

Quabbin Regional High School

Barre ♦ Hardwick ♦ Hubbardston ♦ New Braintree ♦ Oakham



Course Catalog 2016-17



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EOE: Quabbin Regional School District's Policy of nondiscrimination will extend to students, staff, the general public and individuals with whom it does business; and will apply to race, color, national background, religion, sex, disability, economic status, political party, age, handicap, sexual orientation, gender identity, homelessness and other human differences.

ACCREDITATION

Quabbin Regional High School is accredited by the New England Association of Schools and Colleges (NEASC), a non-governmental, nationally recognized organization, whose affiliated institutions include elementary schools through collegiate institutions offering post-graduate instruction.

Accreditation of an institution by NEASC indicates that it meets or exceeds criteria for the assessment of instructional quality periodically applied through a peer group review process. An accredited school or college is one which has the necessary resources available to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Vision & Mission Statement

Quabbin Regional High School is a collaborative learning community, where all students have opportunities to achieve personal excellence in a safe and accepting environment. Our mission is to prepare students to become self-reliant, life-long learners who are responsible and resourceful citizens in a global society.

Core Beliefs

We believe

- in giving all students access to a rigorous standards-based program of studies designed for a future in which they will work and learn.
- in using specific and appropriate data to inform both school and instructional decision making.
- in using multiple measures to determine and evaluate the performance of individuals and the school.
- in giving all students access to technology-enhanced learning environments where students and teachers acquire information, interact globally, and creatively problem solve.
- in engaging students and teachers in critical thinking, open inquiry, cooperative learning, and reflective practices both within and outside the classroom.
- in innovation to serve students and the community in a dynamically-changing environment.
- in ongoing, effective, research-based professional development to enhance student achievement.
- in empowering students to take ownership of their personal development and education, to set challenging goals, and to become risk takers.

Core Values

We value

- civic, social, and environmental responsibility.
- collaborative approaches to teaching, learning, and decision making among and within school, home, and community.
- a strong sense of security and the existence of a safe, positive, and caring environment.
- dignity, honor, and respect for all.

21st Century Learning Expectations

Students will

- actively learn and collaborate
- exercise responsible citizenship
- communicate effectively
- effectively use technology
- think critically
- think creatively

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COURSE SCHEDULING

QRHS creates a master schedule based on student course demands and registrations. Scheduling for students happens mid-way through the school year. Students are first given draft versions of the course selection sheets which they can use as a worksheet when planning out their courses and considering possibilities. They can also show the draft version of the course selection form to their parents and have discussions at home regarding their courses for the following year. Students are advised to seek feedback and information from parents, teachers, and counselors on upcoming courses for their next year of high school. Then all students will fill out their official course selection form on Scheduling Day in February.

The courses a student chooses in freshmen year can have implications on their schedule in future years as well as their college applications; so decisions on student's schedules should be made in conjunction with student, parent/guardian, and guidance counselor. It is recommended that students consider their high school career and goals as well as their post-graduate goals and college aspirations when making course decisions, even in freshman year.

The Guidance Department advises each student to take the scheduling process seriously as space in classes is determined by student registrations and therefore there will be limited availability in courses once the master schedule is set. Students also have a narrow window where they are able to change courses once the year begins. It is recommended that students meet with teachers and review the Course Catalog prior to making course registration decisions for the following year.

Once completed course selection forms are received by guidance, the registrations are entered in the computer. A Course Registration letter will be mailed home for all students that indicates the courses that a student registered for. The letter allows parents and students to review the course registrations for accuracy as well as to serve as a way for students to make any necessary changes to the courses they registered for prior to the master schedule being created. If a student would like to change the courses they registered for they can simply write the change on the Course Registration letter, have a parent sign it, and return it to the high school guidance office.

COURSE SELECTION PROCEDURE

Quabbin provides a limited time for the course selection process. It is recommended that students:

- Review the courses offered and prerequisites; a passing grade is required for all prerequisites
- Review the courses required for your grade level and review graduation requirements
- Review college admission criteria
- Review and select appropriate Instructional Level or Phase to make sure you are choosing a course load that fits your abilities and appropriately challenges you
- Select the electives that complete your schedule and meet your goals
- Collaborate with parents/guardians in making course choices
- Consult with teachers and guidance counselor
- **FULLY COMPLETE THE COURSE REQUEST FORM ON SCHEDULING DAY**
- Circle electives and list alternate electives to best ensure your schedule most closely matches your interests
- Submit the completed Course Request Form to Guidance
- Course choices will be input in to the computer system
- A Course Registration Letter is sent home indicating the courses you chose to parents/guardians
- Make any changes on the Course Registration Letter and return to the guidance office

ADD/DROP TIMETABLE

Students are able to change a first trimester course in the first four days of school based on course availability. After the first four days of school a student will need to have guidance, administrative and parent approval for any changes. Any change requests for Trimester 2 or 3 need to be made by the end of October. Once Trimester 2 or 3 begin, only teacher recommendation or failure in a core subject will allow a student to move from a course.

COLLEGE & CAREER READINESS

It is Quabbin Regional High School's expectation for all students that they develop the skill set, wisdom and expertise needed to form and achieve any post-graduate goal. Whether a student is headed toward college, vocational training, military or service work, the academic and co-curricular activity choices a student makes matter. As a freshman, sophomore, junior or senior, the courses students choose to take will either maximize options or limit opportunities. Each year a student's schedule will include both required, or core, courses and elective courses. The Guidance Department strongly encourages all students to focus elective choices on courses that will assist you in forming and achieving your post-graduate goals.

All students should work toward college and career readiness by accessing a rigorous, well rounded curriculum while in high school. The Guidance Department recommends all students meet not only QRHS requirements but also work to fulfil the standards required by the MA Department of Higher Education. In order to succeed after high school graduation, all students must develop the skill set necessary to handle challenging level coursework.

The Following is from the Massachusetts State University System Admission Standards published in 2013. Beginning with the Class entering college in the fall of 2016 the following minimum course requirements must be met for entrance to a Massachusetts State University. MA community colleges may admit any high school graduate or HiSet/GED recipient. Please refer to the MA DHE website for current information on Massachusetts public institutions.

Subject	Requirement for college freshmen entering a Massachusetts University or UMass
English	4 Courses
Math	4 courses (Algebra I & II and Geometry or Trigonometry, or comparable coursework) including mathematics during the final year of high school.
Sciences	3 courses (drawn from Natural Science and/or Physical Science and/or Technology/ Engineering), including 3 courses with laboratory work.
Social Science	2 courses (including 1 course in U.S. History)
World Language	2 courses (in a single language)
Electives	2 courses (from the above subjects or from the Arts & Humanities or Computer Sciences)

College-bound students should note that many schools have different entrance requirements based on the course of study and type of institution. It is imperative that applicants know and follow the admission requirements of each institution to which they are applying. Certain colleges and universities require additional and/or specific units for special programs such as engineering, the medical field, occupational therapy, physics, mathematics, computer information science and business management.

The QRHS Guidance Department meets with students individually and in groups throughout high school to assist them in identifying their interests and establishing a post-graduate goal. Resources are provided for students to assist them in completing self-interest inventories, college and career research, and planning for life after graduation.

Information on standardized testing, programming and guidance initiatives are available on the QRHS website. Please refer to the site for more information. The guidance department hosts an in-house college fair as well as programming throughout the year for students regarding the college application process, financial aid, and other relevant topics to help students and families prepare for the transition from high school.

ART & DESIGN DEPARTMENT

The Art & Design Department implements the Massachusetts Curriculum Frameworks and the Quabbin District School Wide rubrics by providing opportunities for students to express themselves in two-dimensional and three-dimensional media, as well as through the historical aspects of art.

Students are encouraged to think inventively and reflectively. Students work to understand the role of the creative process in their own work and in the work of their peers. The Art & Design Department embraces the trimester schedule by complementing ART I with an assortment of dynamic courses in visual production.

Course Offerings

Art I
Ceramics I
Ceramics II
Digital Illustration
Digital Imaging I
Digital Imaging II
Drawing I
Drawing II
Illustration I
Illustration II
Introduction to Graphic Design
Painting I

Painting II
Portrait Sculpture
Printmaking
3D Design I
3D Design II
College Portfolio
Portfolio Preparation
Visual Capstone Studio
IB Visual Arts – Higher Level (5 Parts)
IB Visual Arts – Standard Level(3 Parts)
IB Film – Higher Level (5 Parts)
IB Film – Standard Level (3 Parts)

ART I

Course No. 4001

Phase 4

Grades 9, 10, 11, 12

2.5 Credits

Prerequisites: None - Art I meets the Middle Years Program Arts requirement.

Art I is the gateway course building a solid base for all advanced classes. Art I is a sketchbook-based course and will focus on the development of the student's creative process. Students will learn how to recognize and apply the necessary foundation of visual problem solving skills, useful in future art courses as well as courses beyond the Art Department. In addition, students will learn how to properly analyze their own work and the work of others. Art I will encourage inventive thinking through the use of a variety of materials, allowing students to experience a wide range of media. (Art I is required as a pre-requisite for all other art classes except 3-D Design and Digital Imaging I.)

CERAMICS I

Course No. 4002

Phase 4

Grades 9, 10, 11, 12

2.5 Credits

Prerequisites: Art I

This is an introductory course in the study of clay objects. The primary focus is hand building, which includes slab-work, coiling and pinching. Using these techniques, students will construct various functional and nonfunctional forms. Basic sculpting techniques will also be explored. In addition, students will learn the language of the ceramics studio and the terms and procedures associated with the ceramist.

CERAMICS II

Course No. 4003

Phase 4

Grades 10, 11, 12

2.5 Credits

Prerequisites: Art I and Ceramics I

This course will provide students with a more thorough, in-depth study of clay objects, materials and techniques. In addition to advanced hand building, surface decoration, firing and glazing techniques, basic wheel throwing skills will also be introduced.

DIGITAL ILLUSTRATION

Course No. 4004**Phase 4****Grades 9, 10, 11, 12****2.5 Credits****Prerequisites: Digital Imaging I**

This course enables students to develop computer-drawing abilities using Adobe Illustrator and Adobe Photoshop to create a variety of illustrations. Students will learn digital paint techniques to take their drawings to a finished level. Projects range from icon design to cartoon characters and packaging concepts.

DIGITAL IMAGING I**Course No. 4005****Phase 4****Grades 9, 10, 11, 12****2.5 Credits****Prerequisites: None** - Digital Imaging I meets the Middle Years Program Design requirement.

This course will enable students to utilize Adobe Photoshop to create unique digital images. Students will explore both the techniques of image manipulation and the artistic aspects of creating images. By completing a variety of individual projects, including use of photography, students will become comfortable in using the computer as a medium to create images that communicate.

DIGITAL IMAGING II**Course No. 4006****Phase 4****Grades 9, 10, 11, 12****2.5 Credits****Prerequisites: Digital Imaging and Design I**

This course expands upon skills developed in Digital Imaging I by enabling students to combine photographs from several sources to create original imagery in a variety of styles. The surreal or fantasy art used widely in the gaming industry will also be explored.

