment again with parents, teachers and other students during a pre-kindergarten science fair. Topics studied throughout the year include magnets, the five senses, dinosaurs, animals, shadows, dental health, weather and the four seasons.

## **Lower School Vision Statement**

At the Andrews Osborne Academy Lower School, our vision is for all of our students to become confident, secure, life-long learners by being immersed in a nurturing, child centered environment. We differentiate for students as we strive to engage students actively in the learning process, fostering curiosity and helping students to make meaningful learning connections through an integrated curriculum. We value reason, respect, and responsibility and challenge our students to think critically, respect themselves and others, and act responsibly at school, at home, and in their communities.

AOA Lower School achieves this vision with each student through:

- Instruction that teaches to various learning styles and uses assessments to guide planning in order to differentiate our program for each student
- Public speaking assemblies: each student gives two formal speeches per year in addition to other performing opportunities in class plays/productions
- Varied instructional techniques including cooperative work, whole group lessons, occasional one-on-one instruction, hands-on experiential activities, and interest centers
- Integrated curriculum, both within the classroom and in co-curricular classes where specialists strive to connect their content with topics being taught in the classroom
- Community service
- Field trips that complement academic work

### **Curriculum Highlights**

#### **Kindergarten:**

- Kindergarteners spend the year immersed in print. They develop pre-reading and reading skills through whole group lessons and small group guided reading instruction. Writing is developed through journal writing, story writing, interactive writing and opportunities to work at writing centers.
- The math curriculum focuses on the development of number sense including a focus on counting to 100 and beyond, number recognition and writing, place value, skip counting by 2's, 5's 10's, addition and subtraction concepts and problem solving. Students are also exposed to measuring, data collection, graphing and geometric concepts. Skills are reinforced through math games and Math Workshop where teachers differentiate through multi-modal activities.
- Students spend the year on a comparative study of Australia. Students compare Australia to the U.S. including Australian Aboriginal and Native American cultures, customs, holidays, time zones, weather and geography. They also learn about endangered species and their habitats.
- Colonial Kindergarten helps students gain a greater understanding of life in colonial days by reenacting customs of that period. Parents are invited to help with the many hands-on center activities. Students bake bread, create a quilt, stencil, and work on pottery and hand dip candles. A field trip to Burton Century Village enriches this social studies unit.
- The science curriculum includes studies of rocks, magnets, weather, seasons and animals. Kindergarteners participate in weekly "animal interviews" where they learn important facts about animals through stick puppet interviews. Students write about and illustrate facts they have learned in their animal journals.
- Each kindergartener has an opportunity to be Child of the Week. Child of the Week activities focuses on each child's uniqueness, heightening self-esteem and developing respect and acceptance for individual differences.
- A Peter Rabbit Play occurs in the spring. Students make the props, scenery and costumes for this production, which encourages public speaking and drama skills.

- A Mother's Day Breakfast recognizes mothers or special friends. The students learn and practice manners and etiquette skills at this formal event.
- All kindergarteners participate in a community service project where they write and illustrate their own books. Three copies of each child's story are printed. One copy is sent to Rainbow Babies and Children's Hospital for their waiting rooms, one copy is catalogued in the AOA library and one copy is sent home with each new budding author.

### **First Grade:**

- First graders spend the year developing their reading skills with the goal of becoming fluent, proficient readers who read for meaning. They develop a variety of reading strategies, learn decoding and phonics skills, develop comprehension skills and begin learning to think inferentially by participating in whole group lessons, guided reading groups, one-on-one reading time with the teacher and sustained silent reading using "just right" reading selections. Reading instruction is differentiated for students at all reading levels.
- The math curriculum builds on skills learned in kindergarten with a continued focus on the development of number sense. Students use a variety of methods including games, computer activities and problem solving applications to help commit addition and subtraction facts to memory and apply their use to real world situations. Students also spend time on data collection and representation through surveys, graphing, tallying, physical models and the creation of tables. Visual and spatial skills are developed through a hands-on geometry focus that uses both 2D and 3D models and tasks. The concept of time is explored through calendar activities, timelines and an introduction to clocks.
- Being members of many communities, first grade students understand their place in the world by beginning locally and working toward a global perspective (family, neighborhood, town, state, country, continent, and planet). The year ends with an overview of world cultures during an International Day. Activities include a drama performance followed by the presentation of student research projects on various countries and a sampling of international foods.
- As members of local communities, first graders study different occupations and community helpers. They have opportunities to interview various community helpers and meet with special guest speakers.
- Building on kindergarten's introduction of weather, a study of weather and weather tools helps first graders to see how their daily lives and choices are affected by the weather.
- Students deepen their understanding of animals by focusing on animal habitats and adaptations. They examine the interdependence of life in ecosystems and the effects of weather and seasonal changes on ecosystems. Field trips bring ecosystems and habitats to life for students and have included River Walks (when water levels are safe) and trips to the Cleveland Zoo.
- The Chocolate Factory is an economics unit in which first and fifth graders work together to market, produce, sell and deliver chocolate suckers for Valentine's Day. A field trip to Malley's Chocolate Factory highlights this unit. This unit is integrated with a mathematical unit on money and making change.

### **Second Grade:**

- Second graders continue to gain fluency as the reading focus begins to shift towards vocabulary development and the expansion of comprehension skills. In guided reading groups, students are introduced to and develop their understanding of story elements and cause and effect while reading short stories. They also practice making inferences, comparing/contrasting and identifying problems and solutions. Working as a whole group, individually, in pairs or in small groups, students study word types (compound, antonyms, and synonyms), word parts (prefixes, suffixes), parts of speech and word

patterns. Study skills are introduced including the use of the dictionary and reference materials. Reading continues to be differentiated.

- The second grade writing curriculum introduces students to narrative, explanatory, persuasive and comparative writing. Cursive writing is taught during the second half of the year.
- Students continue to build on prior math skills as they learn double-digit addition and subtraction with and without regrouping practice using money and making change, learn to tell time, develop an understanding of elapsed time and collect and represent data. Multiplication concepts are introduced, and students who are ready, begin to work on learning the multiplication and division facts once addition and subtraction facts are mastered. Second graders' understanding of measurement and geometric concepts continue to expand through hands-on activities and problem-solving incorporated daily into math lessons.
- A citizenship unit begins the year and teaches students the character traits of a good citizen in the school and in the community. Students study, complete hand-on activities and role play situations demonstrating honesty, trustworthiness, perseverance, fairness, respect, responsibility, self-discipline, integrity and compassion. They also learn why we have laws and what the consequences are when laws are broken. This unit culminates with a field trip to the Painesville Court House where students get to observe arraignment hearings and talk with Judge Cicconetti.
- A yearlong comparative study of all the animal groups and their characteristics, highlighting specific animals from each group, gives students opportunities for research, classification and a respect and appreciation for nature. A metropark field trip enriches this study.
- A comparative study of Native American Tribes and their cultures helps students understand how the first Americans came to live in what is now North America and how their lives were affected by the arrival of European Americans. Students work in cooperative learning groups studying one particular tribe's customs and lifestyles and building that tribe's traditional shelter. South American tribes (Maya, Aztec, and Inca) are briefly examined and compared to North American tribes.
- An introductory study of the American Revolution teaches students about the reasons for the war, its major battles, important people and the final impact of the revolution. The unit ends with an evening performance of Yankee Doodle, A Revolutionary Tail, a musical based on Gary Chalk's book of the same name. A study of the 50 states follows as students develop an understanding of the creation of our nation.
- A unit on dinosaurs gives students an understanding of life millions of years ago and the various extinction theories. Students make shadow box scenes of dinosaur days to display in a classroom dinosaur museum. A field trip to the Cleveland Natural History Museum culminates this study.
- A health unit focuses on the food pyramid and healthy eating choices. Students learn to read food labels and are introduced to fractional and percentage concepts in the process. A field trip to the supermarket typically culminates this unit.
- To enhance students' reading skills, their understandings of various concepts and their public speaking and performing abilities, second graders have opportunities to be in unit related plays and skits throughout the year.

### **Third Grade:**

- Beginning in third grade, reading instruction is accomplished through the use of full-length novels and poetry. Students continue to expand their understanding of story elements, cause and effect, sequencing, predicting, symbolism, themes and characterization.
- As students refine their cursive writing, they learn and practice sentence and paragraph structure. Persuasive essays, friendly letters and personal narratives are emphasized as students are encouraged to become responsible editors.

- The math curriculum in third grade focuses on multiplication and division concepts including an introduction to multiples, factors and arrays. Addition and subtraction is reviewed through problem solving and real world applications. Students continue to commit facts (addition, subtraction, multiplication and division) to memory through a variety of methods. Measurement and geometric concepts are expanded, and fractions are introduced. The year ends with a Math Olympics competition, hosted by teachers and parents. This competition reviews and reinforces analytical concepts and skills investigated during the school year.
- Third graders study life in Africa with a focus on Egypt and South Africa. The Egyptian Feast highlights an interdisciplinary showcase of learning experiences including art, social studies, music, math and traditional delicacies. Their studies about South Africa end with an afternoon celebration performing African songs, native dances and a drama presentation. Students learn Afrikaan words and discuss that apartheid means separateness.
- In science, students learn the steps in the scientific method and begin to apply these steps as they study plant life, force, motion and simple machines. Third graders design their own machines that combine several simple machines in one. Students also begin to learn scientific reporting.

#### **Fourth Grade:**

- Students read Newbery novels and participate in many differentiated language activities such as creative writing, poetry, essays, paragraph writing and research papers on celebrated artists and composers. In addition, students participate in literature circles where they complete jobs and participate in student-run book talks.
- Fourth graders participate in a “Shakespearean Adventure” as they read and discuss Shakespearean literature, and then perform a selected play for parents, friends and classmates.
- In math, students are challenged to think critically as they explore multiplication and division in further depth, examine the relationship between fractions and decimals, collect and represent data in increasing complexity, learn about mode, median, range, and mean, practice measurement skills and expand geometric understandings.
- The social studies curriculum focuses on an exploration of Asia. Students create relief maps of Japan and the ocean floor. Everyone gets the opportunity to make sushi. In art, students complete a miniature Japanese garden. This grade level also studies Ohio, including a comparative study of Amish culture with mainstream culture. Students witness Ohioans becoming U.S. citizens. They also take a field trip to visit an Amish schoolhouse.
- In science, students are immersed in an in-depth study of the ocean that is integrated with their study of Asia. This study encompasses ocean life, the ocean floor, ecosystems, tides, currents and the water cycle. In January, a study of the solar system focuses on stars and constellations. Students review weather concepts throughout the year taking a look at more complex weather patterns and tools and the weather’s effects on the ocean including tides and currents.
- Students develop an understanding and acceptance of people with disabilities through a health unit that draws from literature and guest speakers.

#### **Fifth Grade:**

- Fifth graders read a variety of novels and short stories from many different genres. They work to understand and acquire new vocabulary, identify and analyze literary elements, develop higher level thinking skills and achieve independent comprehension. As students study Latin America in Social Studies, they are exposed to Latin American literature including a study of Latin American Fairy Tales. Students practice and are expected to master paragraph writing including the use of evidence to support

topic sentences. They are introduced to three paragraph essays and spend time journaling, reviewing letter writing, practicing explanatory and informative writing and producing creative writing pieces.

