

UPPER SCHOOL COURSE DESCRIPTIONS

ARTS

In the Upper School, Art courses are scheduled so that a student can concentrate on one area per year. Therefore, it may not be possible to change areas during a school year without a change to the student's overall schedule.

VISUAL ARTS

DRAWING 1 – fall

Drawing 1 is an intensive survey of drawing techniques. Students spend time working on the rendering of line, form, shadow and light. Students learn to express themselves while considering problems of perspective, object and form, light and shade, and texture. The primary focus for the students is working from observation. Students use pencil, pen and ink, chalk and a variety of other media. Grading is based on preparation, participation, the quality of the work, and personal progress.

DRAWING 2: Printmaking – spring

This course is offered to students who have successfully completed Drawing 1. In the first half of the term students will work on more advanced techniques with a focus on drawing the face and the human figure from life using primarily charcoal and pastels. In the second half of the term students will be introduced to a variety of printmaking techniques, which enables them to reproduce the same image many times. Embossing, relief printing and linoleum cutting are just some of the skills presented. Grading is based on participation, the quality of the work and personal progress.

DRAWING 2: Drawing with Colors – spring

This continuation of the Drawing I course introduces the student to a technical as well as an artistic approach to the use of color. The student learns color theory through a variety of color exercises. Drawing skills are utilized in order to develop a greater understanding of composition. There will also be an opportunity for students to create mixed-media pieces, utilizing collage, paint and pastel. Focus is placed on the elements and principles of design. Building skills, developing creative imagery and using an experimental approach are key factors. Evaluation is based on preparation, participation, the quality of the work and personal progress.

PAINTING 1 – fall

This beginning course introduces the student to technical and artistic approaches to watercolor painting. This course teaches every aspect of the painting process including stretching paper, various painting techniques and applications, and proper presentation of a finished watercolor painting. Through exercises and demonstrations, each student begins to develop their own style as well. An exploratory approach allows students to discover the strengths of this medium so that they can begin to communicate through this process. Emphasis is put on individual instruction and group critiques so that the students develop art appreciation and criticism skills as well. Each project builds on the one before utilizing a specific technique or application, so that the beginning painter experiences success through expression, creativity and technical proficiency. Evaluation is based on preparation, participation, the quality of the work and personal growth. Students are required to purchase a paint kit from the bookstore.

PAINTING 2 – spring

This course builds on the foundation skills learned in Painting I, but now the students get the opportunity to explore both acrylic and oil based mediums. Although many techniques carry over, students learn new ways to maximize the effect and properties of these heavy-body paints. The process remains the same as students go through a series of exercises to further their understanding of expression through painting. More emphasis is put on personal process as each student begins to define, explore and streamline his or her own style. Students also learn how to stretch canvas and prepare wooden panels for painting as well. Evaluation is based on preparation, participation, effort and artistic growth. Students are required to purchase a painting kit for this class. *Prerequisite: Painting 1*

ADVANCED PAINTING – offered each semester

This course is designed for the student who has a desire to pursue painting beyond the introductory level. Painters will continue their exploration into at least two different media, while also learning new techniques and applications. The assignments in Advanced Painting help nurture ability and direction while providing a framework that operates in conjunction with Painting 1 and Painting 2. Advanced painters will be expected to contribute, participate, and add to all critiques and discussions. Grading is based on effort, attitude, participation, and artistic growth. *Prerequisite: Painting 1 and 2, and/or teacher permission.*

CERAMICS 1 – fall

This course is an introduction to the process of creating ceramic art. Students are taught the three hand-building techniques of pinch, coil and slab construction. The main objective is to explore the fundamentals necessary to understand both the possibilities and the limitations of working with clay. Information is presented through demonstrations as well as slide lectures that expose the students to other artists working in this medium. Grading is based on, participation, an effort to meet the objectives of each lesson and personal progress.

CERAMICS 2 – spring

This course is an extension of Ceramics 1, but the sculptural assignments are more challenging and require personal interpretation. The use of the potter's wheel is introduced and the students are asked to produce simple functional forms. More advanced techniques, such as airbrushing and mold making are presented. In the second half of the term, students are asked to select an area of concentration and apply these skills to a body of work for review. Grading is based upon participation, the quality of the work and personal progress. *Prerequisite: Ceramics 1*

ADVANCED CERAMICS – offered each semester

This course is designed for the student who has a desire to pursue the study of the ceramic art at a more advanced level. Potters will learn to create complex forms that involve such things as lids, handles and the creation of sets. More complex glazing and firing processes are presented. Sculptors will be given challenging assignments that leave room for personal expression and creativity. As they move through the term, they are encouraged to explore their own ideas and move beyond teacher driven assignments. Grading is based on participation, the quality of the work as well as personal progress and growth. *Prerequisite: Ceramics 1 and 2; teacher permission.*

DITGITAL PHOTOGRAPHY – offered each semester

*****New Course*****

This course will explore the foundations of digital photography with an emphasis on content, design and the development of a personal, photographic point of view. Emphasis will be placed on learning camera basics, such as depth of field, exposure, ISO and white balance. Attention to light and composition, as well as exploring digital imaging tools (Photoshop), will empower students to shoot and edit photographs that reflect their own vision and ways of seeing. Through weekly photo assignments, guided group photo-shoots, presentations and demonstrations, students will create a body of work-in print, online and as a basis for such studio techniques as photo collage and digital image transfer. A digital SLR camera is highly recommended but not required. We will have several digital SLRs that may be used in school and signed out on a "library" basis. Each student will be required to have a 4 GB memory card and a flash drive for storing and transferring photos.

FILM/VIDEO PRODUCTION (10-12)

This semester long course is designed for visual artists who share a passion for motion pictures and want to learn by making their own projects in a hands-on intensive program. Through instruction in the essential principles of dramatic writing, camera operation, production, direction, sound recording and editing techniques, students develop a basic competence in the practice of filmmaking and video production. In addition, students will become familiar with the aesthetic requirements of the medium and have the opportunity to develop a personal approach to film/video production that presents their view of the world through concept, design and story-telling. Grading is based on preparation, participation, and personal progress. *Prerequisite: two semesters of a Visual Art or Theatre class, or permission from the instructor.*

ADVANCED ART (11-12) – full year, by application

This rigorous course is offered to highly motivated students who have a passion for the visual arts and previous experience in the studio. Students enrolled in Advanced Art would follow a similar course of study and expectations, but would not be held to the IB curriculum and guidelines that lead up to the external exam process. Evaluation is based on the productive use of class time, works of art presented at critique, and a sketchbook that is submitted for review on a monthly basis. *Application: Students who have completed two semesters of visual arts and who have strong skills may submit a portfolio and a statement of intent as part of the application process to take this course. Individual interviews will be held in March of the preceding year, with all prospective candidates. Upon review of all of the applicants, the Advanced Art designation will be offered to those who are most likely to have success without the additional demands of the IB curriculum and exam process. Note that there is a \$100 studio lab fee allowing students to make use of all of the supplies in every medium.*

IB VISUAL ART – grades 11 and 12 (two-year course), by application

This rigorous course is offered to highly motivated students who have a passion for the visual arts and previous experience in the studio. IB Juniors will begin in a teacher driven atmosphere where assignments, demonstrations, lectures and workshops offer the students a foundation in art production that is both technical and conceptual. This first year foundations program

provides a platform for more independent work in the senior year of study when a portfolio is assembled. IB students are expected to invest in both studio production and academic research throughout the program, while preparing a strong body of work for review by an outside examiner in April of the senior year. The Research workbook, which makes up 40% of the final grade, is a significant part of the course and it is designed to support and enhance studio production. A completion of the summer project is required for enrollment in the fall. Evaluation is based on the productive use of class time, works of art presented at critique, and the research workbook, which is submitted for review on a monthly basis. It is recommended that IB students take the Higher Level class, which would include study in both their junior and senior years. The standard level, taken in the senior year only, is extremely demanding, and it is recommended only to those students who have had significant previous experience in art production. *Application: Students who have completed two semesters of visual arts and who have strong skills may submit a portfolio and a statement of intent as part of the application process to take this course. Individual interviews will be held in March of the preceding year, with all prospective candidates. Upon review of all of the applicants, the IB designation will be offered to those who are most likely to have success with the rigorous IB curriculum and exam process.*

MUSIC – INSTRUMENTAL AND CHORAL

All music courses are offered each semester.

STRING ENSEMBLE – half credit (2 meetings per cycle)

The String Ensemble is offered to 9th through 12th grade string players. Intermediated and advanced instrumental techniques are taught such as phrasing, balance, blend and stylistic use of the bow, vibrato, and shifting. Total literacy in the language of music is encouraged, including reading of complex rhythms, and fluency in all key signatures. Music of all genres and eras is studied and performed. String Ensemble members form the core of the Orchestra and perform 6-8 times per year and are encouraged to audition for Regional and Allstate groups. Assessment is based on preparation, participation and personal progress. Recorded and written skills tests are given throughout the year. *11th and 12th grade students who are willing to fulfill some additional requirements may take Wind Ensemble for honors credit.*

ORCHESTRA – half credit (2 meetings per cycle)

The Upper School Orchestra meets twice per cycle and is scheduled in conjunction with the String Ensemble and Wind Ensemble. It is open to intermediate and advanced string, woodwind, brass, percussion, and keyboard players. The Orchestra performs symphonic masterpieces from the Baroque to Contemporary eras, and tours every other spring. Outstanding musicians are featured as soloists in the many performances throughout the year and are encouraged to audition for Regional and Allstate groups. Assessment is based on preparation, participation and personal progress.

WIND ENSEMBLE – half credit (2 meetings per cycle)

Wind Ensemble is offered to 9th through 12th-grade woodwind, brass, percussion, keyboard, and guitar players. Members choose a Classical or Jazz Focus. The Classical Focus includes two Wind Ensemble and two Orchestra rehearsals per cycle. The Jazz Focus includes two Wind Ensemble and two Jazz Band rehearsals per cycle. Intermediate and advanced instrumental techniques are taught, such as phrasing, balance, blend, stylistic use of dynamics and articulation, and tuning. Total literacy in the language of music is encouraged, including reading of complex rhythms, and fluency in all key signatures. Music of all genres and eras is studied and performed. Band members are encouraged to deepen their experience by playing in one of our chamber ensembles: Woodwind Quintet, Sax Ensemble, Jazz Band, or Brass Ensemble. The Wind Ensemble performs 6-8 times per year, and members are invited to play in Full Orchestra two times per cycle. Assessment is based on preparation, participation, and personal progress. Recorded and written skills tests are given throughout the year. *11th and 12th grade students who are willing to fulfill some additional requirements may take Wind Ensemble for honors credit.*

UPPER SCHOOL JAZZ BAND – half credit (2 meetings per cycle)

The Upper School Jazz Band meets twice per cycle and is scheduled in conjunction with the Wind Ensemble. The Jazz Band performs works from the Big Band repertoire with a concentration on Ellington, Basie and Mingus. Intermediate and advanced instrumental techniques are taught, such as phrasing, balance, blend, stylistic use of dynamics and articulation, and tuning. Total literacy in the language of music is encouraged, including reading of complex rhythms, and fluency in all key signatures. Part tests and scale tests are given throughout the year. In the second term all students will have an opportunity to work on improvising in class. Advanced musicians are encouraged to audition for Regional and Allstate groups. Drummers taking this course should already have experience playing the drum set. Assessment is based on preparation, participation, and personal progress. Any student interested in auditioning for the select Jazz Band, Chameleon, which rehearses one evening each week, is required to be in the music program during the day.