DRAWING I**Course No. 4007****Phase 4****Grades 9, 10, 11, 12****2.5 Credits****Prerequisites: Art I**

This course will expand upon the drawing skills introduced in Art I through a series of observational drawing projects. A variety of media are used, building the foundation of drawing techniques necessary to begin to develop a body of work for a college portfolio. In addition, students will learn the traditional classical approach to drawing as well as more modern methods.

DRAWING II**Course No. 4008****Phase 4****Grades 9, 10, 11, 12****2.5 Credits****Prerequisites: Art I and Drawing I**

This advanced level Drawing course will develop observational skills through a series of complex drawing projects. There will be an emphasis on drawing people as well as a concentration on developing a regular sketchbook practice. This course is designed for the serious art student who is highly motivated to improve their drawing skills and is willing to draw on a daily basis beyond studio time.

ILLUSTRATION I**Course No. 4009****Phase 4****Grades 9, 10, 11, 12****2.5 Credits****Prerequisites: Art I**

This course is designed to strengthen student's visual communication skills using a variety of illustrative techniques and media including duct-tape, pen and ink, marker, and watercolor. Projects will include, caricature, political cartooning, botanical and cover illustration.

ILLUSTRATION II

Course No. 4010

Phase 4

Grades 9, 10, 11, 12

2.5 Credits

Prerequisites: Art I & Illustration I

This course is designed to further strengthen student's visual communication skills using a variety of illustrative techniques and media including cut-paper, scratchboard, pen and ink and watercolor. Projects will include children's book, print ad, and scientific illustration.

INTRODUCTION TO GRAPHIC DESIGN

Course No. 4015

Phase 4

Grades 9, 10, 11, 12

2.5 Credits

Prerequisites: Digital Imaging and Design I

This course provides an introduction into the world of advertising and graphic design utilizing the Adobe Creative Suite. Reviewing the project cycle from concept to final production emphasizes the design process. Projects explore the client/designer relationship, target audience and the importance of visual communication.

PAINTING I

Course No. 4020

Phase 4

Grades 9, 10, 11, 12

2.5 Credits

Prerequisites: Art I

This course offers students the opportunity to explore various painting media such as oil, acrylic and watercolor. They will develop specific skills associated with a range of painting techniques. Students will gain a deeper understanding of color theory and how artists use color to get desired results.

PAINTING II

Course No. 4021

Phase 4

Grades 9, 10, 11, 12

2.5 Credits

Prerequisites: Art I

This advanced level course further develops student's painting skills through a series of more complex painting projects. Students are expected to maintain a high level of intensity to develop solutions beyond what is simple or cliché. This course will concentrate on developing the student's personal painting style through a variety of painting mediums and exposure to artist's styles throughout history.

PORTRAIT SCULPTURE

Course No. 4025

Phase 4

Grades 10, 11, 12

2.5 Credits

Prerequisites: Art I

This course is designed to familiarize you with the structure and form of the human head. Through observation and various additive and subtractive sculpting techniques you will produce clay studies of the ear, nose, mouth and eye. Once you have established an understanding of these forms, you will use the skills you have acquired to sculpt a clay portrait.

PRINTMAKING

Course No. 4027

Phase 4

Grades 9, 10, 11, 12

2.5 Credits

Prerequisites: Art I

This course will explore various printmaking methods such as relief, monotype, intaglio and collagraphy. Students will expand their knowledge of composition learned in Art I and will also use the printing press while they do it. While printmaking may be an unfamiliar art form to some, the high level of enjoyment in creating unique prints is universal. Students will learn the fundamentals that follow a strict artistic tradition to ensure quality prints in the end.

3D DESIGN I

Course No. 4028

Phase 4

Grades 9, 10, 11, 12

2.5 Credits

Prerequisites: None – 3D Design I meets the Middle Years Program Design requirement.

This introductory course explores various forms of sculpture and construction using a wide array of materials including wire, wood, found objects, plaster, fabric, corrugated metal and paper. Additionally, a strong emphasis is placed on the artistic process, critical thinking and problem solving skills, as well as visual communication and aesthetics.

3D DESIGN II

Course No. 4029

Phase 4

Grades 10, 11, 12

2.5 Credits

Prerequisites: Art I and 3D Design I

This advanced course explores more complex forms of sculpture and construction including various joinery and finishing techniques, mold-making, assemblage and installation art. Similar to 3-D Design I, a strong emphasis is placed on the artistic process, critical thinking and problem solving skills as well as visual communication and aesthetics.

College Portfolio and Portfolio Preparation - Please note regarding both Portfolio courses:

The Portfolio courses will offer the college-bound student a good foundation for higher education. Students do not need to be planning on going to Art School to take these courses. Many students have benefitted by submitting an art portfolio in other areas of concentration such as engineering and liberal arts. Students who take the Portfolio courses will have the honor of participating in an exhibit of their work during Senior Week at the end of the year. Ideally, Portfolio preparation should be taken Junior year and College Portfolio be taken Senior year.

COLLEGE PORTFOLIO

offered 1st Trimester

Course No. 4030

Phase 5

Grade 11-12

2.5 Credits

Prerequisites: Art 1, Drawing and one other course within the Art Department.

College portfolio is an Honors course offered in the first trimester of each year. This course will focus on shoring up individual's portfolios for college application. Projects will be more individualized based on the needs of each student. Artwork will be photographed and students will develop an artist statement to go with their body of work. (See Portfolio note above)

PORTFOLIO PREPARATION

offered 2nd Trimester

Course No. 4031

Phase 5

Grade 11-12

2.5 Credits

Prerequisites: Art 1, Drawing and one other course within the Art Department.

Portfolio Preparation is an Honors course offered in the second trimester of each year. It is ideal to take Portfolio Prep in your junior year, but it is not required. This course will focus on developing a body of work that meets the quality that can be used in a college portfolio. It will concentrate on developing a personal style and improving two-dimensional art skills using a variety of media. By the end of the Portfolio Preparation course, students should expect to have a solid foundation in composition as well as a broad range of technical abilities in many different media. (See Portfolio note above)

VISUAL CAPSTONE STUDIO

offered Trimester 3

Course No. 4035 & 4036

Phase 5

Grade 12

2.5 Total Credits

Prerequisites: College Portfolio

The Visual Capstone student must meet the prerequisites to select and be enrolled in College Portfolio. Visual Capstone studio is offered in the Last TWO trimesters, 2 and/or 3 of each year, completed in studio.

Visual Capstone is designed for the serious Art student. Visual Capstone is planned as an independent Art study experience. The student's proposal must be presented and approved by the Art faculty during the 1st Trimester.

During the 1st Trimester, in College Portfolio, the student's Visual Capstone description, with student designed assessment objectives and due dates, will be submitted for Department approval. The Visual Capstone student will then select two 2D, 3D and/or Digital studio blocks for scheduling their independent Capstone experience during Trimesters 2 & 3.

IB VISUAL ARTS – HIGHER LEVEL

(This course runs over junior and senior years)

Grades 11 & 12

Grade 11 – Part 1 & Part 2

Course No. 4040 & 4041

5.0 Total Credits

Grade 12 – Part 3, Part 4, & Part 5

Course No. 4042, 4043, & 4044

7.5 Total Credits

Phase 7

Prerequisites: Art I Strongly Recommended

This course is designed to provide students with opportunities to develop aesthetic, imaginative and creative facilities; stimulate and train visual awareness, perception and criticism of the arts of various cultures; enable students to discover, develop and enjoy means of creative visual expression; encourage the pursuit of quality through training; individual experiment and persistent endeavor; and encourage a lively, inquiring and informed attitude toward art and design in all its forms, both in history and today. This course consists of Visual Arts A (Studio Work), an introduction to the principles of art and design, as well as practical experience in several media and techniques. Students develop a portfolio of studio work for assessment by an outside examiner. Visual Arts B (Research Workbook) concentrates on compiling one or more personal research workbooks that include visual and written entries illustrating a student's practical and experimental work, personal responses, and critical research.

IB VISUAL ARTS – STANDARD LEVEL (Part 1, Part 2, & Part 3)

(This course is a single year option)

Grades 11 or 12

Course No. 4050, 4051, 4052

Phase 6

7.5 Total Credits

Prerequisites: Art I Strongly Recommended

This course is designed with the same aims and philosophy as HL, the difference being that SL students need to complete only one option, A or B. Visual Arts option A (Studio Work) SL includes an introduction to the principles of art and design, and practical experience in several media and techniques. Students following option A develop a portfolio of studio work for assessment by an outside examiner. Visual Arts option B (Research Workbook) SL concentrates on compiling one or more personal research workbooks that include visual and written entries illustrating a student's practical and experimental work, personal responses, and critical research.

IB FILM – HIGHER LEVEL

(This course runs over junior and senior years)

Grades 11 & 12

Grade 11 – Part 1 & Part 2

Course No. 4060 & 4061

5.0 Total Credits

Grade 12 – Part 3, Part 4, & Part 5

Course No. 4062, 4063, 4064

7.5 Total Credits

Phase 7

Prerequisites: None

This unique course covers film theory, film history and film production. Students watch entire films and film clips to learn about the language of film. They also will apply that language to look at how filmmakers create meaning in films. Students also will study the differences between films from different countries and cultures. Moreover, students see how the history of film has led us to where we are now and where we might go in the future. Finally, as students master these concepts, they are expected to become filmmakers themselves as they plan, shoot and edit their own movies. This course is quite different than any other film course, and students should be aware that while this class is meant to be fun and interesting, there are still

assignments and work to complete so plan ahead.

IB FILM – STANDARD LEVEL
(This course is a single year option)
Course No. 4070, 4071, 4072

Grades 11 or 12

7.5 Total Credits

Phase 6

Prerequisites: None

This unique course covers film theory, film history, and film production. Students will watch entire films and film clips to learn about the language of film. They also will apply that language to look at how filmmakers create meaning in films. Students also will study the differences between films from different countries and cultures. Moreover, students see how the history of film has led us to where we are now and where we might go in the future. Finally, as students master these concepts, they will become filmmakers themselves as they plan, shoot and edit their own movies. This course is quite different than any other film course, and students should be aware that while this class is meant to be fun and interesting, there are still assignments and work to complete so plan ahead.

BUSINESS DEPARTMENT

The Business Department offers a broad array of courses which are designed to prepare students for success in business-related courses in college as well as exposing them to career possibilities in areas related to business. Each course provides the basic principles and real-world experience needed for a future in business. Development of skills in communication, problem solving, decision making and computer literacy, and an understanding of basic business and economic principles are integrated throughout the Business curriculum.

Principles of Marketing & Retailing
Business Law
Intro to Business Information Systems

Sports & Entertainment Marketing
Principles of Accounting I
Entrepreneurship

All Business Department Courses are 2.5 credits

PRINCIPLES OF MARKETING AND RETAILING

Course No. 4206

Grades 9, 10, 11, 12

Phase 4

2.5 Credits

Prerequisite: None

This course is designed for students who are interested in pursuing marketing- or retailing-related careers such as journalism, mass communication, advertising or public relations, and for students who are planning to further their education at the post-secondary level in the marketing or business arena. It will explore various processes, concepts, practices and trends relevant in today's business world. Primary marketing themes include the marketing environment; understanding buyers and marketing customer value; the impact of technology; ethics and social responsibility; global perspectives; and managing the marketing process. Students with an interest in business and marketing as well as an interest in career practice for the 21st century information world will be served by this course. Course content includes human relations, math, communication, economics, salesmanship and leadership. Instruction includes the relationship of products, prices, and promotions to the marketing of goods and services to consumers. Students learn competencies required for securing and holding a job.