- The fifth grade social studies curriculum examines the history and culture of Latin America. Students will begin with a study of ancient American civilizations such as the Maya, Aztec, Inca and some native North American societies. They will then focus on European colonization, the era of Independence, and the development of modern Latin American nations. Students will finish the course by studying several modern nations and issues that impact the region as a whole. Topics of study include the evolution of civilization, cultural practices, government and politics, economic development and philosophical and artistic movements. Students will have the opportunity to incorporate into the course their study of the art and language of Latin America.
- The fifth grade math curriculum builds upon number sense concepts from fourth grade, but also includes calculations with numbers through millions. Fraction, decimal and percent relationships are investigated and applied in problem solving, as well as computations with all three number forms in geometric formulas. Polygon properties dealing with side and angles relationships are analyzed and students study rectangular prisms, including dimensions and how changing the volume affects the dimensions of a prism. Customary and metric measurements tie in with fraction and decimal concepts. Growth patterns provide the backdrop for the application of data analysis, graphing and drawing conclusions from various data representations. Real world experiments are conducted to analyze probability, both experimental and theoretical.
- In science, students begin with developing their observation skills and understanding of the scientific method. The course is an overview of various science disciplines designed to prepare students for middle school science courses. Fifth graders study Earth science including observation of the Earth, moon and sky. They are introduced to physics concepts including light, vision, sound, hearing and motion. Chemistry topics include matter, matter in solutions, acids, bases, salts and practice in describing the physical world. Finally, students review and expand their understanding of life science concepts including viruses, simple organisms, plants, ecology and changing ecosystems.
- Students take part in a “Peers Learning Useable Skills” course, led by Lake County police officers, which seeks to teach and train pupils how to say “No” to drugs and violence.
- Students benefit from a personal living and health instruction course conducted by professional teachers in the field.

## **Co-Curricular Subjects**

### **Visual Art**

Art classes are provided to students in the Enrichment Center (age 3) through fifth grade. The program provides sequential skills that offer a foundation for applying techniques, theories and principles of art to the compositions created by the students. The course of study encourages the development of self-expression through a variety of mediums.

### **Music**

Music classes for the children from the Enrichment Center (age 3) through fifth grade use singing, movement, and music reading skills as a basis for their study. Band is available for students in fourth and fifth grades. The curriculum provides the students with opportunities to perform, create, analyze, listen, and move to music. These multi-sensory experiences offer the students a variety of means through which music can be explored. Music provides an outlet for creativity and self-expression. It allows a student to draw on the technical elements of music and use them to express thoughts and feelings.

### **Physical Education**

The resources available help create a wide variety of experiences to strengthen gross motor control and body awareness for our students. Through the activities selected, students in the Enrichment Center through fifth grade have the opportunity to succeed at their own skill level. This is an important ingredient to each student's self-esteem.

### **Library**

Serving students in the Enrichment Center through fifth grade, the library classes nurture reading for enjoyment as well as building skills for efficient research of a topic. Students are encouraged to share their individual book recommendations with others by writing creative descriptions of the books they have read and want to share.

### **Technology/Computer**

Computer classes exist for the Enrichment Center through fifth grade. The computer is introduced as a tool to help each individual student progress and succeed with his/her education. Sequential skills from mouse control and keyboarding to multimedia projects are explored. Internet safety is taught in kindergarten up through all the grades. Wherever possible, integrated projects are done with the corresponding classroom.

### **Spanish**

Focusing on accurate pronunciation through aural lessons of various types, the classes from the Enrichment Center through fifth grade launch the students into their second language adventure. Behind English, it is the most commonly spoken language in the U.S. Bilingual employees are in high demand in every field and getting an early start is the best way to learn another language.

### **Swimming**

The curriculum includes swimming for students in kindergarten through fifth grade. The developmental program begins with the fundamental water skills of floating and stroke refinement. Higher level aquatic skills and endurance goals are added as the students become better swimmers. Small classes permit the students to acquire and refine new aquatic skills at their own pace.

## **Middle School Vision Statement**

The Andrews Osborne Academy Middle School strives to be a caring, supportive community where every student is engaged and challenged to pursue personal excellence. We offer our students a program that fosters curiosity and promotes the application of learning by offering authentic, real world contexts and opportunities to make multiple connections. We value these adolescents who are ready to take a more active role in our society. Our faculty is committed to helping students develop respect for self and others and leadership abilities in preparation for ethical participation in a global society.

AOA Middle School achieves this vision with each student through:

- A challenging and active learning environment for students. For example: qualified students will have the opportunity to advance in classes or take honors classes, specifically in the areas of mathematics
- An advisory program that meets weekly in order to promote team-building, support emotional and social development, and address adolescent issues; advisors act as mentors and liaisons between home and school
- Public speaking opportunities
- Integrated projects, examples have included: Colonial Trade Show, Medieval Festival, and the Greek Festival
- Wide range of extra-curricular activities including student government, athletics, arts, and clubs
- Community service
- Trips and camps that complement academic coursework and/or promote team-building

### **English**

*In the Middle School, we introduce more formal grammar and spelling and crafted a literature curriculum that combines traditional texts with some of the newer books we had brought in over the years. Also for grades 6-8, whenever possible, we developed some English/History cross-curricular approaches, and, in the case of the 7<sup>th</sup> grade, developed a project called the “Medieval Feast” that includes all the disciplines.*

#### **Sixth Grade**

Students focus on the different aspects of society, especially one’s role in a community. There is an extensive study of mythologies from around the world, including ancient Greek, Norse, Egyptian, and Hawaiian, among others. Writing skills are developed through practice with various assignments involving both expository and creative writing; within this context, there is a strong focus on vocabulary, punctuation, and on writing effective sentences and paragraphs. In addition to mythology, literature texts may include, but are not limited to, such titles as *The True Confessions of Charlotte Doyle* and *The Sword in the Stone*.

#### **Seventh Grade**

Students read and study various novels, diaries, and texts about conflict. This course complements seventh grade World History at various points in the year, and in fact the first semester concludes with a Medieval Festival and Museum that involves English, history, and art classes. In composition, students write more advanced expository/analytical essays and creative pieces relating to themes in the reading texts; mastering more complex sentence structures and vocabulary is also emphasized. Literature studied may include, but are not limited to, such texts as *The Giver*, *The Diary of Anne Frank*, *The Hidden Children*, *Shabanu*, *Daughter of the Wind* and *A Christmas Carol*.

## **Eighth Grade**

“Readers are writers, writers are readers” sums up the philosophy behind English 8 and English 8 Honors. As a U.S. National Assessment of Educational Programs states, writing is “more than a way of knowing; writing is an act of discovery.” Students at this level research and prepare research paper practices. Throughout the year, students practice effective approaches to numerous expository and creative writing assignments, strengthening their editing, vocabulary and grammar skills along the way.

This course is regularly integrated with eighth grade American History, both through content and various projects/writing assignments. Literature studied may include, but are not limited to, such works as *To Kill a Mockingbird*, *A Midsummer Night’s Dream*, *A Separate Peace*, *The Pearl* and *Night*. Both reading and composition work are designed to prepare the student for work in these areas in the Upper School.

**Eighth Grade Honors** moves at a faster pace, covers more advanced literature and deals with more abstract concepts. It is expected that these students are more self-motivated and able to work well both independently and in groups.

## **International English Language Courses**

*The International English Language program at Andrews Osborne Academy is designed to provide intensive English language instruction and skill-building classes so that international students can successfully matriculate to mainstream classes. The goal of the program is to prepare students academically with a high level of proficiency in writing, speaking, reading comprehension, note taking, and cross cultural understanding so they may actively participate in non-International English Language classes.*

*Students must arrive at AOA with some knowledge of English, and the first level courses are suitable for students with an intermediate level of understanding. Non-native speakers of English are given multiple assessments to determine their proficiency in listening, speaking, reading and writing. They are placed into an appropriate sequence of courses to develop and refine these essential skills in addition to several sheltered instruction courses for more advanced students. Humanities and Integrated Science courses offer students additional skills development while working on content acquisition in scientific terminology and history.*

*International English Language classes develop multiple language abilities and teach the necessary skills to succeed in an American high school: the ability to write and speak clearly, to work independently, think critically, act cooperatively and join discussions effectively. Students must demonstrate proficiency at each level of the program before moving to the next level.*

## **Middle School International English Language Courses**

### **Middle School International English Language Course (1 period)**

This course will be an English language course that will work to improve intermediate students’ vocabulary and grammar while improving their English language skills in the four domains: speaking, writing, reading, and listening.

### **Academic Support**

The course is offered as a non-credit elective to students who feel that they can benefit from extra academic support. The goal of the class is to support international students as they adjust to a mainstream curriculum at AOA. Classes are offered two to three days per week, depending on the individual’s academic independence and readiness.

## **Fine and Performing Arts**

### **Middle School Visual Art**

*Middle school art follows a sequential body of content knowledge and skills that continually will broaden experiences and understanding of visual expression. Art as a means of self expression is a focus in grades 6-8. Students become more independent by producing expressive pieces that are meaningful to them. Students are engaged in problem solving and creative thinking as they compare and contrast their ideas.*

#### **Sixth Grade Visual Art**

Students in sixth grade use direct observation, personal experience, memory, and individual events as sources for their artwork. Students produce original pieces in two and three dimensions using pencils, markers, pastels, water based paint, printmaking materials, photographic materials, and electronic media. Printmaking techniques include stamping, found object, monoprint, stencil, and linoleum. Three dimensional materials that sixth graders use will include clay, paper mache, plaster, wood, wire, found objects, and the combinations of these media. Students begin to work freely and intuitively or execute plans from drawings.

#### **Seventh Grade Visual Art**

Seventh graders find source material for artworks from memory, imagination, self-perception, and observation of their world. Sketchbooks will become a valuable source for these ideas, observations, and planning of future works. Students will also begin to use concise vocabulary to compare the use of elements and principles of design in their own work and in the work of others. Imaginative combinations of materials to produce artworks will be used to produce two and three dimensional artworks. Students do more planning than in earlier grades, demonstrating more sophistication with two and three dimensional materials.

#### **Eighth Grade Visual Art**

Eighth graders find source materials for artworks from ideas about themselves, direct observation, memory, and imagination. Sketchbooks are used to record these ideas and observations for planning. Students will use vocabulary to compare the use of art elements and principles of design in personal works and in the works of others. They will use photography to study composition and to record events as possible sources for future artworks. Students will start to analyze the ways that artist-designers affect daily lives. Careers in art, portfolio presentation, and art history will be discussed to broaden student's knowledge of the importance of visual art.

### **Middle School Performing Arts**

*Andrews Osborne Academy believes that the Performing Arts Curriculum is essential to a well-rounded and disciplines academic program. We believe that participation in the performing arts facilitates the development of each student. Students in the Middle School will continue to have the opportunity to participate in a variety of music experiences. All Middle School students are required to participate in the Performing Arts Sampler in grades 6 -8. Opportunities in the Middle School also include specialized groups such as band, instrumental chamber music, and honors choir.*

#### **Middle School Performing Arts Experience**

This class will expose Middle School students to music, theater and dance. It will encourage the students to apply the creative process in hands-on ways. Subject areas will include choral experience, vocal technique, acting techniques, instrumental experience (Orff), basic dance styles, stage movement, and improvisational techniques. Students will perform in large and small groups. At times, the performances may be integrated with topics taught in the core subjects. As students work toward the performance of a finished product, such as the performance of a theater scene, song or dance, they practice and refine skills related to collaboration.

### **Middle School Concert Band**

This class will provide the students the opportunity to expand and improve their individual skills on their chosen instrument. Instruction will focus on areas of tone, intonation, range, technique, sight reading and music terminology. Individual practice and preparation of assigned musical passages will be expected. Through the study of published band literature, the areas of balance, blend and musical expression will be the focus of the band as the musicians practice to correctly interpret the composer's directions. Students in this class will participate in all required performances throughout the academic year. Other performing opportunities include District Solo and Ensemble contest and District Honors Band (nominated through the director of music). Participation beyond one year is recommended for students demonstrating musical aptitude.

### **Middle School Choir**

This chamber choir is chosen by student's interested in pursuing a choral experience. Students will prepare rigorous music to be performed in formal concerts. Students in the Choir will participate in the OMEA Honors Choir festival and the OMEA Solo and Ensemble Contest.