CONCERT CHOIR – full credit (4 meetings per cycle)

Concert Choir is designed to give students the opportunity to learn correct vocal technique, to sing a variety of music literature, and to have the experience of singing in an ensemble. This course is for beginners as well as experienced singers for students in grades 9 through 12. The curriculum includes the study of correct breathing, posture, exploring range and timbre, building musicianship skills, (i.e. sight-singing), teaching ensemble techniques such as phrasing, balance, and blend, and understanding music theory. Students are exposed to a wide range of repertoire from Baroque literature, spirituals, jazz, and multi-cultural songs to contemporary music. Students enrolled in Concert Choir will have two sectional meetings in addition to two Full Concert Choir classes. Students are required to perform in any concert or program connected with the music learned. Assessment is based on preparation, participation, and personal progress.

FULL CONCERT CHOIR – half credit (2 meetings per cycle)

For students taking another Arts department offering as their primary commitment or who may have other academic obligations that preclude them from taking the full credit Concert Choir option, participation in Full Concert Choir allows them to sing in a larger ensemble twice per cycle. Students are required to perform in all concerts or programs connected with the music learned. Assessment is based on preparation, participation, and personal progress.

IB MUSIC – grades 11 and 12 (two-year course), by audition

*****New Course*****

This rigorous music course is an immersive study and experience into the musical cultures from around the world. While developing a solid foundation in Western music theory, history, and analysis, students will learn to recognize the differences and the links between a variety of Western and non-Western musical styles. Through such a study of music, students learn to hear relationships of pitch in sound, pattern in rhythm and unfolding sonic structures. Using musical terminology students will learn to critically analyze music through directed listening, as well as knowledgeably answer questions pertaining to prescribed works of study. A vibrant musical education fosters curiosity and openness to both familiar and unfamiliar musical worlds. Although much of the class (50%) prepares students for the academic external assessment, the internal assessment is performance and/or composition focused (50%). Students will need to demonstrate a high level of proficiency in either solo or group performance, (vocally and/or instrumentally) or through creation. Participation in Newark Academy's performance ensembles, or outside ensembles will fulfill this performance requirement. Students who are competent in composing with notation software (e.g. Finale or Sibelius) or audio editing software (e.g. GarageBand or Audacity) may submit music technology compositions or arrangements to fulfill their internal assessment component. *Individual auditions/interviews will be held in March of the preceding year with all prospective candidates. Upon review of all the applicants, the IB designation will be offered to those students who are most likely to succeed with the rigorous IB curriculum and exam process. No official pre-requisite or co-requisite is required, however 2-years of full credit enrollment in Upper School curricular performance ensembles (e.g. Concert Choir) is encouraged.*

DANCE

All dance courses are offered each semester, unless otherwise specified.

INTRODUCTION TO DANCE

This class is designed for the beginning mover or a more experienced dancer who wants to learn a new style of dance and thus start at the beginner level. Students will learn correct body alignment and work on flexibility. They will be exposed to a variety of styles including elements of jazz, modern and ballet. Each class will chose what style of dance they would like to focus most on in addition to these three, or they may chose to focus solely on one of them. Other choices include: tap, hip-hop, lyrical, salsa, merengue, swing, flamenco, and theater dance. In the fall and spring terms, students perform in the dance concert. Students are assessed on preparation, participation and three homework assignments which may include watching a dance company on video and writing some reactions to it, reading a short selection about the type of dance they are studying, quizzes on dance vocabulary, research on a dancer or company in the style they are studying, or creating short works of student choreography.

INTERMEDIATE DANCE

This is a technique class for dancers with previous experience. Students focus primarily on jazz, modern, and ballet and work extensively on perfecting elements of alignment, flexibility, jumps, turns, and positions from each genre. Students do in depth studies of anatomy and kinesiology by learning the muscles and bones and how they affect movement. Choreography is also a focus as students learn and practice principles of composition for both solos and group work. Students continue to watch professional dancers on video, and read articles to further their knowledge of dance history. They may also study important dance vocabulary, learn how to teach various parts of a dance class, or research a famous dancer or dance company. In the fall and spring terms, students perform in the dance concert. Students are assessed on preparation, participation and three homework assignments which may include watching a dance company on video and writing some reactions to it, reading a

short selection about the type of dance they are studying, quizzes on dance vocabulary or anatomy, research on a dancer or company in the style they are studying, preparing and teaching class for the day, or creating short works of student choreography. *Prerequisite: Dance 6, 7, 8 or Introduction to Dance*

ADVANCED DANCE – by permission of instructor

This is a technique class for serious dancers who have extensive dance experience. Students will do advanced work in many dance techniques including jazz, ballet, modern, Latin dance, elements of improvisation, yoga and Pilates. Students are challenged through more complex choreography and perform two separate works in the fall and spring dance concert. They also become more independent as they do an in-depth choreography project that includes choreographing both a solo and a group piece on their own. Students continue to watch professional dancers on video and read articles to further their knowledge of dance history. Students may also study important dance vocabulary, learn how to teach various parts of a dance class, or research a famous dancer or dance company. Students are assessed on preparation, participation and three graded homework assignments which may include essays on videos watched in or out of class, discussions on readings given, quizzes on dance vocabulary or anatomy, research on a dancer or company in the style they are studying, preparing and teaching class for the day, and creating both a solo and a group piece. All students are encouraged to pursue group choreography explorations outside of class to perform at morning meetings, pep rallies, and other venues. *Individual interviews will be held in March of the preceding year with all prospective candidates. Upon review of all the applicants, the Advanced Dance designation will be offered to those students who are most likely to succeed without the additional demands of the IB curriculum and exam process. Prerequisite: Intermediate dance and permission from the instructor.*

IB DANCE – grades 11 and 12 (two-year course), by permission of instructor

This is a technique class for serious dancers who have extensive dance experience who also want to go further in their dance study by doing individual work in research and choreography. Students will do advanced work in many dance techniques including jazz, ballet, modern, improvisation, and yoga. Over the 2 years, students must produce 8-15 minutes of their own choreography made up of 3 separate pieces: a solo, a duet, and a group piece. They also complete a 2500 word “world dance investigation paper” which compares a familiar and unfamiliar dance form. This paper is the culmination of the “guest artist series” where dancers learn from professionals in a variety of movement genres such as Kathak, Bharatanatyam, Odissi, Bollywood, Capoeira, Fosse, Hip-hop, Pilates, Irish Step Dance, Latin Ballroom, Flamenco, and West African Dance. Students also write a 1000 word composition and analysis statement reflecting on their choreography as well as program notes for all of the pieces they perform in. Students are primarily assessed with the IB rubrics on their performances, compositions, and writing assignments, although preparation and work-ethic in class are also evaluated as part of the final grade each term. Students take this course at the IB Higher Level (HL) in their junior and senior years. *Individual interviews will be held in March of the preceding year with all prospective candidates. Upon review of all the applicants, the IB designation will be offered to those students who are most likely to succeed with the rigorous IB curriculum and exam process. Prerequisite: Intermediate dance and permission from the instructor.*

THEATRE

ACTING SKILLS 1 – fall

This introductory workshop course is offered to all upper school students who wish to increase their level of self-confidence and develop their own resources as expressive agents. This course benefits both the novice as well as the more experienced stage performer by providing ample opportunities for students to progress at their own pace. This is not a performance-oriented course. Using Snyder's *Dynamics of Acting* as a primary resource, students participate in theatre games, improvisational acting, pantomime and oral interpretation. Homework is assigned on an occasional basis. Students will also be introduced to the fundamentals of playwriting and will be required to write a brief play. Grading is based on preparation, participation, and personal progress.

ACTING SKILLS 2 – spring

During the second half of the year, the additional element of public performance is gradually introduced. After a more in-depth study approaching improvisation from a more dramatic and truthful perspective, students are then led in the development of a non-verbal theatre piece to be performed for other classes. Monologue preparation follows with the use of Edgar Lee Masters' *Spoon River Anthology* or similar text as a primary resource. Students are taught an initial approach to developing character, analyzing text and performing alone. Completing the year-long study of acting skills involves the careful study of Michael Shurtleff's *Audition*. Students are given regular reading assignments and quizzed on the material. The careful reading of *Audition* is used as a springboard for an in-depth study of acting and rehearsal techniques, leading to discussions regarding characterization, conflict, objective and environment. Students will be able to provide excellent scene analysis as a result. This course culminates with students being assigned a partner and a brief two-person scene from a published dramatic work. Students perform these scenes at the end of the term and are carefully critiqued. Grading is based on preparation,

participation and personal progress. *Prerequisite: Acting Skills 1, or permission from the instructor.* Note: At the successful conclusion of this course, students interested in pursuing further study of theatre are encouraged to audition for IB Theatre/Advanced Acting. Auditions are held early in the spring term.

INTERMEDIATE ACTING SKILLS

*****New Course*****

Fall Semester- Improvisational Acting. Although touched upon in *Acting Skills*, this intensive study would use the ‘Second City Almanac of Improvisation’ as a basis for study. Improvisational acting is an art form that demands a careful and thoughtful study of skills needed to be a successful improvisational actor. While some people seem to be a ‘natural in improvisation’, others struggle. However, all students can improve their improvisational skills through a carefully guided exposure to this fun and seemingly simple, yet complex area of study. Strengthening one’s improvisational skills often leads directly to increased confidence on stage in diverse situations, scripted or not.

Spring Semester- Scene study & Monologue Preparation. Students will have the opportunity to further develop the skills of scene study and monologue preparation in a “workshop style” class. Students will learn the essentials of scene selection, scene rehearsal techniques, and textual analysis, bringing all of these elements to fruition in performance. Monologue preparation will require students to select appropriate monologues, both contemporary and classical, for an auditions situation. The “workshop style” of instruction will require students to prepare work outside of class and then bring it in for evaluation from peers and from the instructor.