BUSINESS LAW

Course No. 4202

Grades 9, 10, 11, 12

Phase 4

2.5 Credits

Prerequisite: None

This course provides students with opportunities to study the United States Constitution as it relates to them; explore criminal and tort law as well as the court system; examine business crimes and contacts; focus on consumer rights and responsibilities; examine legal aspects of employment; research careers in the law field; and discuss the impact of laws on travelers and those living abroad. Students will have the opportunity to use the internet to research, and will benefit from guest speakers. This course provides the most important legal concepts a business person must know to be successful in today's business environment.

INTRO TO BUSINESS INFORMATION SYSTEMS

Course No. 4205

Grades 9, 10, 11, 12

Phase 4

2.5 Credits

Prerequisite: None

This course focuses on fundamental computer concepts applicable to business and management, including software, problem solving, case studies, business models, and computer systems analysis and design, as well as basic computer applications. Students learn to work with a spreadsheet, a database management system, and word processing and presentation software, and to apply these skills to the functional areas of organizations. Case studies are drawn from accounting, finance, marketing, information systems, operations management and other areas of business. Students learn how to use the web efficiently to research information.

SPORTS & ENTERTAINMENT MARKETING

Course No. 4225

Grades 9, 10, 11, 12

Phase 4

2.5 Credits**Prerequisites: None**

This course takes students on a step-by-step journey through the basic functions of marketing including marketing information management, financing, pricing, promotion, product/service management, distribution and selling. Students learn key functions of marketing and how those functions are applied to sports and entertainment. Each market function is incorporated throughout the text; features bring the links between the sports and entertainment industries and marketing into clear focus.

PRINCIPLES OF ACCOUNTING I**Course No. 4215****Grades 9, 10, 11, 12****Phase 4****2.5 Credits****Prerequisite: None**

This course introduces students to a complete accounting cycle for a service business organized as a sole proprietorship, and a merchandising business organized as a small, privately-held corporation. Microcomputer applications provide the opportunity to use automated accounting software to solve problems.

ENTREPRENEURSHIP**Course No. 4220****Grades 9, 10, 11, 12****Phase 4****2.5 Credits****Prerequisite: None**

This course helps students determine if they are suited to be entrepreneurs. Students learn how the free-enterprise system works, the role of entrepreneurs in the system and the characteristics common to successful entrepreneurs. Students engage in self-assessment activities to help them decide if they are well suited for self-employment – the fastest growing form of employment in the world.

ENGLISH DEPARTMENT

The English Department implements the Massachusetts Curriculum Frameworks by providing opportunities for students to read critically, to engage in meaningful discussions, and to express themselves clearly through the effective use of language.

Requirements and Recommendations:

All students are required to take and pass one 5 credit literature-based English course per year. Students should confer with their guidance counselor, English teacher, and/or English Academic Coordinator to determine appropriate course selections when there are options. In addition to required courses, English electives are offered that allow students to explore and pursue special interests. To enhance the critical reading, writing and thinking required in high-stakes tests, career employment, and college placement, it is highly recommended that students participate in English electives in addition to their required English courses.

Courses in the English Department

- fulfill the graduation requirement for English
- selected courses fulfill the graduation requirement of 5 credits in The Arts
- implement academic expectations in critical thinking, effective use of technology, active learning, responsible citizenship, and written and non-written communication

Core Course Offerings

English 9: Elements of Fiction

English 9: Studies in Genre

English 10: American Voice

English 10: World Voice

Advanced Placement: Language &

Composition (3 Parts) (Gr. 11 or 12)

Advanced Placement: Literature & Comp (3 Parts) (Gr. 12)

IB English Literature Standard Level

Gr. 11 -Pt. 1 & 2

Gr. 12 -Pt. 3 & 4

IB English Literature Higher Level

Gr 11 -Pt. 1-3

Gr. 12 -Pt. 4 & 5

IB Literature and Performance Standard Level

Gr. 11 -Pt. 1 & 2

Gr. 12 -Pt. 3 & 4

Elective Offerings 2016-2017

(These course are for enrichment and do not fulfill core requirements for English.)

Media I

Media II

Creative Writing: Writing in Genres

Science Fiction: Technology and Society

Protest Literature: Writing to Defend Human Rights

Drama Workshop

Mythology and Folklore

Middle Eastern Literature

Human Studies & Cultural Identity

Journalism

Future Elective Offerings

(Not offered in 2016-2017)

Narrative Writing: Creative Non-fiction

Poetry in Performance

Creative Writing: The Short Story

Poetry Workshop

Analyzing and Writing about Literature

Massachusetts Historical Literature

Literature and Film

Gothic and the Macabre

Shakespeare and Company

Drama Production

ENGLISH 9: ELEMENTS OF FICTION**Course No. 3001****Grade 9****Phase 5****2.5 Credits****Prerequisites: None**

This course aids students in mastering the skills necessary for analyzing the characteristics of fictional prose and poetry. Students will demonstrate proficiency in reading, analytical writing, and knowledge of the literary elements. Critical thinking skills through close-reading analysis and making connections between texts is emphasized.

ENGLISH 9: STUDIES IN GENRE**Course No. 3002****Grade 9****Phase 5****2.5 Credits****Prerequisites: None**

This course aids students in mastering the skills necessary for analyzing the characteristics of drama, informational texts and non-fiction narratives. Students will demonstrate proficiency in basic research skills and non-written communication. Critical thinking skills through close-reading analysis of complex texts is emphasized.

ENGLISH 10: AMERICAN VOICE**Course No. 3010****Grade 10****Phase 5****2.5 Credits****Prerequisite: English 9**

This course aims to develop students' abilities to analyze a broad variety of literary texts, including media, fiction and non-fiction. Students will examine the ways in which authors use language as a stylistic tool, considering tone and rhetorical devices. The course also explores trends in American literature, examining the connections between cultures and the literature they produce. An emphasis will be placed on close reading, academic writing, and effective speaking and presentation skills.

ENGLISH 10: WORLD VOICE**Course No. 3011****Grade 10****Phase 5****2.5 Credits****Prerequisite: English 9**

This course aims to develop students' abilities to analyze a broad variety of literary texts, including media, fiction and non-fiction. Students will examine the ways in which authors use language as a stylistic tool, considering tone and rhetorical devices. The course also explores a variety of World literature, examining the connections between cultures and the literature they produce. An emphasis will be placed on research as well as effective non-written communication skills.

ADVANCED PLACEMENT ENGLISH: LANGUAGE & COMPOSITION**This course can be taken in place of English 11 or English 12.****Part 1, Part 2, Part 3****Course No. 3019, 3020, 3021****Grade 11, 12****Phase 6****7.5 Total Credits****Prerequisites: English 10**

This course is designed to aid students in becoming skilled readers of prose written in a variety of periods, disciplines and rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. This course pairs an in-depth study of literature with the study of rhetoric and rhetorical strategies employed in nonfiction prose. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing. The course enables students to read complex texts with understanding, and to write prose of sufficient richness and complexity to communicate effectively with mature readers. Ratings on the Advanced Placement Exam in English Language and Composition may enable students to receive college credits for this course. *AP exam required.*

ADVANCED PLACEMENT ENGLISH: LITERATURE & COMPOSITION

This course can be taken in place of English 12.

Part 1, Part 2, Part 3

Course No. 3022, 3023, 3024

Grade 12

Phase 6

7.5 Total Credits

Prerequisites: Junior year English

This course is designed for students who are keenly interested in literature. Students explore, in depth, a number of significant literary works ranging from Greek classics to contemporary fiction. This course focuses on the careful reading and critical analysis of imaginative literature. Through close reading of selected texts, students deepen their understanding of the various ways writers use language to provide both meaning and pleasure for their readers. Students read and write actively and with increasing precision and sophistication. Ratings on the CEEB Advanced Placement Exam in English may enable students to receive college credits for this course. *AP exam required.*

English 11: IB ENGLISH LITERATURE– STANDARD LEVEL Year 1

Part 1 & Part 2

Course No. 3025, 3026

Grade 11

Phase 6

5.0 Total Credits

Prerequisites: English 10

English 12: IB ENGLISH LITERATURE- STANDARD LEVEL Year 2

(This course can be taken even if Part 1 & 2 have not been completed.)

Part 3 & Part 4

Course no. 3028 & 3029

Grade 12

Phase 6

5.0 Total Credits

Prerequisites: Junior year English

This course promotes an appreciation of literature and knowledge of a student's own culture and that of other societies. The course is designed to develop students' powers of expression, both in oral and written communication by emphasizing the skills involved in writing and speaking one's native language in a variety of styles and situations. Students read several texts grouped by themes or genres. The texts are chosen from a broad list of prescribed authors and works representing different literary genres and styles in the target language, as well as literature from other languages and cultures read in translation. Oral and written examinations are used to assess students' individual language skills, their ability to critically analyze and comment upon familiar and unfamiliar texts and their ability to express a personal and independent response to literature. *IB exam may be required.*

IB ENGLISH LITERATURE – HIGHER LEVEL

Grades 11 & 12

This course runs over two years and can be taken in place of English 11 and English 12.

Grade 11 – Part 1, Part 2, & Part 3

Course No. 3030, 3031, 3032

7.5 Total Credits

Grade 12 – Part 4 & Part 5

Course No. 3033 & 3034

5.0 Total Credits

Phase 7

Prerequisites: English 10

This course promotes an appreciation of literature and knowledge of a student's own culture and that of other societies. The course is designed to develop students' powers of expression, both in oral and written communication by emphasizing the skills involved in writing and speaking one's native language in a variety of styles and situations. Students read fifteen (15) texts grouped by themes or genres. The texts are chosen from a broad list of prescribed authors and works representing different literary genres and styles in the target language, as well as literature from other languages and cultures read in translation. Oral and written examinations are used to assess students' individual language skills, their ability to critically

analyze and comment upon familiar and unfamiliar texts and their ability to express a personal and independent response to literature. *Fulfills junior and senior year English graduation requirements. IB exam required.*

IB LITERATURE AND PERFORMANCE– STANDARD LEVEL Year 1

Part 1 & Part 2

Course No. 3035 & 3036

Grade 11

Phase 6

5.0 Total Credits

Prerequisites: English 10

IB LITERATURE AND PERFORMANCE- STANDARD LEVEL Year 2

Part 3 & Part 4

Course no. 3057 (formerly 3037) & 3058

Grade 12

Phase 6

5.0 Total Credits

Prerequisites: IB Literature and Performance Year 1

This interdisciplinary (Group 1: Language and Literature and Group 6: The Arts) course incorporates the essential elements of literature and performance and seeks to explore the dynamic relationship between the two. Students who wish to take a more active, hands-on approach to literature may find this course to be the perfect fit. To approach texts imaginatively, students will experiment, take risks, work collaboratively, and communicate their own interpretations through writing, oral presentations, class discussions, and performance. At the heart of the course is the interaction between a conventional literary emphasis on close reading, critical writing and discussion, and the practical, aesthetic and symbolic elements of performance. Performance in this course emphasizes informal collaborative ensemble work and performing, rather than the technical aspects of theatre. The course as a whole examines poetic, literary and dramatic texts and seeks to develop intellect, imagination and creativity. *IB exam required.*

MEDIA I – INTRO TO VIDEO PRODUCTIONS - Accepted as an Arts Elective

Course No. 3040

Grades 10, 11, 12

Phase 4

2.5 Credits

Prerequisites: None

This course stresses communication through digital video. Students work in small groups and individually to produce videos for viewing in class and distribution through the school's closed circuit TV system as well as the local educational access channel. All students are expected to develop the pre-production, production and post-production skills needed for successful work in front of and behind the camera. Throughout the course, students will study the social context of modern film in our culture. At least one major writing assignment is required, analyzing current issues in mass media and communications, in addition to the writing required for video presentations. Students are expected to spend time after school working with the school's editing equipment as well as recording and broadcasting school sports, concerts and other events. Also, as part of a long-term project for class, students will produce a video documentary.