### **Middle School Drama**

This class will provide the foundation for students interested in all aspects of performance. From the stage to behind the scenes, students will experience the theatre.

### **Instrumental Chamber Music**

Students who wish to develop their instrumental skills are encouraged to participate in Chamber Music. Students will be grouped into instrumental ensembles based on skill level. Two formal concerts and a variety of "run-out" concerts will be given during the academic year. From time to time professional musicians from the Cleveland area will be invited to coach the students. Students will be encouraged to participate in the OMEA Solo and Ensemble Competition.

## **Foreign Language**

*In the Foreign Language department we work to develop the various skills of language and communication while analyzing other cultures and perspectives that help in the language learning process. Our classes are designed to aid in the development of communication skills: speaking, listening, writing and reading while building vocabulary, grammatical structure and cultural understanding. Since one of the main reasons for learning a second language is to communicate with others, we feel it is imperative that students are proficient in the various communication skills mentioned above. Although learning a list of vocabulary words will teach a student the building blocks of a language, if they cannot use it in context, it is not valuable information.*

### **Sixth Grade Spanish**

Sixth Grade Spanish continues to develop the fundamental skills of Spanish communication while making connections with the Latin American history being taught in their history course. Students will study various Latin American myths and legends while improving their skills of speaking, listening, writing and reading in Spanish.

### **Seventh and Eighth Grade Spanish**

The Seventh grade and Eighth grade Spanish courses cover upper school Spanish I material. Students are working on acquiring language through storytelling. As students develop their speaking, listening, writing and reading skills in Spanish, they also learn about various Hispanic and Spanish cultures. The courses are designed to assure active engagement and success for all types of learners. Successful completion of both courses and the final exam grade or a placement test will determine students' placement in upper school.

### **Seventh and Eighth Grade French**

This course is an introduction to essential French vocabulary, grammar, pronunciation, and culture. Students will demonstrate their language skills through skits, simple conversations, short reading selections, and directed writing. Cultural aspects of French-speaking countries, as well as history and geography, will be introduced. Computer and CD programs, tapes, and videos will be used to develop all skills and further the appreciation of the language and people.

### **Middle School – Upper School Foreign Language Transition**

In order for a Ninth grade student to take a Second Level/Year Foreign Language Course, they must earn an 80% on their “Year Percentage Grade (YPG)” during their Eighth grade year. The following “Grades” and “Weighting Percentages” will be used to factor the “YPG” at the end of the school year:

<b>Grades</b>	<b>Weighting Percentages</b>
<b>Semester I</b>	30% of “YPG”
<b>Quarter 3</b>	20% of “YPG”
<b>Quarter 4</b>	20% of “YPG”
<b>Final Exam</b>	30% of “YPG”
	= “YPG”

This procedure has been put in place to assure that a student will succeed in their second level of language study because of its challenging pace and rigor. Assuring that a student has a good foundation in their Level I language abilities is crucial to their success in the upper levels. If a student is doubtful of their abilities or they do not earn the 80% “YPG,” they will benefit by taking the Upper School Level I course, which mirrors the pace of Level II.

### **History**

*In the Middle School History curriculum students continue to build on the Global Studies program at the elementary school level. In the sixth grade student will look at the origins of civilization throughout the ancient world. Seventh graders study modern western culture and its impact on the world through colonization. Students focus on United States history, government and civics in the eighth grade course. Whenever possible, cross-curricular programs, primarily with the English and Art departments, take place at each grade level.*

### **Sixth Grade – Ancient Civilization**

This course is a broad introduction to the development of human civilizations with a special emphasis on ancient civilizations. Units include a study of civilizations in Africa, the Americas, Asia, Europe and the Middle East. Students examine theories of how human societies developed and evolved over time. Topics of study include the impact of geography on civilizations, cultural development and practices, forms of government and economies. Students will begin to develop skills important to their Middle and Upper School education such as research, writing, historical investigation and integrating subjects and skills across the curriculum.

### **Seventh Grade – Western Civilization & History Art**

The course of study for History 7 focuses on Western civilization from the Middle Ages to the Early Modern period. Students will begin the course looking at Medieval Europe and end with European colonization in the sixteenth and seventeenth centuries. Topics of study include cultural practices, the evolution of forms of government and economies, and philosophical and artistic movements. This course also includes a component

called History-Art, which is a collaborative, interdisciplinary endeavor between the art and history teachers. Through this part of the course several units of study will bring both historical/cultural and artistic/creative depth to our understanding of the civilizations we will be studying. History 7 also includes a collaborative Medieval Feast in the fall.

### **Eighth Grade – American History**

In American History, students examine the development of the country as seen through the expansion, politics, economics, social conditions, and cultural influences that created the United States. Historical eras, while presented chronologically, are integrated into general themes of Culture, The Rights of the Individual in Society, Decision Making and Compromise, and Human Rights in the Modern World. Special projects are undertaken throughout the year, including a trip to Washington D.C. and studies of the literature of different eras, which is coordinated with the English Department.

## **Mathematics**

*Mathematics is essential to all scientific research and technology. As a critical component of knowledge, it can be used effectively to refine the thinking abilities of maturing minds for which there exists a great need. In teaching the courses described below, the Mathematics Department seeks to provide a setting in which AOA students will:*

- *be exposed to the mathematics curricula needed to succeed in Upper School Mathematics courses and to subsequently accomplish intended career goals*
- *be called upon to demonstrate competency on all levels of the cognitive domain from knowledge to evaluation*
- *utilize the logical problem solving techniques when confronted with mathematical and non-mathematical problems*

### **Sixth Grade**

Students take Math 6 unless otherwise assessed at a different level. Placement will be based upon previous performance, teacher recommendation and/or a readiness assessment. Math 6 contains an introduction to integers, exponents and equation solving strategies while reviewing the order of operations and the manipulation of fractions and decimals. Several geometry concepts are discussed to include the vocabulary of plane and solid figures and triangular congruency and similarity.

### **Seventh Grade**

Math 6 students take Pre Algebra 7 or in Algebra I H in the seventh grade. Students new to the school may be given a readiness assessment to determine placement. The Pre Algebra 7 course continues the discussion of integers and equations with accompanying applications at a more rigorous level. Additional geometry concepts and linear graphs are also included.

### **Eighth Grade**

Students take either Pre Algebra 8, one of the Algebra I courses or one of the Geometry courses listed in the upper school section based upon their proficiency level and performance during the seventh grade. Students new to the school may be given a readiness assessment.

## Science

*The middle school science program of study is designed to best support a student for a challenging college preparatory upper school experience. During each year, students will not only be exposed to the foundations in content areas, but will also develop and build problem solving skills, including:*

- *predicting, estimating and observing*
- *laboratory experimentation, data analysis and scientific writing*
- *mathematics used in science [metrics]*
- *use of scientific and technologic equipment*
- *public presentation of their findings*

*To better prepare middle school students for their experience in upper school, the middle school science curriculum will spiral, emphasizing specific topics each year. Integration and interconnectedness of all sciences will be highlighted. In each year, application of basic knowledge, time management skills and communication [oral and written] skills will be stressed. Use of a portfolio component, to ensure student mastery of specific laboratory, writing, and practical skills will also be implemented. Mastery will be an invaluable tool in making recommendations for upper school placement in appropriate science classes.*

### **Sixth Grade – Earth and Space Science and Weather**

Students will demonstrate an understanding about how Earth systems and processes interact in the geosphere resulting in the habitability of Earth. This includes demonstrating an understanding of the composition of the Universe, the Solar System and Earth. Understanding the properties and the interconnected nature of Earth's systems helps students understand the processes that shaped the Earth and explain the Earth's history. The concepts and principles of energy, matter, motion and forces explain Earth systems, the Solar System, and the Universe. Students will also be exposed to historical perspectives, scientific approaches and emerging scientific issues associated with the Earth and space sciences.

### **Seventh Grade - Life and Environmental Science**

Students will demonstrate an understanding of how living systems function and how they interact with the physical environment. This includes an understanding of the cycling of matter and flow of energy in living systems. An understanding of the characteristics, structure, and function of cells, of organisms and of living systems are developed as well as an understanding of the principles of heredity, biological evolution, and the diversity and interdependence of life. Students demonstrate an understanding of different historical perspectives, scientific approaches and emerging scientific issues associated with the life sciences.

### **Eighth Grade - Physical Sciences**

Students will demonstrate an understanding of the composition of physical systems and the concepts and principles that describe and predict physical interactions and events in the natural world. This includes an understanding of the structure and properties of matter, the properties of materials and objects, chemical reactions and the conservation of matter. It also includes understanding the nature, transfer and conservation of energy, motion and the forces affecting motion, and the nature of waves and interactions of matter and energy. Students demonstrate an understanding of the historical perspectives, scientific approaches and emerging scientific issues associated with the physical sciences.

## **Physical Education/Health**

The students rotate among Physical Education and Health. A comprehensive physical education program encompasses development of the whole person. Unique contributions include the following: knowledge related to lifetime fitness concepts and development of cooperative, competitive, and leadership skills. Health is central to all learning. Students develop responsible health-promoting behaviors that contribute to the well-being of the individual and the community.

## **Middle School Technology**

*Computer courses at AOA are designed with the goal of educating students to be knowledgeable, flexible, and creative problem solvers who will use technology responsibly and safely and recognize its use globally. Our goal is to help students learn various technologies, see those technologies as tools, and begin to apply the use of those tools in all subjects for effective learning, both in school and throughout life.*

### **Sixth Grade**

Internet safety is a main focus in sixth grade. Issues covered include the school's Acceptable Use Policy, safe web surfing and researching techniques, plagiarism, copyright infringement, and "stranger danger" on the Internet. Keyboarding is continued with students working up to 30-35 WPM at 90% accuracy. Introduction to some of our multimedia software programs such as *imovie*, *PowerPoint*, *HyperStudio*, and *Adobe PhotoShop Elements* are taught in conjunction with integrated projects in History and Language Arts.

### **Seventh Grade**

Internet safety continues to be a core component in this middle school course, with a focus on being safe at home while using email, chats, IMing, blogging, etc. Students learn more sophisticated Internet searching techniques, allowing them to successfully find and evaluate relevant information. They create *PowerPoint* presentations and their own still picture animated short movies. Seventh graders learn how to use the digital cameras with an understanding of how to take quality pictures. Throughout the course, students work on projects integrated with other subject areas. Effective keyboarding is an expectation when working on any project.

### **Eighth Grade**

Eighth graders combine speech and presentation techniques with technology. They learn how to become comfortable in front of an audience through the lens of a video camera. They gain confidence in their ability to become accomplished writers and speakers. They also learn how to work the cameras and edit their projects to put together a final presentation. *Power Point* and other presentation software will also be used along with *imovie* and *Garage Band*.

## Upper School Vision Statement

The Andrews Osborne Academy curriculum emphasizes the importance of a lifelong engagement with the world. As a college-preparatory school, AOA offers a challenging curriculum that prepares students for future academic success, and purposeful, fulfilling lives. AOA strives to graduate citizens who can think critically, discuss important matters articulately, write persuasively, and act responsibly. AOA's challenging program of study is balanced by a tremendously supportive faculty. An average class size of 10 allows faculty members to get to know their students and understand their individual strengths and weaknesses. AOA's talented faculty and diverse and challenging curriculum affords students abundant opportunity to realize their potential.

Straddling the traditional and progressive in its offerings, the academic program at AOA, despite its small size, provides students opportunities to pursue avenues of interest in depth while gaining solid grounding in all academic disciplines. Committed to offering its students a well-rounded program, AOA builds its curriculum upon a solid foundation of English, Mathematics, Science, History, Foreign Languages, Technology and Fine Arts, offering many opportunities for advanced work in all areas. These core subjects are complemented and enhanced by AOA's electives in various disciplines, but whether it be Pre-Calculus or Biodiesel, the offerings at AOA all collaborate toward the development of critical thinking, communication skills, analysis, problem solving, logical thinking, and empathetic understanding of global social, political, and scientific issues. AOA's growing international population has necessitated the advancement of what is now a stable and strong ESL program that remains essential to the school's success as that contingent continues to grow.