ADVANCED ACTING SKILLS (11-12) – by audition

This course is designed for the most dedicated of acting students: those who possess a strong sense of purpose, self-discipline and genuine interest in the rigorous study of acting, playwriting, theatrical trends and non-Western theatre. Although students will be receiving credit for either IB Theatre Arts HL or Advanced Acting Skills (placement will be determined by the instructor following auditions), all students are exposed to the IB Theatre Arts HL curriculum. This two-year curriculum includes the study of improvisation, ensemble acting, acting theory, scene analysis and performance, preparation of monologues for audition, Shakespeare, playwriting, directing and the reading of both Western and non-Western theatrical texts. Every other year there is a 24-hour playwriting festival in the spring. The fall and spring semesters culminate with the performance of a major scene, short play or original work. Grading is based on daily preparation, participation, personal progress and the successful completion of written assignments. The Advanced Acting Skills designation will be offered to those students who are most likely to succeed without the additional demands of the IB curriculum and exam process. *Auditions for this course are held during the preceding spring semester and are open to students who have successfully completed Acting Skills 1 and 2 or who have received permission from the instructor.*

IB THEATRE – grades 11 and 12 (two-year course), by audition

This course is designed for the most dedicated of acting students: those who possess a strong sense of purpose, self-discipline and genuine interest in the rigorous study of acting, playwriting, theatrical trends and non-Western theatre. Although students will be receiving credit for either IB Theatre Arts HL or Advanced Acting Skills (placement will be determined by the instructor following auditions), all students are exposed to the IB Theatre Arts HL curriculum. This two-year curriculum includes the study of improvisation, ensemble acting, acting theory, scene analysis and performance, preparation of monologues for audition, Shakespeare, playwriting, directing and the reading of both Western and non-Western theatrical texts. Every other year there is a 24-hour playwriting festival in the spring. The fall and spring semesters culminate with the performance of a major scene, short play or original work. Grading is based on daily preparation, participation, personal progress and the successful completion of written assignments. In addition to the above requirements, IB students are required to keep an ongoing journal documenting their progress throughout the two-year course. In addition, they have four major components (25% each) which are assessed either externally or internally, determining their IB grade. These components are research based and require solid writing skills, perseverance and a genuine desire to learn the unfamiliar. *Auditions for this course are held during the preceding spring semester and are open to students who have successfully completed Acting Skills 1 and 2 or who have received permission from the instructor.*

ENGLISH

(All English courses are full year courses unless otherwise stated.)

CORE COURSES

LITERATURE & COMPOSITION (9)

*****New Course*****

This foundational course teaches the necessary skills to be a thoughtful student of literature. As students engage with a variety of literary genres, they learn to be active readers, critical thinkers, and persuasive writers. Students write in both analytical and creative modes, while practicing the art of self-expression through poetry recitation, personal essay, and

intellectual dialogue. The course puts particular emphasis on the interpretation of text as the basis for analytical composition. As intellectual fodder, this course immerses students in literature from all over the globe, with ancient classics like the *Oedipus* cycle, modern explorations of other cultures like *Persepolis*, alongside more familiar favorites like *The Catcher in the Rye*.

AMERICAN LITERATURE (10)

By examining a range of genres and voices in American Literature — from the poetry of Emily Dickinson to the plays of Tennessee Williams and the prose of Toni Morrison—this course asks questions about American identity. Those questions in turn become the fodder for strengthening skills in critical reading, creative thinking, analytical writing, and clear communication. The course seeks to cement those skills introduced in Literature & Composition while demanding a higher level of independent thought.

WORLD LITERATURE (11)

*****New Course*****

In *World Literature*, juniors navigate the globe in pursuit of some of the greatest literary works from a wide range of cultural traditions. The tour makes stops everywhere from Shakespeare's Globe (*Hamlet*) to a small 20th century Latin American village (*Chronicle of a Death Foretold*). The course focuses on developing the skills necessary to be excellent students of literature: independent thinking, close reading, and analytical essay writing. Students examine how authors reflect on their global situations and ponder about their own place in an ever-changing world. Seminar-style classes help students deepen their understanding of the texts, while assignments and exercises help them formulate well-structured and personal critical responses.

IB ENGLISH (11)

Besides surveying representative masters from Great Britain and Ireland, IB English studies works from other literary traditions, as well as focusing on a particular literary genre (drama, poetry, or the novel). IB English seeks to develop the skills necessary for students to become mature literary critics: critical thinking, close reading, and analytical writing. Discussion-based classes help students reach a more nuanced understanding of texts, while the course's writing assignments push them to formulate well-structured and original argumentative responses. This course allows students to meet the additional requirements of the IB Program, including the completion of the Written Assignment and various oral assignments. Students must take either the IB English A1 Standard Level exam in May or the Higher Level exam in their senior year. *Prerequisite: American Literature students with either an "A-" or a B+ and their teacher's recommendation are eligible for the two-year HL course. IB Diploma candidates who are "B+" American Literature students or "B" students with their teacher's recommendation may take this course for eleventh grade only, seeking SL credit.*

SENIOR ENGLISH: Film Studies: Fiction (12) – fall

This course is a study of film, film theory, film history and film terminology, relying on the movies themselves as the main "text." The close textual analysis students will be asked to perform utilizes many of the lessons from literature classes: through essays, presentations, and round-table discussions, students will synthesize ways in which, image, narrative structure and sound are used to express character, theme and social and political concerns. The course will include examination of intertextual influence and film genre. In studying film noir, for example, students will consider feminist theory as well as the political climate of the United States that spawned this "dark" period of film. There will also be a study of how the influence of the early pioneers of film, like the Lumiere Brothers, Thomas Edison and D. W. Griffith can still be seen today. In addition to watching Alfred Hitchcock's *Rear Window*, *Vertigo* and *Notorious*, other films likely to be considered are *Double Indemnity*, *Sunset Boulevard*, *Chinatown*, *Bonnie and Clyde*, *His Girl Friday*, *On the Waterfront*, *The Godfather* and *One Flew Over the Cuckoo's Nest*.

SENIOR ENGLISH: Film Studies: Genres (12) – spring

This course will utilize the students' knowledge of film, film theory and film terminology in the study of documentaries, foreign films and a single genre, like comedy or the western, in the second half of the semester. Films that may be shown include *The Thin Red Line*, *Bowling for Columbine*, *Hoop Dreams*, *Inside Job*, *Raise the Red Lantern*, *The Lives of Others*, *Some Like it Hot*, *It Happened One Night*, *Butch Cassidy and the Sundance Kid*, *Annie Hall*, *West Side Story*, and *True Grit*.

SENIOR ENGLISH: Genius and Insanity (12) – fall

One does not need to look far today to see our culture's fascination with genius and insanity. Both states of mind require that an individual see or express things in a way that others don't. Looking at literature, the visual arts, and several clinical essays, we will explore the sometimes permeable line between the two states of mind.

SENIOR ENGLISH: Living Writers (12) – spring

This course will focus on current artistic expressions by the men and women who are our living and breathing contemporaries. Looking at fiction and film we will explore the diversity of voices, mediums and styles that are emerging in what is frequently termed the “postmodern” era. While not all of the works are set in the present, the aim will be to investigate the role of the present-day writer as he or she grapples with establishing a resonant contemporary voice that both embraces and amends the literary tradition.

SENIOR ENGLISH: Sport, Story, Society (12) – fall

In this course, we will use sport as a lens on cultural issues from gender and race to the role of the individual and the team. We will pay particular attention to the way stories are told and how that telling shapes our view of events and ideas. We will practice telling stories about sports ourselves in a variety of forms, from articles and essays to poems and presentations, but we will focus more on analyzing the way the professionals have told their stories and what those stories have to say about sport and society. Texts will include, among others, *Seabiscuit*, *Friday Night Lights*, *The Sun Also Rises*, articles from *The Best American Sports Writing of the Century*, and selections from current newspapers and magazines.

SENIOR ENGLISH: Wit, Humor, Satire (12) – spring

From Aristophanes to *The Simpsons*, the humorists and humor covered in this course will represent a wide range of media and voices. We will ask more questions than we are likely to find answers. What makes a work humorous? What social role does humor serve in society? What of satire? Students will be asked to analyze humorous works from a traditional literary perspective while also using psychological and sociological lenses. Though students will attempt their own humorous works in class, the focus will be upon analyzing humor to understand its literary and social functions.

IB ENGLISH HL (12)

In this course, students engage in intensive study of two genres: the novel (Flaubert’s *Madame Bovary*, Woolf’s *Mrs. Dalloway*, Faulkner’s *The Sound and the Fury*) and drama (Shakespeare’s *Othello*, Shepard’s *True West*, Euripides’s *Medea*, Stoppard’s *Arcadia*). Further study of short fiction, nonfiction prose, and twentieth-century poetry fill out the course and serve as preparation for IB assessments including the Higher Level exams in May. Throughout the course, the emphasis is on crafting original, analytically rigorous responses to challenging texts, both collaboratively and independently, in both speech and writing. *Prerequisite: IB English (11) students in good standing.*

ELECTIVE COURSE

CREATIVE WRITING WORKSHOP (10-12) – by application

This yearlong course will introduce the major genres of creative writing — fiction, poetry and nonfiction — to students who have already established proficiency and interest in writing. The workshop-based class will feature cyclical writing assignments, outside reading, and guided submission of work to contests and magazines. Students will have the opportunity to select their own texts, which may include work by Janet Burroway, Robert Olen Butler and John Gardner. In addition, students will occasionally exchange work with a sister class overseas through a shared wiki page. Playwriting and a project of personal interest will wrap up the year. Students who have already taken the class may apply to take it again. *Admittance will be based on submission of a creative work (story, poem, script or essay) and a statement of intent.*

HEALTH

NA offers a Coordinated School Health Program: Health Education and development of Physical Health Competencies. Students participate in a health program designed to foster the skills, knowledge, attitudes and behaviors necessary to provide a foundation for life-long health and well-being. At each grade level students enroll in a course of health education that emphasizes topics geared toward the psychosocial development of adolescents. Health courses meet on a part-time basis for one “season”.

COURSES

EMERGING SEXUALITY AND BUILDING RELATIONSHIPS (9)

Students identify and understand the function of male and female reproductive anatomy as well as the process of reproduction. This course progresses to issues surrounding male and female sexuality and incorporates skill-building in the areas of communication, decision-making and refusal skills. Health concerns such as STD’s and HIV/AIDS, alternative lifestyles and contraception are also emphasized. Students are asked to understand the facts about all issues as well as to consider them from individual and societal perspectives. Assessment strategies include written quizzes and tests, article reviews, reaction papers and individual and class projects, including a Power Point® presentation on a health issue involving sexuality and its relationship to the teen population.