MEDIA II – ADVANCED VIDEO PRODUCTIONS - Accepted as an Arts Elective

Course No. 3041

Grades 10, 11, 12

Phase 4

2.5 Credits

Prerequisite: Media I

Media II is a continuation of the Media I course. This course is designed for the student who is seriously interested in a career in communications and mass media. In addition to continuing responsibilities for the production of major media projects for viewing within the school, including the school-wide news show and the year-end senior video, students in this class will also be expected to produce a significant independent video project that may be entered in a local or national video competition.

CREATIVE WRITING: WRITING IN GENRES - Accepted as an Arts elective

Course No. 3051

Grades 10, 11, 12

Phase 4

2.5 Credits

Prerequisites: None

This course is recommended for the avid creative writer. Students will develop an understanding of the various forms of written expression and writing techniques by working in different literary genres such as poetry, drama, fiction, and non-fiction. Additionally, students will examine sub-genres such as comedy, mystery, myth and romance. There will be an emphasis on developing students' individual writing styles while acquiring more sophisticated tools for writing.

SCIENCE FICTION: TECHNOLOGY AND SOCIETY

Course No. 3054

Grades 9, 10, 11, 12

Phase 4

2.5 Credits

Prerequisites: None

This course examines the impact of science on humanity, along with the hopes and fears people have of technology. By exploring the evolution of science fiction from the pulp comics of the 1920s-1930s, to the Golden Age of Sci-Fi in the 1950s, to cyberpunk, crossover and apocalyptic science fiction, students gain an understanding of the connection between science, technology and literature. Students examine Science Fiction radio shows, short stories, film and novels from the 1920s to present day; units include creative and analytical writing, a research project and student presentations.

PROTEST LITERATURE: WRITING TO DEFEND HUMAN RIGHTS

Course No. 3050

Grades 11, 12

Phase 4

2.5 Credits

Prerequisites: None

This course **will** introduce students to the rich tradition of modern worldwide protest literature from the sixties until the 21st century. Focus areas include the struggle for human rights and dignity in Chile under Pinochet, in the Dominican Republic under Trujillo, in Cuba under Castro, in Haiti under Duvalier and the Tonton Macoute, and apartheid in South Africa, as well as looking at women's rights under many regimes throughout the world. Students will examine various genres including poetry, short stories, novels, essays and speeches, and will write several analytical essays.

DRAMA WORKSHOP – Accepted as an Arts elective

Course No. 3044

Grades 9, 10, 11, 12

Phase 4

2.5 Credits

Prerequisite: none

This course provides students with an opportunity to explore the skills and techniques used in dramatic performance. Students will learn the fundamentals of theatre and developing an ensemble through improvisation activities and performance of theatre projects. Coursework emphasizes student creativity, building students' self-confidence and poise, while developing non-written communication skills and encouraging effective collaboration.

DRAMA PRODUCTION – Accepted as an Arts elective

Course No. 3059

Grades 9, 10, 11, 12

Phase 4

2.5 Credits

Prerequisite: none

This course is designed for students who have taken Drama Workshop and would like to take their skills to the next level by putting together a formal production. Topics of study will include a review of the fundamentals of acting, but will extend into the elements of putting on a play, including consideration of technical elements such as set design and construction, lighting, sound, costumes, makeup, props, and advertising for a show. This course will culminate in a festival featuring performances of 1-2 act plays independently produced by the students.

MYTHOLOGY AND FOLKLORE

Course No. 3053

Grades 9, 10, 11, 12

Phase 4

2.5 Credits

Prerequisite: none

Several major modes of folklore to include myths, ballads, legends and epics from around the world will be studied (e.g. Egyptian folk tales, Greek and Norse mythology, N. European Ballads). These fascinating stories are a connection to long dead civilizations, and a way to understand their beliefs, desires, and passions. Students will use contemporary theories on

archetypes and the hero's journey as a basis to explore how different cultures from around the world are connected through literature. Writing for the course includes analytical essays, short research projects, and creative writing assignments.

MIDDLE EASTERN LITERATURE

Course No. 3062

Grades 9, 10, 11, 12

Phase 4

2.5 Credits

Prerequisites: None

This class is designed to teach Middle Eastern literature to high school students in a post-9/11 and post-Boston Marathon Bombing classroom in New England. The ideology is deeply connected to the idea that in a world inundated with terrorism, both domestic, and abroad, we must educate our students in becoming more open-minded, more respectful, and possessing a deeper sense of empathy. The class will work with Middle Eastern literature to bridge the connection between students and Middle Eastern conflict, as well as introduce them to first-person narratives and the memoir genre. Students may begin by reading *Persepolis: The Story of Childhood*, by Iranian author Marjane Satrapi, and transition to a work published more recently, by women's advocate for education, seventeen-year-old Pakistani Malala Yousafzai's *I Am Malala*. Throughout their studies, students will work on the skills associated with reading international literature by identifying, analyzing, and explaining through a variety of activities and discussions. The course will guide students through dialogical relationships and critical thinking, resulting in an informed outlook on Middle Eastern society.

HUMAN STUDIES & CULTURAL IDENTITY

Course No. 3056

Grades 10, 11, 12

Phase 4

2.5 Credits

Prerequisites: None

Our perception of our place in the world is influenced by our sense of self and our identity, as well as gender expression. For humankind, this sense of belonging often comes from knowing one's self in relation to the community's history and culture, and being informed regarding the effects gender, sexual orientation, race, and culture have on one's life and relationships at home, work, and in the world.

This humanities-based course will examine the culture and socio-political concerns of diverse communities and movements, and the impact these concerns have on identity, society, the arts and families. By exploring the evolution of civil rights, race identified groups, gay community groups, feminism, news magazines, media, music and literature from the Victorian age, to the 1950's (Mattachine Society), 1960's Civil Rights Acts, Women's Rights, Pre & Post-Stonewall life, the gay rights movement, the AIDS crisis, hate crimes legislation (Sakia Gunn, Matthew Shepard), the marriage rights movement, the It Gets Better Project, and the transgender rights legislation, students will gain an understanding of the connection between gender expression, race, sexual orientation, and literature. Students will examine short stories, poetry, film, news reports, and plays from the 1800s to present day, and units will include creative and analytical writing, a self-guided research project, and student presentations.

JOURNALISM - Accepted as an Arts elective

Course No. 3049

Grades 9, 10, 11, 12

Phase 4

2.5 Credits

Prerequisites: None

Throughout modern history, people have depended on mass media to communicate with the general public. In today's society, we are bombarded by media influence from an early age, and it both shapes and reflects our culture. This course is designed to introduce students to the exciting world of print, online and broadcast media, while simultaneously building critical thinking skills that will help students become intelligent consumers of mass media. Students will develop and publish their own work, critique their work and the work of others, and analyze media messages in the world around them.

MATHEMATICS DEPARTMENT

The Mathematics Department implements the Massachusetts Curriculum Frameworks by developing all students mathematically through problem solving, communication, reasoning and connections within each course offering. Students acquire number sense; an understanding of patterns, relations, and functions; an appreciation of geometry and measurement; and value the role of probability and statistics.

Courses in the Mathematics Department

- Courses fulfill the Mathematics graduation requirement
- Implement academic expectations in critical thinking, effective use of technology, active learner, responsible citizenship, written and non-written communication

MATHEMATICS DEPARTMENT PREREQUISITES

(Algebra I, Algebra II (parts 1 and 2) and Geometry are required for graduation)

Course Offerings

Algebra I (Part 1, Part 2, Part 3)

Algebra II (Part 1 & 2)

Algebra II – Ph5/Hon (Part 1, Part 2, Part 3)

Geometry (Part 1 & 2)

Geometry – Honors (Part 1 & 2)

Concepts in Algebra and Geometry

Trigonometry

Algebra II Part 3

Pre-Calculus – Honors

Advanced Placement Calculus AB

Advanced Placement Statistics

Calculus II - Ph5/Honors

Statistics

AP Statistics

Financial Algebra (Part 1 & Part 2)

Logic

MCAS Math Prep

SAT Math Prep

IB Mathematics – Higher Level

IB Mathematics - Standard Level

IB Mathematical Studies - Standard Level



= Graphing Calculator Required

ALGEBRA I (Part 1, Part 2, Part 3)

Course No. 3201, 3202, 3203

Grade 9

Phase 3

7.5 Total Credits

Prerequisites: None

These three courses in *Algebra I* must be taken in successive trimesters in the same academic year. Students will cover the topics of algebra in order to develop a solid foundation in the fundamentals of algebra. These courses are designed for the average student who may have difficulties in basic arithmetic.

ALGEBRA I (Part 1, Part 2, Part 3)

Course No. 3211, 3212, 3213

Grade 9

Phase 4

7.5 Total Credits

Prerequisites: None

These three courses in *Algebra I* must be taken in successive trimesters in the same academic year. They are designed for the above-average math student who has had some exposure to algebra. These courses provide the student with a strong and thorough foundation in algebraic concepts and skills for upper level mathematics courses.

ALGEBRA II – HONORS (Part 1, Part 2, Part 3)

Course No. 3241, 3242, 3243

Grade 9

Phase 5

7.5 Total Credits

Prerequisite: Grade 8 Algebra I

These three courses in *Algebra II* must be taken in successive trimesters in the same academic year. They are designed for the exceptional math student who has taken and mastered Algebra I in grade 8. These are rigorous courses providing students with concepts and skills needed for advanced mathematics courses.

ALGEBRA II (Part 1 & Part 2)

Course No. 3221 & 3222

Grades 10, 11, 12

Phase 3

5 Total Credits

Prerequisite: Algebra I

This course is designed for students to deepen their insight into math. It begins with the study of axioms and the real numbers, and applies this study to real functions in one and two variables. Other topics covered are graphing, factoring, irrational numbers, quadratics and logarithms.

ALGEBRA II (Part 1 & Part 2)

Course No. 3231 & 3232

Grades 10, 11, 12

Phase 4

5 Total Credits

Prerequisite: Algebra I

This is a rigorous course in Algebra II that prepares students for advanced mathematics and calculus. Topics covered include functions, graphing, factoring, irrational and rational numbers, quadratics, logarithms and imaginary numbers. This course is considered Algebra II parts 1 and 2. Part 3 is optional, but necessary if the student plans to go on to Pre-Calculus.