AOA Upper School achieves this vision with each student through:

- Cross-curricular offerings at AOA enhance the learning experience of our students. Interdisciplinary offerings at all grade levels encourage our students to discern connections between and among academic fields that enrich their understanding of each discipline.
- Our course offerings accommodate the average to gifted learner, providing a diversity of curriculum that belies our size. AOA offers enough courses to cater to all abilities.
- The intuitive variety of pedagogical approaches at AOA enriches the learning of each student, allowing for the success of students with a variety of learning styles.
- AOA maintains a commitment to individualized attention for its students. Our philosophy celebrates it as a defining characteristic of an AOA education.
- AOA has responded to the increasing percentage of international students with an outstanding ESL program.

## UPPER SCHOOL COURSE OFFERINGS

*Credit for courses given in parentheses*

### **ENGLISH**

World Literature (1)  
World Literature Honors (1)  
British Literature (1)  
British Literature Honors (1)  
American Literature Foundations (1)  
American Literature (1)  
AP American Literature (1)  
Senior English (1)  
AP Senior English (1)  
Creative Writing (.5)  
Short Fiction (.5)  
Russian Literature (.5)  
European & American Drama (.5)  
Film History & Criticism (.5)  
Media Studies: Race, Gender & Class (.5)

### **MATHEMATICS**

Algebra I (1)  
Algebra I Honors (1)  
Geometry (1)  
Geometry Honors (1)  
Algebra II (1)  
Algebra II Honors (1)  
Pre-Calculus (1)  
Pre-Calculus Honors (1)  
AP Calculus AB (1)  
AP Calculus BC (.5)  
Probability & Statistics (.5)  
Statistics II (.5)  
Functions & Applications (.5)  
Applied Differential Calculus (.5)

### **SCIENCE**

Environmental Science (1)  
Advanced Environmental Science (1)  
Biology (1)  
Biology Honors (1)  
Advanced Biology (1)  
Human Biology (1)  
Chemistry Fundamentals (1)  
Chemistry (1)  
Chemistry Honors (1)  
AP Chemistry (1)  
Physics (1)  
Advanced Physics B (1)  
Biodiesel (.5)

### **HISTORY**

World History I (1)  
World History II (1)  
U. S. History (1)  
AP U. S. History (1)  
Advanced European History (1)  
International Human Rights (.5)  
Economics (.5)  
Ethics (.5)  
Government (.5)  
Entrepreneurship (.5)

### **FOREIGN LANGUAGE**

French I (1)  
French II (1)  
French III (1)  
French IV (1)  
AP French Language (1)  
Spanish I (1)  
Spanish II (1)  
Spanish III (1)  
Spanish IV (1)  
AP Spanish Language (1)

### **INTERNATIONAL LANGUAGE**

#### **PROGRAM**

Intermediate American Studies (3)  
Intermediate Grammar (1)  
Advanced World Studies (2)  
Advanced Grammar (1)

### **PHYSICAL EDUCATION**

Physical Education (.5)  
Health (.5)  
Fitness (.5)  
Health Topics (.5)

### **TECHNOLOGY**

Web Design (.5)  
Digital Imagery (.5)  
Intro to Computer Topics (.5)  
Robotics (1)  
Pre-Engineering (1)  
Yearbook (1)

### **FINE ARTS**

#### **Visual Art**

Drawing & Design (.5)  
Color & Design (.5)  
Ceramics (.5)  
Global Crafts (.5)  
Global Art (.5)  
Portfolio (1)

#### **Performing Art**

Concert Choir (1)  
Theatre Arts (1)  
Music Theory (1)  
Instrumental Ensemble (1)  
Jazz Band (1)  
Beginning Piano (.5)  
Beginning Guitar (.5)  
Voice (.5)

*All elective courses are tentatively scheduled. They may be dropped due to insufficient enrollment.*

**GENERAL REQUIREMENTS**  
*Up to and including the Class of 2013*

**All students are required to complete at least 24 units of credit to graduate.**

A. Credits distributed as follows:

1. **4 credits** in English
2. At least **minimum** credits in each of the following academic areas:
  - a. **3.5 credits** in History including:  
World History I, World History II, U. S. History, and Government
  - b. **3 credits** in Science including:  
Biology
  - c. **4 credits** in Mathematics including:  
Algebra I, Algebra II, Geometry, and Probability & Statistics
  - d. **3 credits** in Foreign Language
3. At least **1 credit** in Fine or Performing Arts
4. **.5 credit** (one half) in Physical Education
5. **.5 credit** (one half) in Health

B. To graduate, students must also:

1. Complete the Community Service hours required:  
Grades 9–12 = 16 hours per school year
2. Be accepted to at least one U. S. College or university

C. Clarifications:

1. Students taking Algebra I in eighth grade must still earn 3 credits in Upper School Mathematics.
2. Students taking French I or Spanish I in Middle School must complete up to a third level of Foreign Language study.
3. Students in grades 9 –12 must register for a minimum of 6 credits per semester.

## English Department

*The English Department emphasizes the continual development of language-arts related skills, especially those skills necessary for reading challenging literature and writing high-quality expository, creative, and research-based compositions. Preparation for college-level work is obviously the more immediate goal, but engendering a love for good literature and building the confidence that one can express oneself effectively throughout one's life are also a part of the departmental philosophy. In recent years, the department has taken the traditional but solid reading/writing/discussion-based curriculum and added some more modern texts and texts from non-western cultures. We have developed a more integrated curriculum that utilizes some cooperative learning experiences and alternative evaluation methods while retaining the effective traditional aspects of the program. For example, English 9 is taught in conjunction with World Studies I, but we have held onto the traditional course offering of Advanced Placement English for qualified seniors and added an Advanced Placement English course for juniors. At all levels we have incorporated writing portfolios, group and individual presentations, writing groups and selected projects; teachers still have some lecture/discussion days, teach the writing of traditional essays, and give a variety of tests over material. The department continues to incorporate applications for new technology as a tool for writing, research, and presentation. We are committed to encouraging each student to be self-reliant, responsible for their own work and for their own success.*

### **World Literature**

**Full year -1 credit**

This course is taught by integrating English and History by examining world cultures, history, and themes. The period of history covered runs from ancient civilizations to the Renaissance and includes both Eastern and Western cultures. Students also study the art, architecture, and music of the periods and take field trips to the Art Museum. Literature parallels the historical studies and includes such works as *Antigone*, *The Odyssey*, Old Testament passages, writings by Confucius, King Arthur stories, and *Romeo and Juliet*; modern works such as *Catcher in the Rye*, *The Joy Luck Club*, and *Ishmael* are also studied. Composition skills, close reading skills, and vocabulary are stressed, and students complete two research projects and make presentations on them.

### **World Literature Honors**

**Full year – 1 credit**

**Prerequisite: Departmental Approval**

Honors students in this course follow the same curriculum described above but are required to do additional readings and projects. It is expected that these students can work independently (both as individuals and in small groups) and that their reading and writing skills are already strong when the course begins. Honors students' work is evaluated using more demanding standards than those used for non-honors English.

### **British Literature**

**Full year - 1 credit**

This course curriculum provides an overview of British literature from the Anglo-Saxon period to the modern age. Major works typically covered include excerpts from *Beowulf*, Chaucer's *The Canterbury Tales*, Shakespeare's *Macbeth*, Shaw's *Pygmalion*, Achebe's *Things Fall Apart* and Orwell's *1984*. For about two months during the second half of the year, students work on their first formal research paper, which involves a trip to the Cleveland Public Library and specialized instruction on every step of the research process. Students also study poetry that reflects a variety of literary movements (romanticism, modernism, etc.), while working to improve their writing skills. Most often, vocabulary is studied in the context of novels and other texts, although an excellent workbook series is often used as a supplement. On-going journal writing provides fertile material for student-generated discussions and writing assignments throughout the year.

### **British Literature Honors**

**Full year - 1 credit**

**Prerequisite: Departmental Approval**

The honors curriculum provides a more in-depth overview of British literature, following the same outline as the non-honors class but requiring more writing assignments that display a greater level of depth,

thoughtfulness, and complexity. More specifically, honors students must read and write about two additional novels outside of class and write a longer research paper using more sources. Honors students are expected to have advanced reading and writing skills and to maintain interest in and dedication toward all class work.

### **Foundations of American Literature**

**Full year - 1 credit**

Following the same basic curriculum as the standard American Literature class, this course is designed for students who are proficient enough to be out of ESL classes but are still developing the essential skills required for the standard American Literature class. Likewise, the course is intended for native speakers with demanding learning plans. Lessons focus on developing proficient writing and comprehension skills.

### **American Literature**

**Full year - 1 credit**

The course is called *Moguls, Mavericks, and Virtuosos: The Individual's Weight on Society*, because this year-long survey of American Literature examines aspects of the individual's response to society. The individuals not only include fictional characters, but also the writers themselves whose lives often imitated their art. Students read and respond to works by great American writers such as: Hawthorne, Miller, Emerson, Thoreau, Whitman, Dickinson, Gilman, Twain, James, Chopin, Fitzgerald, Hurston, Hemingway, Capote, Irving, Baldwin, Carver etc. Parallel to our course of study, and in conjunction with U.S. History, students write a research paper that considers literature in its social and historical context.

### **AP American Literature Language and Composition**

**Full year-1 credit**

Here, too, students examine aspects of the individual's response to society, but the additional feature of this college-level course is a year-long study of rhetoric and composition, focusing on analysis and argument. While reading works by great American writers and related literary criticism, students prepare for the AP Language and Composition exam (given in May) by working on deepening their awareness of how language works. Students should have a desire to read for knowledge, write with the goal of exploring ideas and demonstrate a readiness for college. Parallel to our course of study, students write a research paper in conjunction with U.S. History. Summer reading and writing is required preparation.

### **Senior English**

**Full year-1 credit**

Senior English is divided into two sections. During the first semester all seniors not in English AP take "Composition for College", while for the second semester students must select one of the two literature-based courses.

#### **I. Composition for College (Required)**

Early in the class students read, discuss, and write about the plays that they will see at the Stratford Theatre Festival in Ontario, Canada. The focus then shifts to working on developing and reinforcing composition skills, both for the writing of essays for college applications and to prepare the student for college-level writing. Texts have included Hall and Birkerts' *Writing Well*, Hall and Emblen's *A Writer's Reader*, and Gerald's *Prose Models*. Students write a number of essays following the traditional rhetorical modes while working to polish their own writing styles.

#### **II. Studies in Literature (Required)**

Second semester offerings vary from year to year but have included such courses as: "Love and Loss," a thematic course examining these issues in dramas, novels, short stories, and poetry from around the world; "The Modern Novel," a course that uses novels written within the past forty years to explore themes prevalent in contemporary society; and "Women Writers in American Culture," which examines novels, dramas, short stories, and poetry written by American women from Colonial to modern times.

## **AP English 12 Literature & Composition**

**Full year - 1 credit**

**Prerequisite: Departmental Approval**

This course is designed to offer the equivalent of a college freshman/sophomore level introductory course to composition and literature. While it does help prepare the student for the AP Literature and Composition test, this is not its sole purpose. During the first semester, students study and write about the plays we will see at the Stratford Theatre Festival in Ontario, Canada and then undertake an intensive study of the genres of short fiction, drama, and poetry, using Perrine's *Literature: Structure, Sound and Sense*, a college-level text. A significant amount of essay writing is required. During the second semester, students split their time between writing a literature-based term paper and on AP-level dramas and longer works of fiction not covered in previous years. These works are organized around a central theme which may change from year to year and encompass such works as *Native Son*, *The Inferno*, *Othello*, *All the King's Men*, *Equus*, *The Collector*, and *The Color Purple*. There will be a first-semester examination and students are expected to take the AP exam, but no final exam is required. As with other honors courses, students must come into this course with reading and writing skills of considerable strength and with a positive work ethic.