HEALTH 10 - electives

Food, Glorious Food! is the study of nutritional practices, problems and possibilities around the world. Areas of study include basic nutritional concepts, consequences of personal nutritional choices, cultural food practices and choices; world hunger and its connection to global health issues; sustainable vs. monoculture crops; GMOs; taking action on global food dilemmas, the role of the media in food accessibility, marketing and selection.

The Psychology of Addiction is the study of the role of brain and behavior in addiction as well as the addiction's consequent impact on and connection to the economic, political and social environments of the addict. Students will learn new research about the origin of addiction, factual information on physiological and psychological drug effects, the impact of drug, gambling, sex, and food addictions on the individual and society and the global considerations of world health organization and multinational corporation clinical drug trials or dispensing of drug therapy in third world countries.

Non-Western Healing Practice is the study of the connection between mind-body physiology; disease prevention, and non-allopathic medicine. Areas of study include new research in the brain's role in maintaining or creating physiological and psychological health and the role of stress in illness. A comparative view of well-established systems of healing selected from East Asian, Ayurvedic Medicine, Tibetan, Native American and Caribbean Island cultures will be presented. Individual healing modalities of a non-allopathic nature are highlighted within four categories: 1) Biologically based healing (botanicals, aromatherapy, nutritional supplements; homeopathy) 2) Manipulative and Body-Based methods (chiropractic care, therapeutic massage; yoga, tai chi, Qi Gong, reflexology) 3) Energy Realignments (acupuncture, Reiki, Healing Hands, TENS, electromagnetic therapy, thermal) 4) Mind-Body Interventions (meditation, visual imagery, shamanic healing, healing environments and spiritual engagement).

Advanced Topics in Sexuality is the study of world population dynamics and the 21st century cultural practices and technological advances available to create, manage or transform the nature of human sexuality. Areas of study include gender roles across cultures, gender reassignment surgery, reproductive technology, cloning, FGM, abortion, etc. Assessments include reaction papers, a project with an oral presentation and quizzes.

Global Health Issues is the study of health challenges and crises around the world. Beginning with the physiology of the immune system and its role in disease prevention and cure, the course will explore primarily common infectious diseases that can occur in epidemic proportions outside the US such as malaria, dengue fever, polio, HIV, yellow fever, cholera and measles. The historical significance of the disease eradication in the US and the current state of infectious disease world-wide will be examined. Organizations and efforts to support disease prevention and treatment such as Global Health and Doctors Without Borders provide a contemporary view of health in developing countries. Non-infectious disease challenges such as maternal health and obesity both in the US and globally will be considered from health, economic and cultural viewpoints.

Emergency and Survival Skills. In this course, students will learn how to assess and respond to situations requiring basic first aid procedures. In addition, students will learn why, when and how to properly administer CPR and AED emergency techniques. Skills needed for successfully engaging in the out of doors such as assessing weather conditions, animal, insect and plant identification for safety, medicinal and food resources, shelter and fire building, knot-tying, map reading and navigational basics, and proper selection and use of outdoor gear will be discussed. Emergency techniques such as universal signaling codes and withstanding the elements will also be incorporated. Assessment will be a combination of written, oral and practical skill demonstrations. Students should be prepared to participate outdoors for some lessons.

For all courses, assessments will include demonstration of factual knowledge through position papers, simulation activities, an experiential project with an oral presentation component and class participation.

ETHICAL ACTION / SOCIAL RESPONSIBILITY (11)

Students develop an understanding of the basic tenets of social ethics and articulate their moral and ethical principles as they relate to selected health-related ethical issues. They are asked to consider their rights and responsibilities in all areas of interpersonal relationships including with friends, in a dating relationship, in a committed partnership, in the family, in the larger community and as a global citizen. Students practice decision-making, problem-solving, disclosure and boundary-setting skills and communication skills. Students' knowledge is assessed through written tests and quizzes, reaction papers, research-supported position papers, individual and group projects such as debates, surveys, interviews, or role-plays.

SENIOR SEMINAR (12)

Seniors assess their current level of health knowledge and revisit important topics to review and update that information. Students are asked to discuss and evaluate their future education and career plans and to identify the skills needed to be proficient in their areas of interest. Expectations of college life and strategies for coping with campus issues are highlighted, with time management and responsible decision making emphasized. Students are asked to conduct a case study analysis on a health issue affecting college freshmen. The case study analysis includes background research on the presenting health issue, a discussion of precipitating or co-morbid factors, recommendations for resolving the problem and a presentation of the analysis and its relationship to the development of personal health behaviors.

DRIVERS TRAFFIC AND SAFETY EDUCATION (10) - Offered each term

The Driver Education course, given in the students' sophomore year, consists of thirty hours of classroom study. Proper attitudes, driving skill, knowledge of motor vehicles laws, car maintenance, proper emergency treatment in the event of an accident and other related topics are covered. The state's written exam is administered at the end of the course. In addition to the classroom portion of the course a "behind the wheel" phase is offered after school, on weekends and during vacations as an elective for all qualified students. After completing the theory and the "behind the wheel" requirements, a student will possess a valid New Jersey learner's permit and an insurance reduction card.

PHYSICAL HEALTH COMPETENCIES

In addition, all students must complete requirements that demonstrate their commitment to the development of physical health competencies and to their continued involvement in healthful, physical activity throughout the high school years. To that end, the departmental graduation requirements feature the following.

The satisfactory completion of four physical competencies:

- Water Safety course (9th grade)
- Swim test (9th grade) *Students who are unable to pass the swim test will be required to attend additional swim classes.*
- Fitness and Nutrition Personal Plan (10th grade)
- Stress Management Activities (grade 11)

In addition to the four competencies, students must complete at least one marking period per year of physical activity.

This expectation may be fulfilled by Upper School students through any of the five options below.

1. *Physical Education class*: participate in a scheduled class (which meets twice per cycle) and satisfactorily complete class requirements.
2. *Dance class*: participate in an NA dance course that meets at least twice per cycle [Note: Afterschool dance alone does *not* fulfill this option.]
3. *Fitness Center*: complete at least two hours per week in the Newark Academy Fitness Center. [Note: *This is only available to students whose academic schedules conflict with scheduled Physical Education classes and who do not select another option.* Eligible students must prepare a personal fitness plan and associated paperwork for approved by the Health Department.]
4. *Varsity or JV Interscholastic Sport*: participate on an NA team and meet all team responsibilities. [Note: *Team managers or statisticians are not eligible to select this option.*]
5. *Intensive Off-campus Activity*: pursue a minimum of 12 hours per week of physical activity for a scheduled, organized program outside of school, e.g. figure skating, tennis lessons/clinics, martial arts etc. [Interested and eligible students must complete the necessary paperwork which includes program information and contact person before seeking approval from the Health Department.]

HUMANITIES

All Humanities courses are full year courses unless otherwise indicated.

ELIGIBILITY AND PLACEMENT POLICY

Unless otherwise stated below, students who wish to enroll in AP or IB courses must have maintained a 'B' average in their current AP or IB Humanities course. Those students presently enrolled in non-honors courses must have maintained an 'A-' average in their current core humanities course (Ancient World, American Experience, or Western Heritage). Students who do not meet eligibility requirements for AP or IB elective courses but who wish to enroll in those courses should contact the Department Chair about alternative eligibility.

CORE COURSES

THE ANCIENT WORLD (9)

This course gives students a deeper understanding of the roots of human expression in the ancient world. Course content focuses on the origins of western culture including Greece and Rome, and the origins of ancient religious thought and practice in the Jewish, Christian, Muslim, Hindu, and Buddhist traditions. The course concludes with an exploration of contemporary religious conflicts and peacemaking efforts around the world. There is a heavy emphasis upon skill development in the course, especially in the areas of writing, organization, test taking, listening, note-taking, critical thinking,

and interpersonal skills. In addition to tests and quizzes, students are assessed on the basis of homework, oral presentations, papers, and research projects.

THE AMERICAN EXPERIENCE (10)

American Experience is a survey course of American History. The themes reflect topics that are important to the making of America and encourage students to think about how they have inherited a complex past filled with notable accomplishments and thorny problems. The course weaves together our history as a nation, as a people, and as a society. Students develop ethical reasoning, critical thinking, reading and verbal skills. Evaluation of student progress is based on portfolios, tests, quizzes, homework, debates, research paper and class participation.

AP US HISTORY (10)

AP US History is a rigorous course of study that covers US history from the colonial era through the Clinton administration. Students are asked to prepare, on average, ten pages of textbook reading and ten pages of primary source document readings per class. As a result of their efforts, students not only master how to read and interpret primary source documents, but also gain a fluent command of the fundamentals of US history. Student achievement is assessed through the use of multiple-choice problems, essay questions and document-based questions. The student must take the AP exam in May, and will complete a research paper in the remaining classes after the exam.

WESTERN HERITAGE (11)

The Western Heritage is a humanities-based course that uses a variety of primary and secondary historical literary, artistic and internet sources to accomplish its mission. The course is designed to give students a broad knowledge and understanding of the political, cultural, intellectual and socioeconomic developments of Europe from 1350 AD to the present; to give students a sense of the dynamic forces which drive history; to teach students the tools necessary for the appreciation of the past. The content units include: the later Middle Ages, the Renaissance, the Protestant Reformation, the Scientific Revolution and the Enlightenment, the French Revolution, the Industrial Revolution, Romanticism, 19th Century Imperialism, WWI, WWII and the Holocaust, the Cold War and the Fall of Communism.

IB HISTORY (11)

This course aims to help students develop an understanding of the political, economic, cultural, and social developments that have played a role in shaping the modern world as well as to teach students how to analyze and evaluate historical data and theories critically. The course begins with a brief examination of the ideas and events that preceded the emergence of the West as the dominant global power at the beginning of the 20th century, such as the Enlightenment, the American and French Revolutions, the Industrial Revolution, and 19th-Century Imperialism. Students then intensively study the 20th century, focusing on the history and historiography of WWI, the inter-war period, WWII, the Cold War, nationalist and independence movements, as well as the end of the bipolar world and the emergence of non-state threats. In addition to regular coursework, students will undertake an authentic historical investigation, which will require significant independent work. Students must take either the IB History Standard Level exam in May or the Higher Level exam in their senior year.