GEOMETRY (Part 1 & Part 2)

Course No. 3251 & 3252

Grades 10, 11, 12

Phase 3

5 Total Credits

Prerequisite: Algebra I

This course introduces logical thinking by means of proof writing involving congruent and similar triangles. Parallels, perpendiculars, triangles, circles, polygons, area, and measurement are other topics that are extensively pursued.

GEOMETRY (Part 1 & Part 2)

Course No. 3255 & 3256

Grades 10, 11, 12

Phase 4: College Prep 1

5 Total Credits

Prerequisite: Algebra I

This rigorous course is designed for students who wish to acquire a deeper insight into geometry. Topics include congruence and similarity of geometric figures, parallels, perpendiculars, measurements and areas.

GEOMETRY HONORS  Part 1 & Part 2)

Course No. 3261 & 3262

Grade 10

Phase 5

5 Total Credits

Prerequisite: Algebra II

This course is designed for the exceptional math student. Strong emphasis is placed on writing formal proofs and problem solving. This course includes the basic topics in geometry, and introduces advanced topics such as topology, fractals and non-Euclidean geometry.

CONCEPTS IN ALGEBRA AND GEOMETRY (Part 1 & Part 2)

Course No. 3265 & 3266

Grades 11, 12

Phase 3

5 Total Credits

Prerequisites: Algebra II and Geometry

This course is designed for students who have taken Algebra II and Geometry, but have not scored 240 on MCAS for math. Students cover topics in Algebra and Geometry to address any deficiencies they may have. The course will then continue with advanced topics to strengthen and enhance mathematical concepts and skills with a focus on financial algebra.

FINANCIAL ALGEBRA (Part 1 & Part 2)

Course No. 3380 & 3381

Grades 12

Phase 4

5 Total Credits**Prerequisites: Algebra II and Geometry**

This course combines algebraic and graphical approaches with practical financial applications in order to demonstrate to high school seniors some of the meaningful and relevant applications of mathematics in their daily lives. Advanced topics include investments, credit, automobile expenses, insurance, income tax and household budgeting using exponential functions, piecewise functions, regression limits and logarithms.

TRIGONOMETRY

Course No. 3270

Grades 11, 12

Phase 4

2.5 Credits**Prerequisites: Algebra II and Geometry**

This course expands students' backgrounds in mathematics in preparation for SAT II and first-year college mathematics courses. It involves the study of right triangular trigonometric functions, circular trigonometric functions, analytical trigonometry and the solutions of triangles.

TRIGONOMETRY**HONORS**

Course No. 3271

Grades 11, 12

Phase 5

2.5 Credits**Prerequisites: Algebra II and Geometry**

This course expands students' backgrounds in mathematics in preparation for SAT II and first-year college mathematics courses. It involves the rigorous study of right triangular trigonometric functions, circular trigonometric functions, analytical trigonometry and the solutions of triangles.

ALGEBRA II PART 3

Course No. 3233

Grades 10, 11, 12

Phase 4

2.5 Credits**Prerequisites: Algebra II (parts 1 & 2)**

This course is only designed for students who plan to take Pre-Calculus and have taken Algebra II (course no. 3231 & 3232). Students cover topics in functions, exponentials, logarithms and analytic geometry to prepare them for Pre-Calculus.

PRE-CALCULUS - HONORS

Course No. 3280

Grades 10, 11, 12

Phase 5

2.5 Credits**Prerequisites: Algebra II Honors or Algebra II parts 1, 2 and 3. Geometry is strongly recommended prior to this course.**

This course is designed as a foundation for calculus. This is a rigorous course of study in the advanced topics of algebra, exponents, logarithms, vectors, and series and sequences.

ADVANCED PLACEMENT CALCULUS AB

Part 1, Part 2, Part 3

Course No. 3291, 3292, 3293

Grades 11, 12

Phase 6

7.5 Total Credits**Prerequisites: Pre-Calculus & Trigonometry**

This course follows the College Board topic outline for Calculus AB. Topics include functions, graphs, and limits; derivatives; and integral. The course represents a college-level mathematics course in Calculus. The course emphasizes a multi-representational approach to Calculus with concepts, results and problems being expressed graphically, numerically, analytically and verbally. *AP Exam required.*

CALCULUS II – Honors (Part 1 & Part 2)

Course No. 3285 & 3286

Grade 12

Phase 5

5 Total Credits

Prerequisite: AP Calculus

This course allows students to continue their studies of differentiation, integration and applied problems.

STATISTICS: DESCRIPTIVE STATISTICS & PROBABILITY

Course No. 3330



Grades 11, 12

Phase 4

2.5 Credits

Prerequisites: Algebra II and Geometry are strongly recommended prior to taking this course.

This rigorous course introduces the student to the world of statistics. Statistics is based on mathematics, but has many applications in a variety of areas. Disciplines such as health care, business, economics, social and physical sciences, engineering and education all employ tools found in statistics. Many college majors require courses in statistics. Topics include data collection and organization, probability, and the calculation and interpretation of summary measures.

STATISTICS: DISTRIBUTIONS & INFERENCE STATISTICS

Course No. 3331



Grades 11, 12

Phase 4

2.5 Credits

Prerequisites: Statistics: Descriptive Statistics is required.

Algebra II and Geometry are strongly recommended prior to taking this course.

This rigorous non-calculus based statistics course explores distributions of data, including Normal, Binomial, Geometric and Poisson. Inferential Statistics covered in this class include Confidence Intervals and Hypothesis testing.

ADVANCED PLACEMENT STATISTICS



(Part 1, Part 2, Part 3)

Course No. 3341, 3342, 3343

Grades 11 or 12

Phase 6

7.5 Total Credits

Prerequisites: Algebra II and Geometry

This course follows the College Board topic outline for AP Statistics. Topics include Exploratory Data: Describing patterns and departures from patterns; Sampling and Experimentation: Planning and conducting a study; Anticipating Patterns: Exploring random phenomena using probability and simulation; and Statistical Inference: Estimating population parameters and testing hypotheses. The course represents a college-level introductory, non-calculus based mathematics course in Statistics. *AP Exam required.*

IB MATHEMATICS – HIGHER LEVEL

Grades 11 & 12

(This course runs over junior and senior years)

Grade 11 – Part 1, Part 2, Part 3

Course No. 3351, 3352, 3353

7.5 Total Credits

Grade 12 – Part 4 & Part 5

Course No. 3354 & 3355

5 Total Credits

Phase 7

Prerequisites: Pre-Calculus is strongly recommended prior to taking this course.

This class is designed for students with a strong background in mathematics and competence in a range of analytical and technical skills. It is a rigorous program intended to prepare students well for university studies in math and science. The topics covered include those of the SL course but they are covered with more depth, particularly in the area of calculus. *IB exam required.*

IB MATHEMATICS – STANDARD LEVEL - Year One

Part 1 & 2

Course No. 3361 & 3362

Grades 11

Phase 6

5.0 Total Credits

IB MATHEMATICS – STANDARD LEVEL - Year Two

Part 3 & 4

Course No. 3363 & 3364

Grades 12

Phase 6

5.0 Total Credits

Prerequisites: Pre-Calculus is strongly recommended prior to taking this course.

This class is designed for students who will continue to study mathematics at university, and provides them with a background of mathematical thought and a reasonable level of technical ability. Course topics include logarithms; sequences and series; linear and quadratic functions and equations; the binomial theorem; arcs and sectors; trigonometry; functions and calculus; vectors; and probability and statistics. **IB exam required.**

IB MATHEMATICAL STUDIES – STANDARD LEVEL –Year One

Part 1 & 2

Course No. 3371 & 3372

Grades 11

Phase 6

5.0 Total Credits

IB MATHEMATICAL STUDIES – STANDARD LEVEL –Year Two

Part 3 & 4

Course No. 3373 & 3374

Grades 12

Phase 6

5.0 Total Credits

Prerequisites: Algebra II and Geometry

This course is designed for students with varied backgrounds and abilities to provide them with a realistic mathematics course. The course develops the skills needed to cope with the mathematical demands of a technological society with an emphasis on the application of mathematics to real-life, every-day situations. Course topics include linear, quadratic, and exponential functions; approximation and error; algorithms; probability and statistics; sets and logic; simple sequences and finance; linear programming; vectors; matrices; and trigonometry. A personal research project involving the collection, analysis and evaluation of data is required. **IB exam required.**

MCAS MATH Prep

Course No. 3300

Grades 9, 10

Phase 3

2.5 Credits

Prerequisites: None

This course helps prepare students for the MCAS mathematics test. The course covers the skills tested and strategies needed to be successful on the MCAS.

SAT MATH PREP.

Course No. 3310

Grades 11, 12

Phase 4

2.5 Credits

Prerequisites: Algebra II and Geometry

This course is designed for grade 11 students interested in preparing for SAT I. Mathematics skills required for success on the SAT I are emphasized. Test-taking techniques are presented and practiced.

INTRODUCTION TO LOGIC

Course No. 3320

Grades 11, 12

Phase 4

2.5 Credits

Prerequisite: Geometry

This course allows students to undertake a systematic study to develop an understanding of the standards for deductive reasoning: this is the study of valid argument and is the basis for accepting a conclusion. In developing this understanding, students learn how to distinguish valid arguments from invalid arguments, learn how to show that an argument is valid (if it is), and how to show that an argument is invalid (if it is invalid). The course develops students' abilities of analysis and proof. Students develop a much finer ability for abstraction, the ability to see what is in common among concrete examples that differ in subject matter. In addition, students learn a great deal about what is needed for showing something to someone else.

MUSIC DEPARTMENT

The Music Department implements the Massachusetts Curriculum Frameworks by providing students the opportunity to express themselves creatively, to develop skills in vocal and instrumental music, to collaborate with others and to communicate through public performances.

The Music Program is geared to help students achieve self-satisfaction through participation in the school's many performing ensembles. There are two general music course offerings for those with musical interests outside performing venues. Quabbin Regional High School takes pride in the excellence of its performing musical groups and in the outstanding achievements of its student musicians. Courses are offered for those students who desire to continue in music after high school.

Courses in the Music Department

- fulfill the graduation requirement of 5 credits in The Arts
- implement academic expectations in critical thinking, effective use of technology, active learning, responsible citizenship, written and non-written communication

Advanced students may elect to take music performance courses at the Phase 5-Honor level under the conditions specified in course expectations.

Course Offerings

Concert Chorus
Show Choir
Quabbin Singers
Quabbin Singers – Honors
Symphonic Winds
Symphonic Winds - Honors
Orchestra

Orchestra - Honors
Jazz Lab Band
Jazz Ensemble
Jazz Ensemble - Honors
Elvis to Fallout Boy: A History of Today's Music
Performance Capstone Studio
IB Music Standard Level

Courses not offered in 2016-17:

Music Theory Elective
AP Music Theory
Concert Band

CONCERT CHORUS

Grades 9, 10, 11, 12

Course No. 4100

Course No. 4101

Course No. 4102

Phase 4

Credits 2.5, 5.0, or 7.5

(choose one course number for one trimester, two course numbers for two trimesters, and all three numbers for all three trimesters, or all year)

Prerequisites: None

This class develops the fundamentals of posture, breathing and vocal production. Solfege (sight singing with syllables) is stressed so that students may achieve independence and develop their musicianship skills. This independence may be transferred into adult participation in community singing groups. A wide variety of the world's music is sung with the joy of music-making as a primary goal.