NOTE: The English Department has available a list of expectations and requirements for honors and AP students.

### **Creative Writing (10-12)**

**Semester - .5 credit**

This workshop-style class is designed for students to explore and experiment with the world of story. Character development, dialogue, point of view, and other elements of fiction and creative nonfiction are clarified and used to develop personal style and voice. With the goal of developing a valuable level of self-trust as well as self-discipline, issues discussed include struggles and triumphs of students own writing such as short fiction, poetry, creative nonfiction, children's literature, and profile writing. Submitting two pieces for publication is a course requirement.

### **Short Fiction (10-12)**

**Semester - .5 credit**

Ranging from Gustave Flaubert to Augusten Burroughs, from the subtle and sublime to the outrageous and irreverent, this seminar is a survey course designed to examine the unique art and construction of the short story. Writing one short story to submit to the literary magazine is a class requirement.

### **Media Studies: Gender, Race, and Class (10-12)**

**Semester - .5 credit**

The goal of the course is to teach students strategies to engage with popular culture more consciously and deliberately so that they can be more effective media users in a media-driven age. Through analysis of print and television advertisement, film, television, and news, central to our study are the ways media construct meaning. Students contribute to course content by responding critically and creatively to readings and screenings (*Thank You for Smoking*, *Wag the Dog*, *Bamboozled*, *Persepolis*, & selected documentaries). Evaluation is fundamentally project-based and discussion oriented.

### **Film History and Criticism (10-12)**

**Semester - .5 credit**

Students examine the collaborative process of filmmaking and the social contexts of films. The course involves becoming familiar with film techniques and genres, the business of film, and screenplay writing. Students evaluate film criticism and write two focused film analyses, each with a strong thesis and a seamless integration of evidence.

### **Russian Literature (10-12)**

**Semester - .5 credit**

Some of the the greatest literature ever written – *War and Peace*, *Anna karenia*, *Crime and Punishment*, *The Cherry Orchard* – was created by a handful of Russian writers during the latter half of the century. We will read Dostoevsky's *Crime and Punishment*, novels, short sotries, poetry, and dramas by other writers of the times, including, Pushkin, Gogal, Tolstoy, and Chekov. The main text for the course is *The Great Books of Russia*.

## **European and American Drama (10-12)**

**Semester - .5 credit**

This course traces the development of Western Drama from its inception in Ancient Greece through the European and Middle Ages, the Renaissance, the Enlightenment, and the Romantic periods and finally to the modern American theatre. Author's studied include Sophocles, Shakespeare, Moliere, Ibsen, Arthur Miller, and August Wilson. The class will include reader's theatre experiences, discussions, films, and, when possible, attending live performances.

## **International English Language Courses**

*The International English Language program at Andrews Osborne Academy is designed to provide intensive English language instruction and skill-building classes so that international students can successfully matriculate to mainstream classes. The goal of the program is to prepare students academically with a high level of proficiency in writing, speaking, reading comprehension, note taking, and cross cultural understanding so they may actively participate in non-International English Language classes.*

*Students must arrive at AOA with some knowledge of English, and the first level courses are suitable for students with an intermediate level of understanding. Non-native speakers of English are given multiple assessments to determine their proficiency in listening, speaking, reading and writing. They are placed into an appropriate sequence of courses to develop and refine these essential skills in addition to several sheltered instruction courses for more advanced students. Humanities and Integrated Science courses offer students additional skills development while working on content acquisition in scientific terminology and history.*

*International English Language classes develop multiple language abilities and teach the necessary skills to succeed in an American high school: the ability to write and speak clearly, to work independently, think critically, act cooperatively and join discussions effectively. Students must demonstrate proficiency at each level of the program before moving to the next level.*

## **Intermediate American Studies Courses**

### **Intermediate American Studies**

**Full year- 3 credits**

The Intermediate American Studies Course is designed to develop the four domains of language proficiency: speaking, writing, listening and reading by way of a language arts program while introducing students to American culture, history, and government. The course should challenge students to not only remember facts and content, but more importantly, develop critical thinking and comprehension skills by application, analysis, evaluation and creation.

### **Intermediate Structure, Pronunciation and Reading**

**Full year-1 credit**

This course is a sister course to the Intermediate American Studies Course. This course will present grammar, language structure, pronunciation practice, and silent-sustained reading. Instead of focusing on content-rich materials, the students will continue to acquire language by:

- Grammar and writing instruction
- Silent Sustained Reading for acquisition per level (we must buy readers or SRA like program)
- Continued development of language in sheltered classroom.

### **Integrated Science 9, 10**

**Full year-1 credit**

Integrated Science is a first year science course for students enrolled in the upper school Intermediate American Studies Program. Although students may have had science courses in their native language, this course is

designed to provide a cooperative and supportive environment, allowing students the opportunity to focus on the English of science. Major scientific vocabulary, concepts, skills, and content necessary for more advanced science courses will be emphasized. This course focuses on the process of science as well as the foundations of biology, environmental science, chemistry and physics.

## **Advanced World Studies Courses**

### **Advanced World Literature Course**

**Full year-2 credits**

The Advanced World Studies Course is designed to fit the needs of students whose next step is mainstream classes but need a year of transition with more ESL training. The literature and content will reflect the topics covered in World Studies II course without forgetting the important aspects of English language development at a high intermediate/advanced level. The course should challenge students to continue to develop critical thinking and comprehension skills by application, analysis, evaluation, and creation at the 10<sup>th</sup> grade level. Continued exposure to new vocabulary is a fundamental aspect of the course design. Students will be required to produce a research paper while learning the process of writing a research paper.

### **World Studies II Course**

**Full year-1 credits**

The World Studies II course is a transition course for international students. Both the Advanced World Literature Course and mainstream 10<sup>th</sup> grade English Literature course will complement the content in this World Studies II course.

The World Studies II, Advanced World Literature Course, and 10th grade English Literature teachers will work together to assure writing, speaking and reading-level assignments are appropriate and preparing all students for the American Literature and History courses that follow.

### **Advanced Structure and Pronunciation Course**

**Full year-1 credit**

This course will present advanced grammar structure, syntax, and pronunciation. The course will complement the Advanced World Literature Course and present some grammar topics per the needs of the students and their performance in their writing abilities.

### **International English Language/ Mainstream Transitioning**

Students who successfully complete the Advanced World Studies Courses should be ready for the mainstream foundations or regular American Literature and American History courses. During the third or fourth quarters of the Advanced World Studies Courses, the International Placement Committee will assess the students' progress and make recommendations for the following school year. If it is determined that a student is not working enough to improve one's English language skills and academic reading, writing, and research skills, she or he will be warned that there is a possibility that she or he will not be able to return to AOA the following school year.

### **International English Language Students Enrolling in Honors and AP Courses**

In order to enroll in an Honors or AP Course, students must prove that they have the English language abilities and mental capability to handle the rigor of an Honors or Advanced Placement Course. In order to take an AP or Honors course, all students must:

- Complete the Advanced International Language Courses or be in mainstream courses
- Have an Interview with a member of the International Placement Committee and AP/Honors teacher to assess language proficiency in the course discipline
- Take the AP Placement Exam per discipline
- Meet the other requirements per department

*\*The results of the above factors will result in the approval from the Department Chair and AP/honors teacher granting permission. Please note that the final decision is made in the best interest of the student and the integrity of the course. All AP courses have been designed following the College Board AP descriptions. The recommendations based on the criterion outlined above, should be withheld regardless of complaints or petitions.*

### **International Summer Program**

This Intensive English Language Program should acclimate and challenge students while developing their English language abilities. The program will not be designed for students to skip Intermediate or Advanced Levels of the ***International Student Plan*** because these courses have been designed to teach all of the necessary skills of a College Preparatory education including Research, Critical Thinking, Academic Reading, and Academic Writing. If the Admissions Committee and English as a Second Language Faculty believe a student might be ready for the next level, after completion of the International Summer Program, after the Placement Process, a student may be ready for the next level of the International Student Plan.

The International Summer Program would also present students with many cultural experiences and opportunities for students to interact with domestic, native English speakers. The program will have a fun-tone but with an intensive academic focus with structure and boarding-school, behavioral expectations for all students.

### **Academic Support**

The course is offered as a non-credit elective to students who feel that they can benefit from extra academic support. The goal of the class is to support international students as they adjust to a mainstream curriculum at AOA. Classes are offered two to three days per week, depending on the individual's academic independence and readiness.

## **Mathematics Department**

*The many colleges and universities that our students have and hope to attend are increasingly recommending at least four years of mathematics courses at the Upper School level. Even undergraduate programs where mathematics courses play a little role, the logical and sequential thought processes nurtured in Upper School mathematics prove valuable to the professional development and training in virtually all disciplines. Effort is consequently made to incorporate as many application-oriented and thought provoking experiences as is possible in our courses.*

*The major focus of technology for the mathematics courses centers around the appropriate use of calculators both in and out of the classroom. Students regularly use the graphing calculator models from Algebra II courses to the Calculus courses while more basic models are used in the Middle School and early Upper School courses.*

### **Algebra I**

**Full year - 1 credit**

**Prerequisite: Departmental Approval**

Designed for those students who have successfully completed the concepts and skills of Pre-Algebra, this course incorporates the classical topics of beginning Algebra, including operations with signed numbers, writing and solving equations and inequalities, exponents, graphing, factoring, and radicals.

## **Algebra I Honors**

**Full year - 1 credit**

**Prerequisite: Departmental Approval**

Intended for the strong student of mathematics, this course includes the classical topics of beginning Algebra taught in considerable depth and at an accelerated pace. Those eighth grade students who have successfully completed Pre-Algebra are eligible for this course, as well as strong ninth grade students who are new to AOA.

## **Geometry**

**Full year -1 credit**

**Prerequisite: Algebra I**

This is the traditional, formal Euclidean geometry course. The nature of the deductive proof is explored, though not emphasized. Students also continue to use their algebraic skills in solving numerical problems dealing with geometric relationships. Topics include congruence, similarity, triangles, other polygons, circles, parallel and perpendicular lines, area, and volume. This course will include four integrated projects involving the art applications of geometry. These projects will be team taught by the Mathematics and Art Departments, allowing the students the added experience of learning mathematics through art.

## **Geometry Honors**

**Full year - 1 credit**

**Prerequisites: Algebra I, Departmental Approval**

This course is intended for the more advanced student of mathematics. The content of the course is similar to that of Geometry as previously described, but the pace is faster, and the concepts are studied in greater depth. The course will include four integrated projects involving the art applications of geometry. These projects will be team taught by the Mathematics and Art Departments, allowing students the added experience of learning mathematics through art.