ELECTIVE AND ADVANCED COURSES

HOLOCAUST STUDIES (11-12) – fall

Students engage in an in-depth study of the philosophy of Nazism, its rise to power in Germany and the advent of the Holocaust. Students also discuss issues regarding anti-Semitism and racial prejudice and world opinion and issues relating to intervention, especially by the United States, both during that historical period as well as in current-day world affairs. Student grades are based on a series of tests and two papers. The course includes a visit to a Holocaust Museum/ Resource Center and a discussion led by a “survivor.”

ECONOMICS (11-12) – spring

This study of basic economic principles with particular attention to macroeconomics introduces the student to the market system, the interaction of supply and demand, and the flow of GNP. Additionally, students will study how national budgets mirror personal budgets, and the course will provide students with the tools to evaluate both. The course includes economic theory and modern day practices. Student grades are based on a series of quizzes, exams and a final paper. Students are encouraged to participate in class discussions and to present and lead discussions of current events in the economic markets.

POLITICS OF CHANGE: Voices of the Middle East (11-12) – fall

Voices from the Middle East will conduct an in-depth analysis of the “cross roads of the world”. Students will learn about the history, religion, culture, geographical, sociological and geopolitical diversity that exists in the Middle East. In so doing,

Students will have an opportunity to analyze information from a variety of diverse sources including: primary source documents, religious texts, speeches, Arab internet sites, short stories, poetry, film and music.

POLITICS OF CHANGE: Voices from the Modern World (11-12) – spring

This course is designed to analyze the history, sociological status, political conditions, and contributions, of those members of the society that sought to make significant and sometimes revolutionary changes. This course will have an opportunity to examine the nature of the feminist revolution of the 20th century, the cultural and political ramifications of the counter cultural movement during the decade of the 60's, and the forces that are moving this generation toward cultural change today.

IB HISTORY HL / REVOLUTIONS I (11-12) – fall

This course will survey the very different paths taken by Japan, China, and India from the mid-nineteenth century in reaction to Western imperialism. Japan was transformed by the Meiji Restoration, which established the preconditions for industrial development. The rise of Japanese militarism and its rebirth as a world power after the US occupation of the 1940s and 1950s are also studied. China endured a century of chaotic war, civil war, and revolution without achieving political or domestic stability. This course also explores the rise of the Indian National Congress, the emergence of M. Gandhi as the face of the Indian decolonization movement, Partition, as well as the emergence of the modern Indian state under J. Nehru. IB History students are expected to take an IB Higher exam in May.

IB HISTORY HL / REVOLUTIONS II (11-12) – spring

This course examines the revolutions of 1905 and 1917, the formation of the Stalinist regime, and then the collapse of the Soviet Empire and system in the 1980s. In addition, this course will examine the events that led to the CIA's covert support of the deposition of M. Mosaddeq in Iran, the US installation of M Pahlavi as the Shah of Iran and successful revolution against the US-backed regime by R. Khomeini. Other revolutionary leaders, such as F. Castro, and C. Aquino of the Philippines will also be examined. IB History HL students are expected to take an IB History exam in May.

AP ART HISTORY (11-12)

Advanced Placement History of Art is a college-level survey of art from Paleolithic cave painting to modern architecture. The course stresses the historical and cultural context of western and non-western artistic expression as well as the relationship of form and meaning. Visual analysis is the single most important component of the course. Students are expected to take the AP exam in May. This is an open enrollment course.

IB ECONOMICS (11-12)

IB Economics is a year-long course that prepares students to take either the IB Higher or Standard level exam. As a discipline, economics seeks to observe and quantify how humans attempt to solve the problem of scarcity. The course covers five major content areas: introductory economic concepts, macro-economics, international trade, global development and micro-economics. There is a substantial overlap between the content of this course and the content of the AP macro- and micro-economics courses, and students may take these exams in lieu of the IB if they so wish. Students are assessed using objective items (data response questions), in-class essays, and substantial papers. Students are expected to take either the IB Higher or Standard level exam or the AP exams in May. *Prerequisite: In addition to meeting departmental standards for enrollment in an IB course, students must have maintained a 'B' average in Pre-Calculus or a more advanced math course.*

IB PHILOSOPHY (11-12)

This rigorous course seeks to engage students in important conversations about the nature of reality, knowledge, ethics and humanity which started nearly 3,000 years ago. Previous contributors to the conversation whom students will get to know include Plato, Aristotle, Descartes, Hobbes, Kant, Hume, Locke, Rousseau, Wittgenstein, de Beauvoir, Lao Tzu, Confucius, as well as a few novelists. Students will gain an understanding of the perspectives of these thinkers, as well as the implications of their ideas. They will also learn to use appropriate philosophical language. In daily class discussions, students share their opinions and thoughtfully consider those of others. They will eventually articulate their own philosophical stances with clarity, discipline and personal conviction. The majority of assessments are in the form of in-class essays and smaller assignments. In addition, students write one major essay each semester: a philosophical analysis of a non-philosophical stimulus. Students are expected to take either the IB Higher or Standard level exam in May.

THEORY OF KNOWLEDGE 1, 2 – grades 11 and 12 (two-year course)

TOK is a two-year course requirement for students pursuing an International Baccalaureate diploma. Its purpose is to help students bring together skills, ideas and information that they have acquired in their other classes and non-academic experiences. TOK is a process course rather than a content course. In a seminar-style setting, students are asked to examine

the processes involved in acquiring knowledge and to recognize the similarities and differences among types of knowledge we claim to have. Students are expected to be active participants in class, contribute routinely to the on-line journal and prepare one essay or presentation each term. In TOK 1, students study the concept of knowing, four 'ways' of knowing (perception, language, emotion and reason), and one 'area' of knowledge (mathematics). In TOK 2, students study five other areas of knowledge (natural science, social science, history, arts and ethics) and routinely revisit epistemological issues first examined in TOK1. TOK 2 concludes at spring midterm.

LANGUAGE

All courses are full year courses.

GRADUATION REQUIREMENT: ORAL PROFICIENCY

At the end of the spring semester, students finishing level 3 will have to demonstrate their oral proficiency in the target language. In order to fulfill this requirement, students will have to achieve the intermediate-low level according to the ACTFL (American Council on the teaching of Foreign Languages) scale.

ELIGIBILITY AND PLACEMENT POLICY

A combination of grades and the teacher's judgment determines whether a student is recommended for an honors section the following school year. A minimum requirement is that students in a non-honors section maintain an 'A-' average; students already in an honors section must maintain a 'B' average. In most cases, the prerequisite for AP/IB courses is current enrollment in an honors section or AP/IB class. (Specific requirements are given in the relevant course descriptions that follow.) Equally if not more important as the above-mentioned grade requirements, students will be considered for an honors section or AP/IB course if, in the teacher's judgment, they can handle honors level work the following year, based on several criteria, including, but not limited to: ability and willingness to speak with reasonable comfort and ease; and consistency in all the language skills, etc.

COURSES

FRENCH 1

After learning basic interactions and vocabulary (greetings, days of the week, numbers, colors, etc.), students will cover basic grammatical structures of French: present, *futur proche*, and past tenses as well as idiomatic structures particular to French. Evaluation is based on oral work, homework, daily exercises, and assessments. There are also a variety of projects that can include skits, PowerPoint presentations and posters. The primary language of instruction and interaction is French. *By the end of the year students will be assessed on their oral proficiency.*

FRENCH 2

In this class, students continue to learn to interact in a French-speaking environment. Grammar and vocabulary work is grounded in video and images as well as written text from either textbook or graded reader sources. The focus of class is to actively use these foundations in discussion and improvisation. In addition to traditional tests and quizzes, other evaluations may include skits, journal writing and presentations. The **honors** sections of this course begin with a review of past tenses and move on to the acquisition of the conditional and present subjunctive. They move at a quicker pace than the regular sections and push expression to a more sophisticated level. *By the end of the year students will be assessed on their oral proficiency.*

FRENCH 3

This course consists of a review of all grammatical structures learned in French 1 and 2, but on a more sophisticated level. In addition, the class learns the subjunctive. Emphasis is on vocabulary acquisition and reading skills; the class reads newspaper and magazine articles as well as short pieces of literature and essays on cultural topics. Evaluation is based on cyclical quizzes, tests, and oral presentations with both written and oral components. The **honors** sections of this course move at a quicker pace than the regular sections and push expression to a more sophisticated level. *By the end of the year students will be assessed on their oral proficiency.*

ADVANCED FRENCH

This course specifically addresses the five C's of language acquisition: Communication, Comparisons, Connections, Culture, and Community. *Advanced French* students encounter Francophone culture through foreign films and selected readings in verse and prose, as well as current events articles. All films and texts are in the target language and utilized by students to practice speaking and writing French. This is an immersion-style class. *By the end of the year students will be assessed on their oral proficiency. Prerequisite: French 3 Honors; or French 3 with a B average*

AP/IB FRENCH LANGUAGE

This course is designed to prepare students for either the AP French Language and Culture exam or the IB “B” exam. It will refine skills that students have learned in their prior study of French. Using thematic units presented by both the AP and IB curricula, students will continue to communicate in the interpersonal, interpretive and presentational modes. Using authentic materials, students will read, write, listen and speak as well as explore cultural differences in the Francophone world. Active class participation is required. Students must take either the AP or IB exam at the end of the course. *Prerequisite: French 3 Honors or Advanced French with a B average.*

IB FRENCH LITERATURE AND CULTURE

This course is an approach to 20th Century French and Francophone literatures and cultures. Students study contemporary literary texts from French, Quebecois, African and Caribbean authors. They develop analytical skills in reading texts, and acquire new tools to perfect written and oral communication. Taught within specific cultural contexts, the literature serves as a springboard to discover a richly diverse French-speaking world. Via video recordings, magazine excerpts, Internet sites, music, debates on topical issues, etc., students broaden their perspective and knowledge of French identity. Evaluations will include oral presentations and written papers. At the end of the year students must take the IB French B HL exam. *Prerequisite: Successful completion of AP/IB French Language.*

IB FRENCH LITERATURE AND CULTURE 2

When offered, this course will serve as a second year of IB Literature and Culture. The class will focus on the three compulsory IB Core Topics (Social Relationships, Communication & Media, and Global Issues) from the French-speaking world and compare and contrast them to their own English-speaking world. In addition to making these comparisons, students will select two of the Option Topics (Health, Customs & Traditions, Leisure, Cultural Diversity, Science & Technology), as well as read several literary works to further explore the rich diversity in French culture. At the end of the year, students must take the IB French B HL exam. *Prerequisite: IB French Literature and Culture*

MANDARIN 1

This course is an introductory class for students with no prior knowledge of Mandarin. Emphasis is placed on the oral aspect of Chinese, listening, acquisition of everyday vocabulary, conversation and control of basic structures. Reading and writing simple characters is also required. Evaluation includes participation in class, quizzes, and both oral and written tests. *By the end of the year students will be assessed on their oral proficiency.*

MANDARIN 2

This course is designed for those students having basic reading, listening and speaking ability in Mandarin. There is increased emphasis on vocabulary, listening comprehension and oral comprehension. Reading and writing a wider variety of characters is required. Evaluation includes participation in class, quizzes, written tests and presentations. *By the end of the year students will be assessed on their oral proficiency.*

MANDARIN 3

In this course of Mandarin, students have already attained a basic level of proficiency in reading, writing, speaking and understanding Mandarin. While there is still work to be done in vocabulary development, greater emphasis is placed on dealing with unknown texts, using structures and vocabulary to communicate original thoughts in both oral and written tasks. Students enrolled in this class at the appropriate moment in their NA careers should plan to take the IB *ab initio* exam to externally validate their three years of study.