SHOW CHOIR

Grades 9, 10, 11, 12

Course No. 4105

Course No. 4106

Phase 4

2.5 or 5 Credits (choose one course number for one trimester or both for two trimesters)

Prerequisites: None

This course is designed for students who are interested in a learning experience that combines singing and dancing in Jazz, Pop, and Broadway styles. No previous dance or vocal experience is necessary. Fundamentals of posture, breathing and vocal production are developed. Solfege is used so that students develop their ability to read and interpret music. This ensemble will perform a wide variety of music throughout the duration of the course. Class members are expected to attend some rehearsals and performances outside of class and to participate in the Show Choir competition in February.

QUABBIN SINGERS**Grades 9, 10, 11, 12****Course No. 4110, 4111, 4112****Phase 4****Total Credits 5.0, or 7.5****(Choose two course numbers for two trimesters, and all three numbers for all three trimesters, or all year.)****Prerequisite: By Audition. Auditions will be held in January. See Mrs. Guilbault for an appointment.****QUABBIN SINGERS****Grades 11, 12****Course No. 4115, 4116, 4117****Phase 5 (for students who take all three trimesters)****Total Credits 7.5****(Must sign up for all three course numbers for each trimester, or all year)****Prerequisite: By Audition. Auditions will be held in January. See Mrs. Guilbault for an appointment.**

This course is designed for vocalists who wish to develop advanced techniques of voice, solfege, intonation and interpretation of high quality literature. Acappella singing is a desired goal. Singers members perform often and participate in several festivals in New England. Students are required to enroll in Quabbin Singers for the entire year for honors credit. Honors students are expected to audition for the Central District Music Festival in November, to write program notes for each concert, and to organize and participate in a community performance.

Please Note: All students will be initially scheduled in to Singers Phase 4, and once students have three trimesters of Singers in their schedule AND they audition, only then they will be added to the Phase 5 section.

SYMPHONIC WINDS**Grades 9, 10, 11, 12****Course No. 4120, 4121, 4122****Phase 4****Credits 5.0, or 7.5****(choose two course numbers for two trimesters, and all three numbers for all three trimesters, or all year)****Prerequisite: Successful completion of a middle school band program****SYMPHONIC WINDS****Grades 11, 12****Course No. 4125, 4126, 4127****Phase 5 (for students who take all three trimesters)****Credits 7.5****(Must sign up for all three course numbers trimesters, or all year)****Prerequisite: By audition. Requirements include the ability to perform at least 8 Major scales, the Chromatic scale and a prepared solo. Auditions will be held in January. See Mr. Lewis for an appointment.****7.5 Credits**

Prerequisite: By audition. Requirements include the ability to perform at least 8 Major scales, the Chromatic scale and a prepared solo. Auditions will be held during the first week in February. See Mr. Lewis for an appointment.

This course is designed for students who are motivated, responsible and skilled instrumentalists who are seeking to strive for a high level of musicianship. Students explore and perform many different styles, historical eras and technically varied selections of music. This ensemble helps students continue to develop an advanced awareness of technique, tone, expressive qualities, rhythmic sense and ensemble balance in a collaborative and challenging setting. Students are expected to enroll in Symphonic Winds for the entire year. Symphonic Winds meets the same period as Quabbin Singers so that interested students may enroll in both ensembles and split the period between the classes. Honors students are expected to audition for the Central District Music Festival in November, to write program notes for each concert and to organize and participate in a community performance.

Please Note: All students will be initially scheduled in to Symphonic Winds Phase 4, and once students have three trimesters of Symphonic Winds in their schedule AND they audition, only then they will be added to the Phase 5 section.

ORCHESTRA**Grades 9, 10, 11, 12****Course No. 4130, 4131, 4132****Phase 4****Credits 5.0, or 7.5****(choose two course numbers for two trimesters, and all three numbers for all three trimesters, or all year)****Prerequisite: Successful completion of a middle school orchestra program****ORCHESTRA****Grades 11, 12****Course No. 4135, 4136, 4137****Phase 5 (for students who take all three trimesters)****Credits 7.5****(Must sign up for all three course numbers trimesters, or all year)****Prerequisite: By audition. Requirements include the ability to perform at least 8 Major scales, the Chromatic scale and a prepared solo. Auditions will be held in January. See Mr. Lewis for an appointment.**

Students in this course have the opportunity to explore and perform music from a variety of genres and Historical eras. This ensemble helps students continue to develop an advanced awareness of technique, tone, expressive qualities, rhythmic sense and ensemble balance in a collaborative and challenging setting. Students are required to enroll in Orchestra for the entire year for honors credit. Honors students are expected to audition for the Central District Music Festival in November write program notes for each concert and organize and participate in a community performance.

Please Note: All students will be initially scheduled in to Orchestra Phase 4, and once students have three trimesters of Orchestra in their schedule AND they audition, only then they will be added to the Phase 5 section.

JAZZ BAND**Grades 9, 10, 11, 12****Course No. 4140, 4141, 4142****Phase 4****Credits 2.5, 5.0, or 7.5****(choose one course number for one trimester, two course numbers for two trimesters, and all three numbers for all three trimesters, or all year)****Prerequisite: One year experience on an instrument**

Jazz Band is an ensemble where students will investigate the world of jazz music through performance. Students will be exposed to the history, theory, and performance of this great American art form through in depth study regarding all facets of this musical style, including music from jazz greats such as Duke Ellington, Count Basie and Stan Kenton. Students learn how to perform as a member of jazz ensemble in a variety of jazz styles including swing, bossa nova, samba and funk. Students will learn the basic language of jazz with a focus on improvisation so they are able to express themselves more clearly and with greater depth with their instrument. Ultimately, students will come to realize that jazz is a vehicle to express all aspects of the human condition.

MUSIC THEORY ELECTIVE**Course No. 4155****Grades 9, 10, 11, 12****Phase 4****2.5 Credits****Prerequisites: None**

This course covers all of the inner workings of music: the hows and the whys. Students are taught music from the composer's point of view, and learn the rules and rationales that govern creative choices. Students study everything from scales, intervals, solfeggio, harmony, instrument range, transposition and timbre. These concepts are addressed in both the written and aural applications. Students become familiar with the music of J.S. Bach, learn how his music laid the groundwork for the western music community for centuries to come, and how these practices and principles now apply to contemporary and popular music.

ELVIS TO FALL OUT BOY; A HISTORY OF TODAY'S MUSIC**Course No. 4160****Grades 9, 10, 11, 12****Phase 4****2.5 Credits****Prerequisites: None**

This course is designed for students to study today's music through five Themes and Streams found in American popular music. Students will explore music through listening, identity, technology, business and centers and peripheries. The musical journey begins with 1950's Rock and Roll and travels through to current music in our western culture.

ADVANCED PLACEMENT MUSIC THEORY (Part 1, Part 2, & Part 3)

(not offered in 2015-16)

Course No. 4150, 4151, 4152

Grades 10, 11, 12

Phase 6

7.5 Total Credits

Prerequisites: None

This course is designed for students who desire to major in music in college, or who are seeking additional study in music theory in a very rigorous format. Students prepare for the AP Music Theory exam to be taken in the spring. Students learn and demonstrate advanced analytical techniques, arranging and composing, twelve tone serialism, dodecaphony and functional harmony. Students learn about many formal structures in music compositions such as sonata form, rondo and the fugue. Students are exposed to advanced ear training and sight singing. Students are required to prepare sight singing excerpts and to feel comfortable singing alone and in a group using the solfeggio system. **AP exam required.**

PERFORMANCE CAPSTONE STUDIO

Course No. 4165, 4166, 4167

Grade 12

Phase 5

7.5 Total Credits

Prerequisites: Successful completion of three years of appropriate high school ensemble given students instrument/voice. Acceptance to a least one auditioned ensemble and successful completion of one other music elective (music theory, history of popular music, etc.)

This course is designed for seniors who wish to study a topic that is academically and artistically significant and challenging. Completions of advanced electives in Music are required for this Capstone. Students will have demonstrated evidence of self-directed motivation and effective use of time and work management. Students will work with one or more Music teachers acting as their Capstone advisors. Note: the Performance Capstone Studio requires that students will report to their advisor five days per week, to utilize materials, environment and mentoring, replicating the college experience. Performance Capstone students will also act as role models as artist-in-residence mentors in their school and local communities.

IB Music Standard Level

Course No. 4170, 4171, 4172

Phase 7

7.5 Credits (classroom) + 5.0 Credits (of ensemble coursework)

This course is designed for music students with varied backgrounds in music performance. The aim of IB music is to give music students the opportunity to explore and enjoy the diversity of music throughout the world by enabling them to creatively develop their knowledge, musical abilities and understanding through performance and composition. Students will be expected to demonstrate their understanding of music by performing, by using appropriate musical language and terminology in analyzing musical works from many and varied cultures and periods and by exploring music through music theory, sight-singing and composition. All IB students must enroll in one of the school's large ensembles (Concert Chorus, Quabbin Singers, Symphonic Winds and Orchestra) for at least two trimesters.

NAVAL JUNIOR RESERVE OFFICERS TRAINING CORPS

The NJROTC Program implements the Massachusetts Curriculum Frameworks by providing students the opportunity to study and participate in social studies, mathematics, physical training and science-related topics in a real-life context.

High School NJROTC is designed as a course in civics, science, citizenship and life skills. The goals of the course are to develop self-disciplined and informed citizen leaders with an appreciation of the United States Navy and the role of sea power in preserving the American way of life. This course will assist the student in broadening his/her understanding of world events. All cadets participate in drill and physical training, and will have the opportunity to participate in a variety of co-curricular activities.

The objectives of the NJROTC program are:

1. Promote patriotism.
2. Develop informed and responsible citizens.
3. Promote habits of orderliness and precision.
4. Develop a high degree of personal honor, self-reliance, self-discipline, physical conditioning and leadership.
5. Promote an understanding of the basic elements and requirements for national security.
6. Develop respect for and an understanding of the need for constituted authority in a democratic society.
7. Provide incentives to live healthy and drug-free lives.
8. Develop leadership potential.
9. Promote high school completion.

In order to benefit fully from the program, students are strongly encouraged to begin in the first trimester of freshman year. However, students may join at any time with the concurrence of the Senior Naval Science instructor. Students who enroll in the NJROTC course during any trimester (i.e. take one block of NJROTC) are members of the NJROTC Program for the entire school year. As such, they participate in all required unit events for the entire year, and are eligible to participate in any co-curricular activities as well as orientation trips to military and nonmilitary locations, no matter when they are enrolled in the course. Additionally, they are required to properly wear the uniform once each week for the entire year. Co-curricular activities include, at a minimum, Cadet Marksmanship Team, Academic Team, Color Guard and Drill Team.