## **Algebra II**

**Full year – 1 credit**

**Prerequisite: Algebra I**

The central ideas of Algebra I are reviewed as students move on to more advanced topics in algebra, including quadratic systems, logarithms, variation, graphing, conic sections, and problem solving. A student-provided graphing calculator is a course requirement.\*\*

## **Algebra II Honors**

**Full year - 1 credit**

**Prerequisites: Algebra I, Departmental Approval**

Intended for strong students of mathematics, this course continues the study of algebraic concepts in greater depth and at a faster pace. Topics include quadratic systems, logarithms, conic sections, functions, and determinants. A student-provided graphing calculator is a course requirement.\*\*

## **Pre-Calculus**

**Full year - 1 credit**

**Prerequisites: Algebra II, Geometry, Departmental Approval**

Pre-Calculus is an elective course for seniors who are above average in their skills and who wish to take four years of mathematics. The content is much the same as that described for the honors Pre-Calculus course but includes greater emphasis on applications and problem solving than on theory. A student-provided graphing calculator is a course requirement.\*\*

## **Pre-Calculus Honors**

**Full year - 1 credit**

**Prerequisites: Algebra II, Geometry,  
Departmental Approval**

An elective for honors mathematics students, this course places considerable emphasis upon the thorough investigation of elementary functions and their applications, including those which are trigonometric, logarithmic, exponential, rational, or polynomial in nature. A student-provided graphing calculator is a course requirement.\*\*

*To qualify for Pre-Calculus, students must earn at least a B- in the second semester of Algebra II and at least a C- on the Algebra II second semester examination.*

## **AP Calculus AB**

**Full year - 1 credit**

**Prerequisites: Pre-Calculus Honors,  
Departmental Approval**

Students expand their understanding of functions as applied to the concepts of limits, derivatives, integrals, and the applications of derivatives and integrals. It is expected that students in this course will take the AP examination in Calculus. A student-provided graphing calculator is a course requirement.\*\*

## **AP Calculus BC**

**Semester – .5 credit**

**Prerequisite: AP Calculus AB**

This course is designed to prepare students for the Calculus BC Advanced Placement exam. A brief review of the Calculus AB material is followed by a study of the operations of parametric and polar equation systems including derivative and integral applications and an introduction to sequences and series manipulations. More advanced graphing analysis follows to provide a foundation for multi-variable Calculus topics. A student-provided graphing calculator is a course requirement. \*\*

## **Probability & Statistics**

**(fall) Semester—.5 credit**

**Prerequisite: Algebra II**

This course is designed to provide students with the fundamental concepts of probability and probability distributions and an introduction to descriptive and basic inferential statistics. It also may be taken concurrently with either Pre-Calculus or Calculus AP courses. A student-provided graphing calculator is a course requirement. \*\*

## **Statistics II**

**(spring) Semester- .5 credit**

**Prerequisite: Probability & Statistics and  
Mathematics Department approval**

This course is designed to provide students who have completed the Probability and Statistics course with an introduction to more advanced statistical topics and techniques including correlation, regression, analysis of variance and nonparametric methods. Emphasis will be placed on research project design and implementation. A student provided graphing calculator is a course requirement. \*\*

## **Functions & Applications**

**(spring) Semester—.5 credit**

**Prerequisite: Algebra II**

This course is designed for students who have not met the requirements for Pre-Calculus. Course content includes a thorough review of exponent and simplification operations and an introduction to basic functions, trigonometric ratios, exponential and logarithmic functions and their applications. A student-provided graphing calculator is a course requirement.\*\*

## **Applied Differential Calculus**

**(spring) Semester—.5 credit**

**Prerequisite: Pre-Calculus**

This course is designed for students who have not met the requirements for AP Calculus. Course content includes the concept of a limit and the derivatives of polynomial, rational, algebraic, exponential and logarithmic functions, and various applications using those concepts and functions. A student-provided graphing calculator is a course requirement.\*\*

## **Multi Variable Calculus**

**(spring) Semester—.5 credit**

**Prerequisite: AP Calculus BC**

This course is designed to introduce students to the fundamental operations and basic applications of multiple independent variable Calculus. Discussed topics include partial and total derivatives, vector-valued functions, multiple integrations and their application to three-dimensional analysis. A student provided graphing calculator is a course requirement.\*\*

**\*\*The Texas Instrument graphic calculator models TI-83, TI-83 Plus, and TI-84 and TI-84 Plus are recommended and will be used in classroom demonstrations.**

## **History Department**

*The primary goal of the faculty of the History Department at AOA is to help students achieve their potential as critical thinkers and active citizens. Besides the focus on an in-depth study of material, skill development is stressed at all levels of the curriculum, including primary document analysis, critical reading and writing, geography, research and rhetoric. The department also encourages students to develop technology skills and incorporate them into their learning process through research and presentations. A further goal is to explore all facets of the human experience through social and cultural history – an investigation of the groups and trends that drive history – as well as political and economic movements. The History Department pursues productive working relationships with other departments in order to promote a cross-curricular approach to subjects. Lastly, it is the goal of the department to offer as wide a variety of courses and electives as possible to expose students to diverse subjects and approaches in history and the social sciences. The department stresses a high standard of student achievement that promotes a solid work ethic, fosters self-reliance, and encourages an understanding of global cultures and communities. The faculty also attempts to respect the diversity of the student body – in all its forms – in its approach to topics and teaching methods.*

### **World History I**

**Full year - 1 credit**

This combined course is taught in two separate class periods, but English and History are integrated through examining world cultures, history, and themes. Students investigate some of the important cultural, religious, political, and intellectual developments in the prehistoric, ancient, and medieval worlds. Areas of focus include Africa, the Americas, Asia, Europe, and the Middle East. Emphasis is placed on developing critical thinking and writing skills, as well as the principles and methods of historical research. Students will study works of literature that parallel the historical periods and cultures being examined. A number of research and creative projects are required.

### **World History II**

**Full year - 1 credit**

In this course, the influence of world politics, the arts, economics, science, and religion and their contribution to humankind's current condition are studied from the Renaissance to the present. Students explore such global themes as cross-cultural encounter, political development, scientific and technological development, the arts, literature, revolution and social change, Africa and Asia before and after imperialism, nationalism, the world wars, communism, fascism, the Holocaust, and post-World War II international developments.

**United States History****Full year - 1 credit**

This course chronologically traces the history of the United States from the period of Exploration and Colonization through the present day. Emphasis is placed upon the development of writing and analytical skills as well as on class discussion. A research paper in conjunction with the English Department is required.

**AP United States History****Full year - 1 credit****Prerequisite: Departmental Approval**

The advanced placement program in U.S. History is designed to provide students with the analytical skills and factual knowledge necessary to critically examine social, political, and economic issues in American history. The course makes demands upon students equivalent to those of full-year, introductory college courses. Assessment of historical materials, their relevance to a given interpretive problem, their reliability, their overall importance, and the weighing of evidence and interpretations presented in historical scholarship are emphasized. A major research paper in conjunction with the English Department is required. It is expected that students in this course will take the AP test in United States History.

**AP European History****Full year – 1 credit****Prerequisite: Departmental Approval**

Advanced European History is designed to provide students with a college level introductory course on European history from the Renaissance to the present. Students investigate the major themes of modern European history in terms of political, economic and social continuity and change to the present day. Historical research, interpretation, and writing are emphasized through an extensive study of primary documents. A special emphasis is placed on the role and evolution of artistic expression and intellectual movements. Students enrolled in the course are expected to take the AP exam in May.

**\*International Human Rights****Semester – .5 credit**

In this course students will look at how individuals and groups have fought for human rights in various areas of the world during the twentieth century. After an introduction to the development of human rights in history, students will examine specific case studies of human rights struggles in India and South Africa. Other topics will investigate the global fight for human rights and how they emerged in Latin America, Asia, and the United States. Students will also look at current struggles where they appear. Most of the reading materials for this course will be primary documents from people who were or are involved in these struggles, as well as novels, biographies and film.

**\*Economics****Semester-.5 credit**

Economics provides students with an understanding of the basic principles of economic policies and how individuals, communities, and societies influence and are affected by them. The course integrates economic theory with practical examples and exercises that demonstrate the role of economic decision-making in students' lives. Special emphasis is placed on the global economy and how it affects national and local economics and politics.

**\*Entrepreneurship****Semester - .5 credit**

Starting with the basics such as “what is an entrepreneur to how do I find opportunities to start a business?” this course takes you step – by – step through the process of planning, starting and running an actual business. You will also learn the basic concepts of business and tax law, business ethics, building relationships and wealth management to protect and grow your business.

**\*Ethics****Semester - .5 credit**

Ethics is a course which will stimulate students to identify and delineate ethical issues, to become more aware of value considerations in decision making, and to work toward setting priorities in personal ethical systems.

The course will concentrate on selected ideas and moral questions of concern to contemporary authors. Students will be expected to participate in discussions based on assigned readings and on their individual analysis of particular ethical issues.

### **\*Government**

**Semester - .5 credit**

The government course is designed to explore the features and functions of the United States government and our political system. Students will also have the opportunity to discuss population trends and the effect of these trends on our system. Comparisons between democratic and totalitarian societies are also made. Students are expected to participate in class discussions.

*\* Students must receive permission by the History Department to take electives.*

## **Science Department**

*The Science Department believes that all students should develop an appreciation of the world around them, an understanding of basic scientific principles, a working knowledge of the scientific method to solve problems, and excellent observation skills. The department emphasizes learning techniques and strategies to maximize studying science. By offering a variety of courses in life and physical sciences, and by using illustrations and models applicable to everyday life, we strive to provide our students with a strong scientific background. Curriculum is designed to provide students with opportunities to perform the process of science, and to develop logical, creative, and critical thinking skill necessary for problem solving. Teachers also expose students to possible careers in science and science-related fields, and encourage students to participate in many science-related programs.*

### **Integrated Science 9, 10**

**Full year – 1 credit**

Integrated Science is a first year science course for students enrolled in the upper school Intermediate ESL program. Although students may have had science courses in their native language, this course is designed to provide a cooperative and supportive environment, allowing students the opportunity to focus on the English of science. Major scientific vocabulary, concepts, skills, and content necessary for more advanced science courses will be emphasized. This course focuses on the process of science as well as the foundations of biology, environmental science, chemistry and physics. The major goals include strengthening the students' ability to:

- apply scientific concepts and techniques from multiple science disciplines
- analyze the characteristics, changes, and interactions of living organisms and their environment
- apply knowledge of cell structures and processes
- apply the properties and principles of matter and energy
- apply the properties and principles of forces and motion
- develop more effective oral and written communication

### **Environmental Science 9, 10, 11, 12**

**Full year—1 credit**

This course will provide students with a basic understanding of complex environmental problems such as air and water pollution, soil and land degradation, loss of species diversity, ozone depletion, and global climate change. Students will investigate ecological principles such as evolution and the interdependence of organisms, biogeochemical cycles, energy flow, and how the physical environment impacts, and is changed by, living organisms. Nonrenewable and alternative (solar, wind, water) energy sources will be critically evaluated. Environmental law and policies will also be examined. Field and lab activities, projects, and field trips are integral parts of this course.

**Biology 10, 11, 12****Full year - 1 credit****Prerequisite: Environmental Science**

This general biology course studies basic cell structures and functions, how cells get and use energy, heredity, evolution, classification, and the diversity of living things. Laboratory work includes classroom activities and projects.

**Biology Honors****Full year - 1 credit****Prerequisite: concurrent Geometry Honors, Departmental Approval**

This course examines the various aspects of scientific investigations, ecology, the chemistry of living things, cellular structures and their functions, energy transformations, molecular biology (DNA), genetics, and evolutionary history. Emphasis is placed on the importance of structure and function in all living things, diversity and continuity of living things, and application of major scientific principles. Laboratory work is an integral part of the course.

**Human Biology 11, 12****Full year – 1 credit****Prerequisite: Biology and Chemistry**

The Human Biology course will take a conceptual approach to the major body systems as well as medical terminology, anatomical directions, and structure and function of various organs. Current methods of disease prevention, detection and treatment will be studied through the use of case studies and real-world, practical applications of anatomy and physiology. Topics will include: an overview of the body, cytology (cells), histology (tissues), and major organ systems (Integumentary, Skeletal, Muscular, Endocrine, Nervous, Respiratory, Cardiovascular, Blood and Immunology, Digestive, Excretory, Reproductive). Assessments will include homework, tests and quizzes, labs, including mandatory dissections of preserved specimens, and projects.