ADVANCED MANDARIN

This course specifically addressed the five C’s of language acquisition: Communication, Comparisons, Connections, Culture, and Community. Mandarin 4 students will encounter the following: expansion of vocabulary; advanced grammar and sentence structure; listening and comprehension skills through spontaneous interaction; reading and writing practice on a daily basis; essay writing; exposure to modern Chinese culture. Individual and group projects with presentations will be used to enhance the students’ capability to use Mandarin. *By the end of the year students will be assessed on their oral proficiency.*

SPANISH 1

After learning basic interactions and vocabulary (greetings, days of the week, numbers, colors, etc.), students will cover basic grammatical structures of Spanish: present, present progressive, preterit and future (ir + infinitive) tenses as well as idiomatic structures particular to Spanish. The goal of instruction is written and oral expression rather than the mere accumulation of tenses or vocabulary. Evaluation is based on oral work, homework, daily exercises, and assessments. There are also a variety

of projects that can include skits, PowerPoint presentations and posters. The primary language of instruction and interaction is Spanish. *By the end of the year students will be assessed on their oral proficiency.*

SPANISH 2

In this class, students continue to learn to interact in a Spanish-speaking environment. Grammar and vocabulary work is grounded in video and images as well as written text from either textbook or graded reader sources. The focus of class is to actively use these foundations in discussion and improvisation. In addition to traditional tests and quizzes, other evaluations may include skits, journal writing and presentations. The **honors** sections of this course begin with a review of past tenses and move on to the acquisition of the conditional and present subjunctive. They move at a quicker pace and push expression to a more sophisticated level than the regular sections. *By the end of the year students will be assessed on their oral proficiency.*

SPANISH 3

This course consists of a review of all grammatical structures learned in Spanish 1 and 2, but on a more sophisticated level. In addition, the class learns the subjunctive. Emphasis is on vocabulary acquisition and reading skills; the class reads newspaper and magazine articles as well as short pieces of literature and essays on cultural topics. Evaluation is based on cyclical quizzes, tests, and presentations with both written and oral components. The **honors** sections of this course move at a quicker pace and push expression to a more sophisticated level than the regular sections. *By the end of the year students will be assessed on their oral proficiency.*

ADVANCED SPANISH

This course specifically addresses the five C's of language acquisition: Communication, Comparisons, Connections, Culture, and Community. Advanced Spanish students encounter Hispanic and Spanish culture through films, selected readings in verse and prose as well as current events articles. All films and texts are in the target language and utilized by students to practice speaking and writing Spanish. This is an immersion-style class. *By the end of the year students will be assessed on their oral proficiency. Prerequisite: Spanish 3 Honors; or Spanish 3 with a B average*

AP/IB SPANISH LANGUAGE

This class prepares the student for either the AP Spanish Language or an IB Spanish "B" exam. The fall semester is devoted to a thorough review of all aspects of Spanish grammatical structures on a very intense and sophisticated level. The class also reads original Spanish periodical or internet articles, which are the basis of class discussions and compositions. The emphasis is on increasing the skill and comfort level of the student in reading and writing Spanish. Evaluation is based on grammar quizzes, compositions, oral exercises, and internet projects. In the spring semester, after finishing up the grammar, the class reads a full-length literary work and other readings, which will form the basis for class discussions. Evaluation is by means of in-class oral and written assessments. Students must take either the AP or an IB exam at the end of the course. *Prerequisite: Spanish 3 Honors or Advanced Spanish.*

IB SPANISH LITERATURE AND CULTURE

This course focuses on 20th Century Spanish and Hispanic literatures and cultures. Students study contemporary literary texts from the Iberian Peninsula and Latin America. They develop analytical skills by reading texts, and acquire new tools to perfect written and oral communication. Taught within a cultural and historical context, the literature serves as a spring-board to explore the rich diversity of the Spanish-speaking world. Students broaden their perception and knowledge of Spanish through daily discussions based on newspaper articles, television and radio programs, films, and current events from Spain and the Americas. Evaluations will include oral presentations and written papers. At the end of the year students must take the IB Spanish B HL exam. *Prerequisite: Successful completion of AP/IB Spanish Language.*

IB SPANISH LITERATURE AND CULTURE 2

When offered, this course will serve as a second year of IB Literature and Culture. The class will focus on the three compulsory IB Core Topics (Social Relationships, Communication and Media, & Global Issues) from the Spanish speaking world and compare and contrast them to their own English speaking world. In addition to making these comparisons, students will select two of the Option Topics (Health, Customs and Traditions, Leisure, Cultural Diversity, Science and Technology), as well as read several literary works to further explore the rich diversity in Spanish and Hispanic culture. At the end of the year students must take the IB Spanish B HL exam. *Prerequisite: IB Literature and Culture*

MATHEMATICS

All Mathematics courses are full year courses.

ELIGIBILITY AND PLACEMENT POLICY

In the middle of the spring semester, each teacher meets with the department chair to evaluate each student's grades, skills and habits of mind in order to determine placement. In order to be placed in an honors section, a student coming from a regular section must have a year grade of at least an 'A-' and a strong teacher recommendation. A student coming from an honors section must have a year grade of at least at the 'B' level and a strong teacher recommendation. In most cases, the prerequisite for AP/IB courses is current enrollment in an honors section or AP/IB class. (Specific requirements are given in the relevant course descriptions that follow.) Teacher recommendations will focus on the following attributes and skills of the student:

- *insight into mathematical thinking,*
- *ability to see beyond a single presentation and to link several days' lessons,*
- *ability to work and learn independently,*
- *diligent study habits,*
- *contributions to the learning process within the classroom.*

Students enrolled in the sixth grade math courses through Geometry are given a publisher's placement test (some are skill tests; others are predictor tests), which is used as an additional criterion for placement into honors sections.

Students enrolled in an honors section must maintain a semester grade of at least 'B-' in order to continue in the course.

ADDITIONAL DEPARTMENTAL INFORMATION

Calculators. A graphing calculator is required in all courses beyond *Geometry*.

Outside reading. Every student in every math class has a required outside reading book. These books range from biographies to novels to expositions. Evaluation of this reading is usually done on individual tests or other written assessments.

Summer advancement. Students wishing to advance a level during the summer must either: attend the Newark Academy Summer Session and enroll in a six-week advanced credit course, earning a grade of B- or above; attend another accredited summer school, earn a grade of B- or above and pass the Newark Academy final exam in that course; or complete an independent study in the course and earn a grade of B- or above on the Newark Academy final exam. Students granted advanced placement through summer study will continue in the same level of course as they were originally placed.

Advanced coursework. Because students may not write the IB Higher Level exam until they are seniors, we offer a series of very advanced mathematics courses appropriate for students to take after the completion of *BC Calculus*. Each of these courses, *Differential Equations*, *Multivariable Calculus* and *Abstract Algebra*, may be taught as a full course or as an independent study. These courses are generally taken in the order listed. Non-IB Diploma students may take IB Higher Level, but are not required to do so.

CORE COURSES

GEOMETRY

This course in plane geometry covers the elements of analytic and solid geometry. The nature of proof, development of theorems from definitions and axioms, constructions, original exercises, analytic geometry of the straight line and of the circle are studied. A graphing calculator is highly recommended. The **Honors** section puts greater emphasis on formal proofs throughout the year. It also concludes with an extended introduction to trigonometry. *Prerequisite: Algebra 1*

ALGEBRA 2/TRIGONOMETRY

This course in intermediate algebra covers the elements of analytic geometry and trigonometry. Students study quadratic and higher degree equations, graphing, inequalities, the binomial theorem, series and sequences, arithmetic and geometric progressions, analytical geometry extended to the central conics, trigonometry of oblique triangles, trigonometric equations and identities, exponents, logarithms and complex numbers. A graphing calculator is required. After successful completion of the course, students are prepared to take the Math Level 1 SAT Subject Test. The **Honors** sections proceed at a much faster pace and include additional topics, such as: sequences and series, trigonometric sum, difference, double and half angle formulas, and polar graphing and powers and roots of complex numbers. *Prerequisites: Algebra 1 and Geometry*

PRE-CALCULUS

This course reviews intermediate algebra. The following topics are studied in some detail: analytic geometry, functions and inverse functions, logarithms and exponential functions, trigonometry, complex numbers and DeMoivre's Theorem, the conic sections involving translation, parametric and polar equations, vectors in two and three dimensions, determinants,

mathematical induction, limits, continuity and polynomials. Non-seniors, upon completion of the course, are prepared to take the Math Level 2 SAT Subject Test. The **Honors** sections include a significant introduction to both differential and integral calculus. *Prerequisite: Algebra 2/ Trigonometry*

PRE-CALCULUS HONORS WITH ALGEBRA 2/TRIGONOMETRY (FORMERLY TITLED MATH 3/4)

This course is special section of our Pre-Calculus Honors course, with admission by invitation only. It covers the concepts of both Algebra II/Trig and Pre-Calculus in one year. Students are expected to take the Math Level 2 SAT Subject Test upon completing this course. *Prerequisite: Geometry Honors*

IB MATH STUDIES

This IB Standard Level course follows the IB curriculum which includes probability, logic, statistics and financial mathematics among its topics. There is also a small introduction to differential calculus. Students in the course are required to complete a 2000-word mathematics research paper. All students are required to take the IB Math Studies exam upon completion of this course. This course is considered the least rigorous of the IB Mathematics offerings. *Prerequisite: Precalculus.*

CALCULUS (FORMERLY TITLED INTRODUCTION TO CALCULUS AND OTHER TOPICS)

This course offers an in-depth introduction to both differential and integral calculus. This includes the traditional applications of calculus, such as max/min problems, related rates, and area under the curve. Students who complete this course receive an introduction to the skills required for a college level course in Calculus. *NB:* This course is not designed to prepare students for AP Calculus AB at Newark Academy; students who wish to gain entrance must demonstrate mastery of additional topics from Pre-Calculus Honors. *Prerequisite: Precalculus*