This course is not a military recruiting program. Nevertheless, there are several benefits that accrue to students who plan to enter a military service, go to a college ROTC program or to the Naval Academy. Successful completion of the NJROTC Program allows entry into any of the armed services up to two enlisted pay grades higher than fellow enlistees without NJROTC experience, which presently is estimated to be an extra \$250 per month plus being approximately one year closer to advancement to the next higher pay grade. Those who are going on to college and are qualified may receive a Naval Academy Nomination from the Senior Naval Science instructor or be recommended for an ROTC college scholarship.

Participation in NJROTC does not exclude or prevent full participation in any other Quabbin Regional High School activity including sports, music, art, etc. The NJROTC Program is open to both males and females with equal opportunity to excel in all aspects of the program including leadership positions, training opportunities and co-curricular activities.

NJROTC I is available each fall trimester. Upon completion, and based upon their number of years in the program, cadets will then request other NJROTC elective courses in numerical order. Senior cadets who have completed three years of NJROTC course work and demonstrated leadership potential will participate in a Leadership Seminar as their Naval Science IV curriculum. This Leadership Seminar has exceptional opportunities in actually running the NJROTC unit. Cadets are evaluated based upon both academic achievement and their leadership performance at all levels. Other senior cadets will have the NJROTC IV academic curriculum available to them. In this course, some unit administration is required and they, too, will gain experience and insight in running the company of cadets. The academic curriculum focuses on the history of our nation post-Vietnam (1975 to present) with emphasis on national security.

Each of the Naval Science courses carries five elective credits and is available to all students who attend Quabbin Regional High School and are physically able to participate in physical education. **A pre-participation sports physical examination by a licensed physician and the NJROTC Standard Release Form and Health Risk Questionnaire are required for all cadets each year they are in the program.**

Courses in the NJROTC

- implement academic expectations in critical thinking, effective use of technology, active learning, responsible citizenship, written and non-written communication.

NJROTC I (This course may be used to fulfill 1 Wellness elective requirement)

Course No. 4500 & 4501

Grades 9, 10, & 11

Phase 4

5 Total Credits

Prerequisite: Sports physical examination by a licensed physician

(counts as Wellness)

This course is divided into the following units: the NJROTC program; cadet responsibilities: personal appearance, uniforms, self-discipline and physical fitness; unit and naval organization, ranks and rates; introduction to leadership; naval ships and aircraft; and military drill as a means of teaching leadership, followership and self-discipline. All students beginning NJROTC I in grade 9 or grade 10 will be assigned to a fall trimester class.

NJROTC II

Course No. 4505 & 4506

Grades 10, 11, 12

Phase 4

5 Total Credits

Prerequisite: NJROTC I

(counts as Wellness)

This course covers the following units: naval leadership and discipline; naval history to include World War II; naval sea science to include weather, aviation and space science; national security; military drill and physical conditioning.

NJROTC III

Course No. 4510 & 4511

Grades 11, 12

Phase 4

5 Total Credits

Prerequisite: NJROTC II

(counts as Wellness)

This course includes the following units: naval leadership and discipline; naval history to include Korea, Vietnam and modern warfare; naval sea science to include oceanography and navigation; military drill and physical conditioning.

NJROTC IV – LEADERSHIP SEMINAR HONORS

Course No. 4515 & 4516

Grade 12

Phase 5

5 Total Credits

Prerequisites: NJROTC I, II and III and recommendation of the department chair

(counts as Wellness)

This course offers students the unique opportunity to develop their leadership, administrative, and management skills in a seminar format that includes modeling and role playing of an actual military unit. Cadets are assigned specific positions with unique responsibilities requiring daily interface with the Senior Naval Science instructor and Naval Science instructor, cadet peers and cadet subordinates. Further, cadets examine and study present military services, their equipment, personnel and mission, and review historical events. Cadets assist the Naval Science instructors in all aspects of leading, managing and administering the NJROTC Unit.

NJROTC IV – ACADEMIC

Course No. 4517 & 4518

Grade 12

Phase 4

5 Total Credits

Prerequisites: NJROTC I, II and III and recommendation of the department chair

(counts as Wellness)

This course includes the following units: naval leadership; naval and general history post-Vietnam; survival; and national security and intelligence from a historical perspective. Cadets have the limited opportunity to assist in the day-to-day operation and administration of the NJROTC unit.

SCIENCE & TECHNOLOGY DEPARTMENT

The Science Department implements the Massachusetts Curriculum Frameworks by providing a student centered, inquiry-based program of studies. Through a wide variety of laboratory and hands-on courses, students learn the principles, concepts and technologies related to physical and life sciences. Students develop the scientific literacy needed for life in the 21st Century and are prepared for the pursuit of careers related to the environment, medicine, engineering, research and other STEM fields.

- All students are required to take and pass **Biology and a physics based science course**.
- Students must take a total of 15 credits of a lab based science.
- Intro to Technology, Technical Drawing and Design, and Web Design I and II can be used to fulfill an Arts requirement.
- The Science of Nutrition and/or Communicable Diseases can be used to fulfill a Wellness requirement.
- Computer Programming II and Web Design II can be used as a senior capstone with additional work and with prior approval from the teacher and the Capstone Coordinator.

Science Core Course Offerings

Introduction to Physical Science: Motion (LAB)	Issues in Environmental Science (LAB)
Introduction to Physical Science: Energy (LAB)	Intro to Horticulture (LAB)
Biology: Molecules to Organisms (LAB)	Horticulture: Greenhouse (LAB)
Biology: Genetics to Evolution (LAB)	Anatomy & Physiology: Musculoskeletal System (LAB)
AP Biology (3 Parts) (LAB)	Anatomy & Physiology: Dissection & Response Systems (LAB)
IB Biology Higher Level (5 Parts) (LAB)	Newtonian Physics (LAB)
IB Biology Standard Level (3 Parts) (LAB)	Modern Physics (LAB)
Chemistry: Atoms & Molecules (LAB)	IB Physics Standard Level (3 Parts) (LAB)
Chemistry: Chemical Reactions (LAB)	IB Physics Higher Level (5 Parts) (LAB)
Chemistry: Atoms & Molecules- Honors (LAB)	IB Environmental Systems Standard Level (3 Parts) (LAB)
Chemistry: Chemical Reactions - Honors (LAB)	
Intro to Environmental Science (LAB)	

Science & Technology Elective Course Offerings

Applied Physics –How Things Work	Intro to Engineering: Fluids & Thermodynamics
Astronomy-The Earth in the Universe	Intro to Engineering: Electrical & Communications
Communicable & Degenerative Diseases	Robotics: Mechanics (LAB)
Introduction to Biotechnology (LAB)	Robotics: Electrical (LAB)
Introduction to Chemistry (LAB)	Technical Drawing and Design
Science of Nutrition	Web Design I
Computer Programming I	Web Design II
Computer Programming II	AP Computer Science: Principles
Communicating Through Technology	

Courses Not Offered in 2016-17

AP Chemistry (3 Parts) (LAB)	Newtonian Physics – Honors (LAB)
AP Physics (3 Parts) (LAB)	Modern Physics – Honors (LAB)
Astronomy-The Earth-Sun System	
Scientific Research (CAP)	

INTRODUCTION TO PHYSICAL SCIENCE: MOTION (IPS)**Course No. 3401****Grade 9****Phase 5****2.5 Credits****Lab Based Science****Prerequisites: None**

This course is designed to serve as a solid foundation for students taking later courses in science. Its purpose is to give all students a beginning knowledge of physics which will serve as a foundation upon which to build the more complex ideas in the physical and life sciences. In this portion of the course, students learn to describe the motion of objects and how to apply Newton's laws of motion and gravitation to describe and predict the motion of most objects. The laws of conservation of energy and momentum are studied as they provide alternate approaches to predict and describe the movement of objects.

INTRODUCTION TO PHYSICAL SCIENCE: ENERGY (IPS)**Course No. 3402****Grade 9****Phase 5****2.5 Credits****Lab Based Science****Prerequisites: None**

This course is designed for students to build on their understanding of energy focusing specifically on heat, electricity, and energy transferred through waves, especially light and sound.

BIOLOGY: MOLECULES TO ORGANISMS**Course No. 3411****Grade 10****Phase 5****2.5 Credits****Lab Based Science****Prerequisites: None**

This course provides a solid foundation of biology concepts at the cellular and molecular level. Students engage in scientific inquiry and laboratory explorations as well as interactive activities to help them build understanding. The key concepts studied include; biochemistry, cells, and human body systems.

BIOLOGY: GENETICS, EVOLUTION & ECOLOGY**Course No. 3412****Grade 10****Phase 5****2.5 Credits****Lab Based Science****Prerequisites: None**

This course provides a solid foundation of biology concepts related to genetics, evolution and ecology. Students engage in scientific inquiry and laboratory explorations related to concepts learned in class, as well as interactive activities to help them build understanding.

CHEMISTRY: ATOMS & MOLECULES**Course No. 3441****Grade 10, 11, 12****Phase 4****2.5 Credits****Lab Based Science****Prerequisites: Algebra II (can be concurrent)**

This course is designed for students who require a foundation in chemistry for their future studies. This rigorous course focuses on matter, its changes and interactions. Classification of matter, atomic structure, periodicity, and molecular bonding are key topics. Students also explore the extensive involvement of chemistry in our lives. Inquiry, which involves observation and hands-on laboratory investigations, helps to develop problem-solving skills.

CHEMISTRY: CHEMICAL REACTIONS**Course No. 3442****Grade 10, 11, 12****Phase 4****2.5 Credits****Lab Based Science****Prerequisites: Algebra II (can be concurrent) & Chemistry: Atoms & Molecules**

This course continues the topics of "Atoms and Molecules" by closely reviewing chemical reactions including predicting reaction yields, reaction rates, solution chemistry, and the behavior of gases.

CHEMISTRY: ATOMS & MOLECULES – HONORS

Course No. 3445 **Grades 10, 11, 12**
Phase 5 **Lab Based Science**
2.5 Credits

Prerequisite: Algebra II

This course is designed for students who need a rigorous background in chemistry for college with a more intensive and comprehensive look at the science of chemistry. This course provides students with the opportunity to discover answers to questions about the composition of matter via hands-on laboratory investigations. Topics focus on properties and classification of matter, atomic structure, periodicity, and molecular bonding. Typical calculations require the student to have a solid foundation in previous math and science courses.

CHEMISTRY: CHEMICAL REACTIONS – HONORS

Course No. 3446 **Grades 10, 11, 12**
Phase 5 **Lab Based Science**
2.5 Credits

Prerequisite: Algebra II & Chemistry: Atoms & Molecules

This course continues concepts introduced in “Atoms and Molecules” by looking more deeply at chemical combinations, stoichiometric processes, the behavior of gases, solution chemistry, and kinetics.

ADVANCED PLACEMENT CHEMISTRY (Part1, Part 2, & Part 3)

Course No. 3451, 3452, 3453 **Grades 11, 12**
Phase 6 **Lab-Based Science**

7.5 Total Credits

Prerequisites: Intro to Chemistry or Chemistry: Atoms & Molecules and Chemical Reactions are recommended.