**AP Biology 11, 12****Full year—1 credit****Prerequisites: Honors Biology, Honors Chemistry, Departmental Approval**

This course follows the Advanced Placement Biology syllabus, exposing students to a college level curriculum and preparing them for the national AP exam in May. Upon passing the national exam in May, students may receive credit and/or placement by the colleges and universities in accordance with their individual program's policies and criteria. Emphasis is on the major themes of biology: molecules and cells, heredity and evolution, and organisms and populations. Laboratory investigations and problem solving skills are used to approach science as a process.

**Chemistry Fundamentals 10, 11, 12****Full year – 1 credit**

Chemistry Fundamentals encompasses the composition and properties of the components of food and the chemical changes they undergo. Students will use the scientific method to study the biochemical basis of food preparation, processing and preservation. The primary compounds found in foods are carbohydrates, lipids and proteins. Experiments and background information will focus on the chemistry of these compounds, and their functional properties and structures.

**Chemistry 10, 11, 12****Full year - 1 credit****Prerequisite: Algebra II concurrent**

This course allows a student the opportunity to participate in a quantitative science course that stresses abstract concepts related to matter, energy, and their interaction. Laboratory activities allow students to experience standard laboratory techniques while enabling them to observe the connection between theory and the scientific process. Chemistry is not represented as a collection of facts but is gradually and logically explored.

**Chemistry Honors 10, 11, 12****Full year - 1 credit****Prerequisite: Departmental Approval, Algebra II Honors concurrent, Biology H**

This course is designed for the student who is strong in math and science. The emphasis is on problem solving, which is explored through experimentation and observation and deals with the properties and reactions of material. It is concerned with the identification, characterization, and transformations of matter and with the energy changes involved in these transformations. Computers are used to collect and analyze data, and laboratory exercises are investigative in nature.

**AP Chemistry 11, 12****Full year—1 credit****Prerequisite: Departmental Approval**

This course follows the Advanced Placement Chemistry syllabus, exposing students to a college level curriculum and preparing them for the national AP exam in May. Upon passing the national exam in May, students may receive credit and/or placement by the colleges and universities in accordance with their individual program's policies and criteria. Topics covered include stoichiometry, atomic theory, chemical bonding, solutions, thermochemistry, thermodynamics, chemical equilibrium, kinetics, electrochemistry, and organic chemistry. The laboratory investigations are a major part of the curriculum and support each of the topics covered.

**Physics 11, 12****Full year - 1 credit****Prerequisite: Algebra II, and Chemistry concurrent pre-Calculus, Departmental Approval**

This course investigates the laws and principles that govern the behavior of the physical world. Topics include the structure of matter, mechanics, kinematics, gravity, electricity and magnetism, heat and thermodynamics, and optics. Experimental procedure and reasoning are emphasized. This course includes laboratory work.

**AP Physics B 11, 12****Full year - 1 credit****Prerequisite: Honors Algebra II, Honors or Regular Pre-Calculus, Honors Chemistry, Biology, Departmental Approval**

Advanced Physics is a math intensive introductory college survey of the major fields of physics with a non-calculus based approach. The course emphasizes themes in mechanics, electricity and magnetism, fluid mechanics and thermal physics, waves and optics, and atomic and nuclear physics. In addition to lecture based classes, special focus is placed on laboratory experiments using contemporary technology and methods. To qualify for this class students must earn an A or B grade at semester in the prerequisite courses listed.

**Biodiesel 11, 12****Semester- .5 credit****Prerequisite: Chemistry, Departmental Approval**

The Biodiesel course will examine the chemistry, physics and environmental aspects of the alternative fuel, biodiesel, in detail. Students will learn the chemical composition of this environmentally favorable fuel, as well as the reaction mechanisms behind its production. After completing a primer on biodiesel, students will produce micro and macro quantities of biodiesel through the use of our biodiesel processor. Students will examine the thermodynamics and efficiency of using biodiesel to power actual machinery. As a final project, the class will market the benefits of biodiesel to the Willoughby and Lake county communities, offering any additional biodiesel not consumed on campus to non-profit organizations.

## **Foreign Language Department**

*The importance of learning a second language embodies the essence of the AOA Community: a global environment that embraces diversity and respect. While students learn about another culture by studying cultural artifacts, literature, art, performances, and film, our program also offers the opportunity for students to analyze their own culture with the added advantage of being part of a truly international experience because of the make-up of our community. An AOA student should be able to use what they have learned about their second language linguistically, culturally and analytically, enabling them to become self-reliant in a fast-changing global society.*

### **French I**

**Full year - 1 credit**

French I is an introduction to essential French vocabulary, grammar, pronunciation, and culture. Students will demonstrate their language skills through skits, simple conversations, short reading selections, and directed writing. Cultural aspects of French-speaking countries, as well as history and geography, will be introduced. Computer and CD programs, tapes, and videos will be used to develop all skills and further the appreciation of the language and people.

### **French II**

**Full year - 1 credit**

**Prerequisite: French I**

French II develops communication skills through vocabulary expansion, grammar studies, creative writing, and impromptu dialogues. Computer programs, CD's, and videos are used to increase listening skills and speaking fluency. Short stories and poetry are introduced to enhance literacy and cultural appreciation.

### **French III**

**Full year - 1 credit**

**Prerequisite: French II**

French III students continue their study of advanced grammar, vocabulary, and idioms to improve ability in writing, reading comprehension, and speaking. Students will deepen their knowledge of French-speaking areas through a study of history, culture, and civilizations. Magazines, cultural reports, literature CD's, computer programs, and videos supplement classroom materials.

### **French IV**

**Full year—1 credit**

**Prerequisite: French III or Departmental Approval**

French IV students continue their study of advanced grammar in order to refine the necessary skills needed for both written and oral communication. French and Francophone literature is read, discussed, and looked at from historical, social, and cultural perspectives. Students will also study the history and development of French-speaking people in France and in other Francophone countries. Students participate in classroom discussions, make presentations, and write frequent compositions including one research paper.

### **AP French Language**

**Full year—1 credit**

**Prerequisite: Departmental Approval**

The French Language AP course focuses on the mastery of communicative language skills rather than on the content of specific texts. The objectives of the course include:

- 1) developing the ability to understand spoken French in various contexts
- 2) developing a French vocabulary sufficient for reading newspaper and magazine articles, literary texts, and other non technical writings without dependence on a dictionary
- 3) developing the ability to express oneself in French (both orally and in writing) coherently, resourcefully, and with reasonable fluency and accuracy

## **Spanish I**

**Full year - 1 credit**

Spanish I students work on the acquiring of language through storytelling and reading. As students develop their speaking, listening, writing and reading skills in Spanish, they also learn about various Hispanic and Spanish cultures. During the Spanish I course, students study and compare and contrast the lives of people in Mexico, Guatemala and Chile just to name a few. The course is designed to assure active engagement and success for all types of learners.

## **Spanish II**

**Full year - 1 credit**

**Prerequisite: Spanish I**

Spanish II students continue to develop their listening, speaking, reading and writing abilities through reading and storytelling. Language and culture come alive in the classroom while reading, listening and creating stories, plays, songs, dialogues, and a variety of other projects and kinesthetic activities. Students make connections between Hispanic cultures and the communities around them through videos, computer research and other cultural experiences.

## **Spanish III**

**Full year - 1 credit**

**Prerequisite: Spanish II**

Spanish III students continue to build upon the skills, ideas and content learned in their previous courses. Cultural content, vocabulary and grammar will be taught in a variety of ways while students explore various interdisciplinary units such as *Our Place in the Environment*, *Central and South American Indigenous Cultures and their Legends*, *Hispanic Foods and Cooking*, and *Theatre and the Arts*.

## **Spanish IV**

**Full year - 1 credit**

**Prerequisite: Spanish III or  
Departmental Approval**

Spanish IV students continue their study of advanced grammar in order to refine the necessary skills needed for both written and oral communication. Spanish and Latin American literature is read, discussed, and looked at from historical, social, and cultural perspectives. Students will also study the history and development of Spanish-speaking people in Spain and Latin America. Students participate in classroom discussions, make presentations, and write frequent compositions including one research paper.

## **AP Spanish Language**

**Full year – 1 credit**

**Prerequisite: Departmental Approval**

The AP Spanish Language course focuses on the mastery of communicative language skills rather than on the content of specific texts. The objectives of the course include:

- 1) developing the ability to understand spoken Spanish in various contexts
- 2) developing a Spanish vocabulary sufficient for reading newspaper and magazine articles, literary texts, and other non technical writings without dependence on a dictionary
- 3) Developing the ability to express oneself in Spanish (both orally and in writing) coherently, resourcefully, and with reasonable fluency and accuracy

## Fine Arts Department

### Visual Art

*Art courses in grades 9-12 are designed for all students. For some students, upper school art courses conclude their formal art training. For others, the courses prepare them for post secondary studies in art and art related fields. Our program is designed to accommodate the needs of students who will be art appreciators and non-professional and professional artists. The unique learning experiences in art classes complement the characteristics of adolescents and young adults who are receptive to challenging creative study.*

#### **Drawing & Design**

**Semester—.5 credit**

This course is designed to improve student's drawing techniques, compositional skills, and visual conception. Gesture drawing, perspective, caricatures, illusion, and expressionism are among the topics explored. Graphite and ink are the primary media used.

#### **Color & Design**

**Semester— .5 credit**

This course has a two-fold design: part drawing, and part emphasis on the development of ideas using a free mix of media, from colored pencil, pen and ink, and conte crayon, to pastels, acrylics, and watercolors. Our focus will be on the unique visual perception and way of placing images on paper, canvas, and fabric. Students will study images and color through still life, landscape, and the figure, and be challenged by subject matter ranging from realism to abstraction. Experimental techniques in mixed media will also be explored.

#### **Global Art – A Passport to Personal Expression**

**Semester - .5 credit**

This class will explore art and art history from various cultural themes around the world. Projects will be varied and students will be exposed to art and design from ancient cultures to modern ideas and motifs. Two dimensional art mediums and mixed media will be used by students to create personal visual communication and expression. The student will be encouraged to create their own imaginative style.

#### **Global Craft**

**Semester - .5 credit**

Crafts are characterized by the use of real materials native to a land, such as clay, wood, fabric, metal, glass, paper, and yarn. A craft is a skill involving practical application to create a functional or utilitarian product. Students will discover what differs and sets each culture apart by how they use materials, media, and tools. They will explore materials and techniques such as hand felting, jewelry making, paper making, textiles, metal repousse, or altering already made objects. Students will also work on expressing themselves through thoughts, feelings, and acts of creation imparting their own personal vision.

#### **Ceramics**

**Semester—.5 credit**

Students explore the multi-faceted world of clay through a variety of forming, glazing, and firing techniques. Concentrated instruction will be given in hand-building techniques such as pinching, coiling (hand & extruded), and slab techniques. Students will also be introduced to wheel thrown ceramics and clay sculpture. Students will explore and experiment with a range of approaches to surface decoration such as the use of various glaze applications, and carving on pots.