IB MATHEMATICS

This IB Standard Level course includes an introduction to both differential and integral calculus, including applications such as area under a curve, maximum/minimum, related rates, and volumes of rotation. Additional topics are vectors, matrices, and introductions to both probability and statistics. Students must also complete a mathematics research paper for IB assessment. All students are required to take the IB Mathematics SL exam upon completion of this course. *Prerequisite: Pre-Calculus Honors*

AP CALCULUS AB

This course covers Analytic Geometry and Calculus. This is a college-level course preparing for the Advanced Placement examination in mathematics (AB level), which students must take at the end of the course. Course topics include Analytic Geometry derivatives, optimization volumes of rotation, surface areas, and arc lengths. *Prerequisite: Pre-Calculus Honors, or Pre-Calculus or Calculus with additional entrance requirements*

AP CALCULUS BC

This is the second year calculus course that covers the additional topics that are listed in the College Board's curriculum. These topics include: additional integration techniques, infinite sequences and series, polar equations, vectors and space geometry. This course also includes some of the following topics: differential equations, multivariable functions and partial derivatives. Students are required to take the AP exam in May. *Prerequisite: AB Calculus*

AB/BC CALCULUS

This fast-paced course covers the curricula of AB and BC Calculus (see above). Because of the speed and depth of the material to be covered, this course is by invitation only. Students who complete this course are required to take the BC Calculus exam in May. *Prerequisite: Pre-Calculus Honors*

DIFFERENTIAL EQUATIONS

This course, when offered, is designed for students who have finished BC Calculus. Topics will include, but are not limited to: solving First-Order Differential Equations by several methods, solving Second-Order equations, matrix algebra, and solving equations by reduction, graphical, and numerical methods. The course will end with a study of Laplace Transforms and their uses. *Prerequisite: BC Calculus*

MULTIVARIABLE CALCULUS

This course, when offered, extends the study of calculus to include three or more variables. Topics will include but are not limited to: vectors, partial derivatives, surfaces and transformations, multiple integrals and several fundamental theorems, including Green's and Stoke's theorems. Generally, students are expected to take Differential Equations before this course, but it is not required. *Prerequisite: BC Calculus*

ABSTRACT ALGEBRA

This course, when offered, gives students an introduction to completing university-level proofs in a broad range of topics. Topics will include, but are not limited to: sets and relations, the different number systems, groups, rings, and fields, and vector spaces. Generally, students are expected to take Differential Equations or Multivariable Calculus before this course, but they are not required. *Prerequisite: BC Calculus*

IB MATHEMATICS HL

This course, which is only open to seniors, covers both the core curriculum of the IB Higher Level exam and at least one of the subject's 'optional' topics. The core curriculum includes: matrices and transformations, vector geometry, probability, statistics, and additional integration techniques not covered in AB Calculus. The optional topic is typically Analysis and Approximation. Students are responsible for assembling a mathematics research paper for submission to IB. All students are required to take the IB Higher Level Mathematics exam in May. *Prerequisite: BC Calculus*

ELECTIVE COURSES

STATISTICS (11-12)

This course is an introduction to all of the skills needed to understand statistics in our world. The course is activity-oriented with the students completing projects, surveys and other investigations of real-world applications. The calculator is used extensively throughout the course. The course follows the normal curriculum of a college statistics course using a traditional college level textbook. This course does not prepare students for the AP Statistics exam. Students interested in taking the AP exam will be provided with a list of additional topics. *Prerequisite: Pre-Calculus*

INTRODUCTION TO COMPUTER PROGRAMMING (10-12)

Students learn an overview of programming and problem-solving techniques. Programming concepts include input and output commands, control structures, looping techniques, functions and an introduction to object-oriented programming. Instructional time is divided between classroom presentations and work in the computer lab. Assessment is covered by in-class written tests and teacher-directed programming projects. The vehicle language of this course is JAVA. Students who complete this course will have the option of taking the AP Computer Science A exam.

IB COMPUTER SCIENCE (11-12)

This course follows the *Introduction to Computer Programming* course. The curriculum for this course is determined by the IB Computer Science SL course. Students continue learning the language JAVA but also start to study the hardware involved in computers. Students taking this course are required to take the IB Computer Science SL exam. *Prerequisite: Introduction to Computer Programming*

SCIENCE

All courses are full year courses unless otherwise indicated.

ELIGIBILITY AND PLACEMENT POLICY

In order to be eligible for an honors section, a student coming from a regular section should be performing at an 'A-' level in their current science course. A student coming from an honors section should be performing at a 'B' level or above in their current science course. In most cases, the prerequisite for AP/IB courses is current enrollment in an honors section or AP/IB class. (Specific requirements are given in the relevant course descriptions that follow.) In addition, students wishing to enroll in honors sections or AP or IB courses should demonstrate a commitment to the study of science as well as competency in the following skill and performance areas:

- *Classroom skills and demeanor (e.g. prepared for class, self-motivated, able to follow instructions correctly and efficiently, tolerant of the opinions of others, contributes positively to class and lab, and focused and cooperative in class and lab.)*
- *Individual study and thinking skills (e.g. link ideas and facts into an organized whole, apply information to novel situations, identify the significance of ideas, learn and read independently, is curious, creative and imaginative.)*
- *Performance through expression (e.g. asks questions that clarify or improve the lesson, clearly expresses ideas in writing, clearly expresses ideas orally, produces high quality lab reports.)*

Students enrolled in an honors section must maintain a semester grade of at least a 'B' in order to continue in the course.

CORE COURSES

BIOLOGY (9)

This is the branch of science that investigates all aspects of living organisms: structure, function, interrelationships, and classification. The course begins with consideration of the molecular, cellular, and genetic basis of life. Study of topics in evolution, taxonomy, botany, ecology and human biology naturally follow. Laboratory work is essential to the understanding of Biology, and students experience phenomena involving living and preserved organisms while sharpening their skills of observation, data collection, and analysis.

CHEMISTRY (10-12)

The first-year course in chemistry is designed to expose the high school student to a broad range of concepts and experimental procedures concerning the properties and structure of matter, chemical reactions and their associated energy changes. Skills in writing lab reports are honed. The student completing this course will have a solid background for success in a general chemistry course during the college years. Evaluation methods in the course include tests, quests, quizzes, laboratory work, laboratory reports, class work, and homework. The **Honors** sections cover very much the same breadth of material as the regular chemistry sections, but in more depth conceptually and mathematically in all topics. Students who expect to take IB Chemistry must be enrolled in these sections. Evaluation methods in the course include tests, quests, quizzes, laboratory work, laboratory reports, class work, and homework. *Students seeking enrollment in the Honors sections should be working at an advanced level in mathematics. Co-requisite: Algebra II.*

PHYSICS (10-12)

Physics stresses conceptual understanding of the principles that govern the physical world. The topics of mechanics, electricity and magnetism, optics, waves, light and relativity are studied. While problem solving and quantitative calculations are part the course of study, this traditional aspect of physics is considered secondary to understanding and is, therefore, not overly emphasized in Physics. The course is designed for those who intend to study science in college, as well for those who may concentrate on other areas. A major focus is to relate principles to common experiences of the physical world. The **Honors** sections stress problem solving and calculations and are designed for students who are working at an advanced level in mathematics and are intending to take advanced Physics. *Prerequisites: Algebra II/Trigonometry and departmental permission for sophomores*

ELECTIVE AND ADVANCED COURSES

ANATOMY AND PHYSIOLOGY I (11-12) – fall

This course is designed for students wanting a depth of understanding in the structure and function of the human body. Topics include the skeletal, muscular, nervous, immune, endocrine and reproductive systems from the cellular level to the integration of these systems in the human body. During this lab course students will engage in dissections and other investigations to supplement their study of the human body. *Prerequisite: Biology. Sophomores may enroll with departmental permission.*

ANATOMY AND PHYSIOLOGY II (11-12) – spring

This course is designed for students wanting to continue their study of the structure and function of the human body. Topics include the digestive, respiratory, excretory, circulatory and immune systems from the cellular level to the integration of these systems in the human body. During this lab course students will engage in dissections and other investigations to supplement their study of the human body. *Prerequisite: Biology. Sophomores may enroll with departmental permission.*

BIOTECHNOLOGY I (11-12) – fall

This is a lab-oriented course where students extract DNA, perform DNA fingerprinting, isolate and clone genes. These activities are designed to expose students to recent advances in technology incorporating genetics, microbiology and biochemistry. Topics of exploration include recombinant DNA technology, cloning, transgenic organisms, the human genome and their scientific, ethical and economic impact on today's society. The overarching principles will be the theory, practice, global applications and ethical issues of each area of study with an emphasis on solving world problems. The course experience will be supplemented with guest speakers and field trips. Assessments include written evaluations, laboratory work, individual and group projects and reaction/position papers. *Prerequisites: Biology. Sophomores may enroll with departmental permission.*

BIOTECHNOLOGY II (11-12) – spring

This is a lab-oriented course where students engage in labs that detect genetically modified organisms or chimeras in their food, create bioreactors to grow antibiotics, extract, clone, and insert DNA to create microorganisms enhanced with new

powers not usually found in those species--just to name a few of the activities that are meant expose students to recent advances in technology incorporating genetics, microbiology and biochemistry. Topics of exploration include agri- and aqua-biotechnology and meeting world food demands, stems cells and the era of personalized medicine, and nano-biotechnology with regard to the scientific, ethical and economic impact of their inclusion in today's society. The overarching principles will be the theory, practice, global applications and ethical issues of each area of study with an emphasis on solving world problems such as hunger, health/medicine and environmental resources. The course experience will be supplemented with guest speakers and field trips, as available. Assessment includes written evaluations, laboratory work, individual and group projects such as designing a sustainable city of the future and reaction/position papers. *Prerequisite: Biology. Sophomores may enroll with departmental permission.*

ENGINEERING, TECHNOLOGY AND DESIGN (11-12) – fall

This course will serve as an introduction to various types of modern day engineering, including mechanical, civil, chemical, electrical and computer. Students will begin by learning about great historical engineering projects (both ancient and modern). They will come to have a good understanding of the way engineers think and how they proceed with difficult objectives. Students will learn to design and solve technical problems using engineering and basic physics knowledge and concepts. Students will complete an extensive multifaceted engineering/ design project. *Prerequisite: Biology. Sophomores may enroll with departmental permission.*

ASTRONOMY AND ASTROPHYSICS (11-12) – spring

This course will provide an introduction to astronomy and astrophysics. Students will gain a solid understanding of the nature, size and scale of the universe at large and of our place in it. They will be introduced to most important concepts of basic astronomy, such as the Hubble constant, the Doppler shift and the celestial sphere. Fundamental physics theories, including general relativity and quantum mechanics, as they apply to the universe, will be covered qualitatively. Students will then be systematically introduced to the many ways that mankind is exploring the universe, both observationally and theoretically, and to what we are learning from that vast exploration. Where possible, the class will also spend some time locating and viewing celestial objects with the Celestron telescope at Newark Academy. *Prerequisite: Biology. Sophomores may enroll with departmental permission.*

AP/IB ENVIRONMENTAL SCIENCE (11-12)

This is a lab-based course that focuses on the principles behind the functioning of natural ecological environments and the effects that humans have on these natural ecosystems. Areas of study include the structure and function of aquatic ecosystems and biomes, system modeling of ecosystems, population dynamics, nutrient cycles, human population growth, global atmospheric interactions, energy production, pollution, biodiversity and deforestation. Students perform a significant amount of fieldwork in the form of observation and data collection on local ecosystems. IB students conduct a Group IV interdisciplinary project for their IB portfolio. All students enrolled in this course must take either the IB Standard Level or the AP exam in May. *Prerequisites: Biology, Chemistry and Physics are suggested, although not required. In addition, a student must have at least a B- average in the previous two years of science courses.*

IB BIOLOGY I (10-11) – spring or summer

This course is the first portion of the IB course in Biology. The main topics of study focus on bio-energetics, biochemistry, cell structure and function. Lab work is conducted with emphasis on planning and performing lab experiments as well as analyzing collected data. All students will be required to maintain a lab portfolio. More advanced and detailed topics will be covered in the second year. An intensive two-week version of this course has been offered in the summer. *Prerequisites: Biology with at least an A- average, Chemistry (or Chemistry Honors for sophomores)*

IB BIOLOGY II (11-12)

This course provides an in-depth coverage of the discipline of Biology and develops essential laboratory and analytical skills required for advanced work in this field. The topics discussed build on the principles learned in IB Biology I. Evolution and phylogeny are covered as well as plant and animal physiology. An extensive dissection of a mammal will be performed during this course. An overview of taxonomic relationships will be discussed and time permitting a survey of ecology will also be included. Students will be expected to learn some material through self-study and lab work will be extensive. All students will conduct a Group IV interdisciplinary project to be included in their lab portfolio. Students must take the IB (Higher or Standard Level) exam in May. *Prerequisites: IB Biology I (with at least a B average)*

IB CHEMISTRY (11-12)

IB Chemistry is equivalent to a college level course in general chemistry. This course, picks up where first-year chemistry leaves off, providing depth in solution chemistry, kinetics, equilibrium, acids and bases, thermodynamics, oxidation-reduction

and electro-chemistry, topics only touched on in the first-year course. Evaluation methods in the course include tests, quests, quizzes, laboratory work, laboratory reports, class work and homework. Students must take the AP or IB (Higher or Standard Level) exam in May. *Prerequisite: Chemistry Honors.*

IB PHYSICS (11-12)

This course provides a systematic introduction to the main principles of physics and emphasizes the development of conceptual understanding and problem-solving ability using algebra and trigonometry and, occasionally, calculus. It includes topics in both classical and modern physics. The basic ideas of calculus are introduced in the theoretical development of some physical concepts such as acceleration and work. The course seeks to be representative of topics covered in similar college courses: Newtonian Mechanics (35%), Thermal Physics (10%), Electricity and Magnetism (25%), Waves and Optics (15%), and Atomic and Nuclear Physics (15%). All students will conduct a Group IV interdisciplinary project for their IB portfolio. The course will prepare students for the IB (Higher or Standard Level) exam. Student must take this exam in May. *Prerequisites: Physics Honors and Pre-calculus*

ADVANCED PHYSICS SEMINAR (12)

*****NEW COURSE*****

When offered, this course gives students the opportunity to apply to physics more fully the advanced math methods they have learned in other courses. The course covers topics in Mechanics, Electricity and Magnetism that require applications in Calculus. At the conclusion of the course, interested students may choose to sit for the AP Physics C exams. *Prerequisites: Successful completion of IB Physics, and either IB Mathematics or AP Calculus AB (or Precalculus Honors with the permission of the Science Dept.).*

ADMINISTRATIVE

All courses are non-credit and part-time.

PUBLIC SPEAKING (9) – one semester, required

This course meets once per cycle, and introduces the student to the organizational and writing skills necessary for preparing a formal speech or oral presentation. Students are then taught basic presentation skills, and are given several speaking assignments which incorporate the organizational, writing, and delivery skills that have been covered. Types of speeches include Morning Meeting announcements, classroom oral presentations, testimonials, informational and persuasive speeches, extemporaneous speaking, interviewing, and debating. Students are evaluated by the instructor and by students through a skills assessment sheet, and with the medium of videotape.

PEER GROUP (9) – required

Ninth grade groups meet once per cycle with senior Peer Leaders (see below). The meetings focus on assisting students in making the academic, social and emotional transition to Upper School. Activities and discussions are designed to foster a spirit of group unity and to explore decision-making skills associated with adolescent issues.

STUDY HALL (9-11)

To maximize student concentration and efficiency, study halls are silent. Group work is not allowed and students may not go to the library. The study hall proctor may excuse a student to work with a teacher only if he or she provides the proctor with a note from the teacher at the beginning of the period.

COLLEGE COUNSELING WORKSHOP (11-spring and 12-fall)

This workshop provides students the opportunity to meet with the college counselors on a regular basis and serves to facilitate the completion of paperwork, and the dissemination of important information relating to the college search and application process. As a complement to individual meetings with college counselors, the workshop provides students with vital information, as well as affords them an opportunity to discuss the college application process with other students. Students learn about the process through small classes that meet once per cycle. Topics covered include: college research, the campus visit and interview, college essays, completing an application, how colleges make decisions, and preparing supplementary materials. Students are given short-term assignments.

PEER LEADERSHIP (12) – by application

Sixteen seniors are selected each year to participate in this program that is coordinated by the School Counselor and two faculty advisors. The program, which meets four times per cycle, teaches senior peer leaders communication, problem-solving and group facilitation skills. The peer leaders use these skills to plan and conduct peer groups for 9th grade students (see Peer Group above) to help them adjust to and cope with the demands and concerns of Upper School.

Appendix A. THE INTERNATIONAL BACCALAUREATE (IB) DIPLOMA PROGRAM

Newark Academy was the first school in New Jersey (1991)--and remains one of the few--authorized to offer the International Baccalaureate (IB) Diploma Program. The program, designed for grades 11 and 12, is a very rigorous college preparatory program which emphasizes scholarship, intellectual inquiry and international understanding. Students who are drawn to these elements and who are intrinsically engaged learners may be ideal candidates for the Diploma Program. Students who are not interested in pursuing the full program or who do not earn eligibility into all of the requisite courses (see below) may take individual IB courses. As is true for AP courses, high scores earned on the final standardized IB exams in May can lead to advanced placement or course credit in college.

REQUIRED COMPONENTS OF THE IB DIPLOMA PROGRAM

1. Coursework in 6 subject areas - below. At least three of these subjects must be taken at the "Higher" level (HL); the rest at "Standard" (SL). The arrangement is based on individual student's strengths and interests.
2. Theory of Knowledge (TOK) is a part-time discussion seminar on the nature of *knowing* which provides a context for examining what and how things are known in traditional academic disciplines and beyond.
3. Extended Essay is a 4,000-word independent research paper on a topic of personal interest, It is supervised by a faculty member requested by the student. Requiring approximately 40 hours of work, the essay is typically written in the summer after junior year and is presented publically in September.
4. Creativity, Action, Service (CAS) In order to engage with the world outside of high school classes, students pursue endeavors in their school or community with elements of creativity, action and service, and reflect upon them in formal and informal ways.

COURSEWORK

Students must take *at least one course* from each of Groups 1-5 (below), as well as one *elective* course. The elective may be an Art (Group 6) or a second course from Groups 1-5. Diploma students may take up to two SL courses in 11th grade, the rest in 12th grade. HL courses may only be taken in the 12th grade.

GROUP 1	GROUP 2	GROUP 3
IB English HL HL	IB French/Spain Literature HL	IB Economics HL/SL
IB English SL	AP/IB French/Spain Language SL	IB History HL HL/SL
	Advanced Mandarin SL	IB Philosophy HL/SL
	French/Spanish 2 Hon. SL	IB History SL
		AP/IB Environ SL
GROUP 4	GROUP 5	GROUP 6 (optional)
IB Biology HL/SL	IB Math HL HL	IB Dance HL
IB Chemistry HL/SL	IB Mathematics SL	IB Theatre Arts HL
IB Physics HL/SL	IB Math Studies SL	IB Visual Arts HL
AP/IB Enviro SL	IB Computer Science* SL	IB Music SL
	*May be taken only as an elective.	

For more information, contact an IB Coordinator. *Prior to August 2012*, contact Mr. Hawk (bhawk@newarka.edu); *or from August 2012 on*, contact Mr. Stourton (nstourton@newarka.edu).

Appendix B. THE IMMERSION EXPERIENCE

PHILOSOPHY

Beyond mere travel and tourism, an immersion experience seeks to engage students in cultural or environmental exploration, developing an appreciation and understanding of diverse cultures, peoples and perspectives in the world. Experiences can last from two weeks to an entire school year, depending on the interests and situations of individual students.

The Immersion Experience requirement reinforces Newark Academy's commitment to incorporating direct, experiential education into its curriculum. As a result, students gain knowledge, broaden their perspectives, and learn the important skill of adapting to new environments. It is our conviction that students whose rigorous academic work is complemented by such direct, real-world experiences will be poised to thrive in an increasingly global society.

GENERAL INFORMATION

The requirement: all Newark Academy students will have at least one immersion experience involving at least a 10-day wilderness experience or a 16-day experience in a culture distinct from one's own that includes a significant homestay or its equivalent.

Students must fulfill the requirement in a single trip, which may take place at any time over the four years of Upper School, including summer breaks.

Students may choose an immersion experience that focuses on any of the four themes below that most interest them. Of course, many experiences offer a mix of these themes.

- Foreign language immersion
- Cultural immersion
- Community service immersion
- Wilderness/nature immersion

Finally, aiming for flexibility, creativity and economic responsibility, students may fulfill this requirement in any of the ways below:

- A Newark Academy-designed immersion experience
- An approved semester or year off-campus study program (see pp. 2-3)
- An approved summer program
- A well-conceived, student-proposed immersion experience

For more information, contact Mrs. McNeilly-Anta (mmcneilly-anta@newarka.edu), the Immersion Experiences Coordinator.