#### **Portfolio**

**Full year—1 credit**

**Prerequisite: Drawing and Color**

This course is designed for the highly motivated art student who is ready to develop a concentration in art. This student will complete a series of works that are organized around a compelling visual concept and will also demonstrate a depth of investigation and process of discovery. The students will be encouraged to experiment with various techniques and media. Advanced students applying to Professional Art Schools and Art majors in

College will prepare a portfolio according to college specific portfolio preparation guidelines *Recommended for juniors and seniors unless otherwise approved through a portfolio review.*

## **Performing Art**

*Music education enables students to interact with sound, simultaneously engaging mind, body and spirit. Through performing and listening to music, students experience the ways in which music evokes and conveys thoughts, images, and feelings. Our Upper School Choirs and Instrumental Ensembles are performance oriented programs designed to incorporate principles of melody rhythm, harmony and musical jargon into the student's awareness. Students will also begin to understand how music reflects cultures and trends both past and current. Individual responsibility and collective accountability are primary concepts and goals as well as developing a love and appreciation of music for lifelong learning.*

*Drama is designed to provide students with an interest in theatre as an outlet for creating and nurturing their talents. Students learn through scene work and full-length plays the importance of theater as an art form and its ability to reflect cultures and trends from which it comes. Drama provides students with opportunities to examine human experience through imagined roles and situations and to value the essential contribution of drama to their quality of life. Drama helps students develop intellectually by expanding their capacity for creative thought, expression, and critical thinking. Students work cooperatively and are provided with opportunities to demonstrate leadership skills. Other aspects of production, costume, set and lighting design as well as music where appropriate are incorporated into the performances.*

### **Concert Choir (Bel Canto Chorale)**

**Full year – 1 credit**

This performance-oriented course focuses on developing higher levels of musicianship, including proper vocal technique. Through choral preparation and performance, students in the class will develop skills in vocal production, music literacy, and music theory. Three formal concerts are presented during the year. A variety of “run-out” concerts are also presented. Students explore and experience how music reflects historical and cultural aspects of the past and present. Developing individual responsibility, collective accountability, and a lifelong appreciation of music are goals of the class. Attendance is required at all school concerts as well as choral festivals, competitions, and other performances outside of the school. Solo and ensemble contest preparation is also encouraged. Participation beyond one year is recommended for students demonstrating musical aptitude.

### **Instrumental Chamber Music**

**Full year – 1 credit**

**Prerequisite: two years of instrumental study and/or approval by instructor**

Students who wish to develop their instrumental skills are encouraged to participate in Chamber Music. Students will be grouped into instrumental ensembles based on skill level. Two formal concerts and a variety of “run-out” concerts will be given during the academic year. From time to time professional musicians from the Cleveland area will be invited to coach the students. Students will be encouraged to participate in the OMEA Solo and Ensemble competition.

### **Theater Arts**

**Full year – 1 credit**

A general overview of the components of theatre will be covered in this class. Students will learn the basics of theatre history, play production and performance. Students will study aspects of scene work, acting technique and characterization. The class will work collaboratively to build an ensemble, analyze plays and characters. Specific curriculum will focus on the development of students' understanding of theatrical performance and production and the ability to take creative risks. The class will culminate in a showcase of theatrical performances.

**Voice Class****Semester - .5 credit**

Voice class is an offering in vocal music and is open to all male and female students in grades 9 – 12. Voice class is designed for students who enjoy singing and wish to improve their vocal technique. Emphasis is placed on achieving a balanced, blended vocal sound through a variety of challenging music from the solo repertoire of many cultures, styles and historical periods. Various vocal concepts will be studied, including proper vocal technique, rehearsal, practice routines, music reading, writing skills, aural skills, personal expression and teamwork.

**Music Theory****Full year – 1 credit****Prerequisite: knowledge of music and fundamentals and/or approval by instructor**

This semester course is designed to teach the basic elements of music theory, history, composition and analysis. It is designed to build your musicianship, the ability to hear, perceive, understand, learn, and perform music. Through graded exercises, your inner ear will be developed to hear rhythms, melodies, and harmonies, and through regular practice, you will develop the ability to perform, transcribe complex rhythms, melodies, and harmonic progressions.

**Jazz Band****Full year – 1 credit**

This is a performance class which will provide instrumental students the opportunity to develop their skills in the various music styles that define “Jazz”. The focus of the class will be advanced development of individual and ensemble Jazz skills. Areas of study will include basic music theory and improvisation. Two concerts will be presented during the year.

**Beginning Guitar Class****Semester - .5 credit****Prerequisite: students must provide their own Acoustic 6 string Guitar**

This is a class which teaches basic guitar concepts within a class setting. Students will be introduced to the basic fundamentals of guitar playing, scales, chords, triads, techniques and music literacy.

**Beginning Piano Class****Semester - .5 credit**

This is a class designed for students who are interested in learning to play the piano. Basics of piano playing will be taught in a group setting, including solo and ensemble playing. The class will also strive to develop the student’s basic musicianship skills through ear training, keyboard performance and music composition

**Musical Theater**

This **extracurricular** activity is open to all students in the Middle and Upper School. Participation and placement is by audition. One major Upper School presentation and one major Middle School presentation is produced each year. Students may be involved with the musical in a variety of ways including both on and off stage participation. Participation in the Upper School musical is an elective. Participation in the Middle School musical is required as part of the Performing Arts Sampler class.

**Drama**

Students in the Upper School may elect to participate in the **extracurricular** drama program at AOA. Either a full length dramatic presentation or a series of one act plays will be presented during the academic year. AOA sponsors an active International Thespian Society Troupe which supports dramatic activities at the school including participation in the International Thespian Society workshops.

## Physical Education and Health

### **Physical Education 9 - 12**

**Semester – .5 credit**

This course is concerned with the teaching of skills, knowledge, and attitudes in activities concerned primarily with body movement. The program provides each student with an opportunity to assess their own fitness. The physical education program offers instruction in basic skill development in team sports, individual sports, recreational activities, and fitness.

### **Health Science 9 – 12**

**Semester - .5 credit**

The primary purpose of health science education is to gain knowledge about health so that actions can be taken that will improve personal health, the health of others and the quality of the environment. This course explores the areas of mental health, human growth and development, sexually transmitted diseases, substance use and abuse, nutrition and stress management. The student will also earn certification in the American Red Cross Standard First Aid and CPR course. Throughout the semester, each student will be encouraged to assess their own level of wellness and to focus on prevention.

### **Fitness 9 – 12**

**Semester - .5 credit**

This course examines the principles and concepts of fitness including pre and post fitness assessments, exercise prescriptions, and practical applications.

### **Health Topics 9 - 12**

**Semester - .5 credit**

Explore health issues which are prevalent today. The course examines the physical, emotional, and social factors affecting health throughout a person's lifespan. The course also investigates the latest scientific findings relevant to major diseases.

## Technology

### **Web Design**

**Semester - .5 credit**

- HTML
- Dreamweaver CS4
- Basic design techniques
- Cascading style sheets
- Web plug-ins
- Advanced design (layers)
- Domains, DNS, and hosting possibilities

### **Digital Imagery**

**Semester - .5 credit**

- Photoshop
- Illustrator
- Premier (video editing)

### **Advanced Computer Topics**

**Semester - .5 credit**

- Web 2.0 applications
- Virtual reality
- Computer architecture

### **Introduction to Computer Programming**

**Semester - .5 credit**

- Introductory course in JAVA programming

<b>Robotics</b>	<b>Full year – 1 credit</b>
<b>Pre-Engineering</b>	<b>Full year – 1 credit</b>
<b>Yearbook</b>	<b>Full year – 1 credit</b>

### **Non-Departmental Offerings**

<b>Independent Study 11-12</b>	<b>Credits vary</b> <b>Prerequisite: Curriculum Committee Approval</b>
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Independent study opportunities are limited to juniors and seniors who have demonstrated the ability to work independently. Students can design appropriate courses of study providing that the independent study does not duplicate courses already offered. Students must make a formal proposal to the Curriculum Committee. The committee will accept or reject the proposal and assign the appropriate credit. Independent studies will be designated honors or regular and will be graded Pass/Fail. Credit will be earned, but the grade will not be included in the GPA.

#### **Test Prep 11 -12**

Designed to prepare students for the SAT and ACT exams. The content of the course would include a general overview of the tests, instruction on techniques to be used on the exams, and a large amount of practice questions. Students will be required to purchase their own workbooks for this class. (Princeton Review's *Cracking the SAT* and *Cracking the ACT*) The cost of each book is approximately \$15 -20.

### **General Information**

#### **Drop/Add**

A student may add or drop a course during the first two weeks of a semester without penalty, but they **MUST** have written approval from their teacher, their advisor, and the Director of the Middle and Upper School. Each student **MUST** maintain a **six** course load. Students who drop a course after the drop/add period will lose credit for the course, and the student's transcript will indicate Withdrawal Passing or Withdrawal Failing. The classroom teacher and the Academic Dean must be satisfied that all efforts to improve the situation have been tried. Students must gain approval from their advisor, the classroom teacher, the college counselor, the department head, and the Director of the Middle and Upper School to drop a course under these circumstances.

#### **Course Request Override**

Overriding a course should only happen when a student wants to move to a course at a higher level (Honors or AP) than what was recommended. After speaking with the teacher, if a student wants to still override the recommendation, the student will need to complete a Course Override Form. Please attach any Course Override Forms you have to your **Course Selection Sheet**.

**\*PLEASE NOTE THAT THESE CHOICES ARE FINAL AS OF JUNE 11 AND SCHEDULE CHANGES WILL NOT BE PERMITTED ONCE SCHOOL HAS STARTED.**

### **Post Secondary Education Option**

AOA participates in the Post Secondary Option program. For students choosing high school credit, **AOA will accept credit only if the course does not duplicate our offerings and is not a required course for graduation.** In general, all PSEO courses through AOA are counted as electives, and the credit earned will count toward the required credits needed to graduate but will not be considered or calculated into the AOA GPA. Students must be enrolled in a minimum of 4 classes at AOA. Failure to complete a PSEO course successfully will be noted on the student's transcript. Transportation arrangements to and from local colleges participating in the program are the responsibility of the parents.

### **Summer School**

Students are always encouraged to continue with their studies over the summer but taking a summer course will not replace a required AOA course. AOA only accepts summer credit for courses that students are required to complete for academic reasons like completing an incomplete course or retaking failed course.

### **Faculty Advisors**

Faculty Advisors are committed to the growth of each student's intellectual potential, character, and well-being. Each student meets with their advisor regularly to receive extensive, individual guidance on their course of study. Faculty Advisors are actively involved with students both in the classroom and after classes as coaches, club advisors, weekend activity leaders, and neighbors. Parents are welcome to contact advisors at any time throughout the school year.

### **Student Evaluations**

The essence of a quality education is found in frequent, meaningful communication with the family. Report cards are sent home at the end of each nine week grading period. Students receive interim reports midway through each quarter if they are having academic difficulty. Parents may also receive commendation reports for students who are doing especially well, or who have shown marked improvement.

Parents and students can access student progress through Edline, our web based parent portal for communication. (Instructions for using this are distributed at the beginning of every school year)

### **Grading System**

Grades, recorded in letter form, are sent to parents at the end of every grading period to indicate a student's progress.

**A** Indicates superior achievement and comprehensive mastery of concepts and facts.

- B** Indicates high achievement and above-average mastery of concepts and facts.
- C** Indicates average achievement and sufficient mastery of concepts and facts.
- D** Indicates student is passing, but achievement and mastery of concepts and facts are limited.
- P** Indicates passing in a pass/fail course.
- F** Indicates failure to complete the course satisfactorily. No credit is given.
- WP or WF** Indicates withdrew pass or withdrew fail from the course after the drop/add period.

**I** Indicates Incomplete. Under certain extenuating circumstances, students will be permitted to receive a grade of *Incomplete* at the end of a grading period. Students must discuss this option before the end of the grading period with their teacher and the Academic Dean. They must make specific arrangements to complete all missing work for the course within 10 days of the close of the grading period. The teacher and the Academic Dean must approve any extension beyond this. An *Incomplete* that remains after one full semester will become an F.

### **National Honor Society**

Juniors and seniors may apply for inclusion into NHS if they meet the following criteria.

- Maintain a 3.5 grade point average
- Attend AOA at least 4 semesters
- Demonstrate qualities of citizenship, scholarship, leadership, character, and service

*Final selection of applicants includes an evaluation by the faculty and a vote of the selection committee.*

### **Valedictorian**

The Valedictorian will be chosen from students who have completed at least six semesters at AOA and who have earned the highest academic average.

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