This second-year chemistry course builds upon the first-year college preparatory honors curriculum and continues coverage of basic chemistry principles. It is intended to prepare students to take the AP Chemistry exam for college credit. Thus, it is a very rigorous course with content and expectations of performance one would expect at the college level. Topics covered include solution chemistry, equilibrium, kinetics, electrochemistry and thermodynamics. **Summer work and AP exam are required.**

INTRO TO ENVIRONMENTAL SCIENCE

Course No. 3471 **Grades 11, 12**
Phase 4 **Lab Based Science**

2.5 Credits

Prerequisite: Biology

In this course, students develop an understanding of the natural and man-made environment and the environmental problems the world faces. Students gain the knowledge and skills required to help protect and sustain a healthy environment. The course includes the study of ecology and natural resources. Students conduct field studies and collect data on the campus pond to analyze water quality and the health of the aquatic ecosystem. Classwork includes outdoor field studies, lab investigations, projects, and presentations.

ISSUES IN ENVIRONMENTAL SCIENCE

Course No. 3472 **Grades 11, 12**
Phase 4 **Lab Based Science**

2.5 Credits

Prerequisite: Biology & Intro to Environmental Science

This course continues the study of the natural environment and man-made environmental problems. Topics include: pollution and waste management, population studies, biodiversity, and endangered species. Classwork includes lab investigations, projects, and presentations.

INTRODUCTION TO GREENHOUSE

Course No. 3485 **Grades 11, 12**
Phase 4 **Lab Based Science** **Winter Trimester**

2.5 Credits

Prerequisite: Biology

This course provides an introduction to topics in the field of plant science. Students will learn plants of economic importance, plant classification, plant structures, and plant growth and development. Classwork includes projects and lab

activities. This course is required in order to take Greenhouse: Growing Plants. (This course counts as a Core Science course for graduation but may not count as a core science course for other agencies, including for NCAA eligibility.)

GREENHOUSE: GROWING PLANTS

Course No. 3486

Grades 11, 12

Phase 4

Lab Based Science

Spring Trimester

2.5 Credits

Prerequisite: Biology & Introduction to Greenhouse

In this course, students will learn how to grow plants from seeds and cuttings. They will work with the production of flowers, vegetables, herbs, and houseplants, and gain hands-on experience growing plants in the greenhouse. Students will study fertilizers, soils, and pest management. Classwork includes greenhouse work and lab activities. (This course counts as a Core Science course for graduation but may not count as a core science course for other agencies, including for NCAA eligibility.)

ANATOMY AND PHYSIOLOGY: MUSCULOSKELETAL SYSTEM

Course No. 3491

Grades 11, 12

Phase 4

Lab Based Science

2.5 Credits

Prerequisite: Biology

This rigorous college preparatory includes a detailed study of many human body systems. Homeostatic balance and the relationship between structure and function are a major focus of the course. An introduction to body orientation is followed by a detailed study of the skeletal and muscular systems with an emphasis on gross and microscopic features along with the physiology of each system. The connection between both systems is examined as well as a study of injuries and diseases affecting each system.

ANATOMY AND PHYSIOLOGY: DISSECTION & RESPONSE SYSTEMS

Course No. 3492

Grades 11, 12

Phase 4

Lab Based Science

2.5 Credits

Prerequisite: Biology and Anatomy and Physiology: Musculoskeletal System

Dissection of the fetal pig is used to examine the respiratory, circulatory, digestive, excretory and reproductive systems. This “hands on” experience gives students a valuable opportunity to study these body systems. The nervous, endocrine and lymphatic systems are also studied along with the dissection of a sheep brain and sheep eye. This course is strongly recommended for students interested in a health related career such as medicine, nursing, physical therapy, occupational therapy, athletic training, or lab technician.

INTRODUCTION TO ENGINEERING: FLUIDS & THERMODYNAMICS

Course No. 3495

Grades 9, 10, 11, 12

Phase 4

2.5 Credits

Prerequisites: None

All freshmen planning to take the Technology MCAS must also take Introduction to Engineering: Electrical and Communications.

This course introduces students to various engineering concepts, allowing them to explore principles necessary to pursue technical careers. The class is designed to prepare freshman for the MCAS Technology / Engineering test to fulfill the science component of the MCAS graduation requirement. The class introduces technical drawing, including 2 and 3-dimensional technical illustrations. In the first half of the class, students will explore the engineering concepts of mechanical stress, leverage, and material properties. Students observe demonstrations of basic thermodynamic principles and are exposed to hydraulic and pneumatic systems. Construction technology is also introduced.

INTRODUCTION TO ENGINEERING: ELECTRICAL & COMMUNICATIONS

Course No. 3496

Grades 9, 10, 11, 12

Phase 4

2.5 Credits

Prerequisites: None

All freshmen planning to take the Technology MCAS must also take Introduction to Engineering: Fluids & Thermodynamics.

Students learn and practice technical drawing skills. Students are introduced to principles of electricity/ magnetism and communication systems. Students will use hands-on circuit building and computer simulation software. This class is highly recommended for those students who plan to pursue graphic arts, engineering or technical careers.

NEWTONIAN PHYSICS

Course No. 3455

Grades 11, 12

Phase 4

Lab Based Science

2.5 Credits

Prerequisite: Algebra II

This course focuses on the physics of motion including kinematics, dynamics, energy and momentum. Students learn to interpret and work with the mathematical relationships of physics, as well as acquire an understanding of the concepts underlying these relationships. Through hands-on laboratory activities, students will have the opportunity to quantitatively analyze motion.

MODERN PHYSICS

Course No. 3456

Grades 11, 12

Phase 4

Lab Based Science

2.5 Credits

Prerequisite: Algebra II

In this course students explore additional topics in physics including simple harmonic motion, sound, light, and electricity. Students learn to interpret and work with the mathematical relationships of physics, as well as acquire an understanding of the concepts underlying these relationships. Through hands-on laboratory activities, students will have the opportunity to quantitatively analyze motion.

APPLIED PHYSICS - HOW THINGS WORK

Course No. 3525

Grades 11, 12

Phase 4

2.5 Credits

Prerequisite: Algebra II

This course will focus on the physics knowledge and the basic math skills necessary for students to have an understanding of the world around them. The course is student-centered in the sense that students will have a say as to what projects they will undertake and what content they are most interested in pursuing. The class will utilize traditional instruction, student research, and as much as possible, hands-on activities, labs and demonstrations to engage students and enhance their inquiry skills. Internal combustion engines, electric motors and electromagnetism will be used to demonstrate concepts. Students will disassemble common devices to explore the concepts that allow them to operate. Students will be expected to participate in a hands-on manner and will get dirty.

ASTRONOMY - THE EARTH-SUN SYSTEM *(not offered in 2016-17)*

Course No. 3501

Grades 10, 11, 12

Phase 4

2.5 Credits

Prerequisite: Algebra I

Astronomy-The Earth-Sun system focuses on earth's place in the solar system. The seasons, phases of the moon, and solar cycles will be discussed and observed. Planets and other solar system objects will be examined, according to composition (terrestrial or Jovian), position/region (inner solar system and outer solar system), and individual planetary systems (planet and known natural satellites). Data from past and current NASA/JPL missions will be studied and students will complete several projects and guided inquiries. Kepler's and Newton's Laws of Gravitation and motion will receive specific attention. Students are not required to have any previous coursework in astronomy; they may enroll in this course prior to or independent of the Earth in the Universe course. Nightly observations, focusing on the moon and planets will be required. Nighttime observation sessions using Quabbin's telescope are an important part of the course; student attendance at some of these sessions is expected.

ASTRONOMY - THE EARTH IN THE UNIVERSE

Course No. 3502

Grades 10, 11, 12

Phase 4

2.5 Credits

Prerequisite: Algebra I

This course considers the Earth's place in the Milky Way Galaxy, and its relation to nearby star systems, the local arm of the Milky Way, and the Milky Way's relation to other galaxies in our local cluster. The course considers the ideas of Big Bang theory, observations of nonvisible wavelengths, stellar astrophysics and inflation/dark energy theories. There is no previous experience in astronomy required; this course may be taken independently of or prior to the Earth-Sun System course. These areas are explored with emphasis on the physical laws that govern the universe. Nightly observations, focusing on the constellations as guideposts in the sky, are required and provide students perhaps their only chance at being able to see many of the objects being discussed in the course. Nighttime observation sessions using Quabbin's telescope are an important part of the course; student attendance at some of these sessions is expected.

COMMUNICABLE AND DEGENERATIVE DISEASES

Course No. 3515

Grades 11, 12

Phase 4

2.5 Credits

Prerequisite: Biology

This course is a study of the nature, prevention, treatment and control of communicable, chronic and degenerative diseases with an emphasis on epidemiology. Reviews of case studies and professional journals are used to enhance learning. Examples of contemporary issues in chronic and infectious diseases are discussed. *This course counts as a wellness course for graduation.*

INTRODUCTION TO BIOTECHNOLOGY

Course No. 3510

Grades 11, 12

Phase 4

2.5 Credits

Lab Based Science

Prerequisite: Biology

This elective course will introduce students to the field of biotechnology and give them hands-on experience with common techniques used in research and in industry. Meaningful laboratory experiences, coupled with real world connections, case studies, career exploration, an introduction to bioinformatics, and discussions of bioethics, will equip students with important skills necessary to pursue further study in biotechnology or any other scientific field. In addition to developing core molecular biology laboratory skills such as pipetting and solution preparation, activities will provide students with experience in more advanced laboratory techniques, such as bacterial transformations, DNA extraction, restriction digests, PCR, gel electrophoresis, protein purification, and chromatography.

INTRODUCTION TO CHEMISTRY

Course No. 3535

Grades 9, 10

Phase 4

2.5 Credits

Lab Based Science

Prerequisites: None

This is a laboratory oriented course in which students will investigate the structure of the atom, use the Periodic Table to predict the properties of elements, compounds and chemical reactions. The skills developed in this class will be used in Biology, Chemistry, Environmental Science and Horticulture.

THE SCIENCE OF NUTRITION: YOU ARE WHAT YOU EAT

Course No. 3520

Grades 11, 12

Phase 4

2.5 Credits

Prerequisite: Biology

This course includes an overview of the chemistry of food, including macromolecules (carbohydrates, lipids and proteins), and micronutrients (vitamins and minerals). It also looks at specific guidelines for healthy eating, and the effects of unhealthy food consumption on the body, including obesity, cardiovascular disease, diabetes and cancer. Students engage in a variety of interactive activities to analyze and design nutritional meal plans to meet the needs of specific populations, and discuss and debate controversial nutritional topics such as genetically modified foods, organic vs. conventional farming, and vegetarian and vegan diets. *This course counts as a wellness course for graduation.*

AP COMPUTER SCIENCE PRINCIPLES (Part 1, Part 2 & Part 3)

Course No.

Grades 10, 11, 12

Phase 6

7.5 Total Credits

Prerequisites: Algebra II is strongly recommended

This course follows the College Board topic outline for Computer Science Principles. The course is built around fundamentals of computing including problem solving, working with data, understanding the Internet, cybersecurity, and programming. In addition to taking the required end of course exam, students will also upload digital artifacts and written responses via a Web-based digital portal. Students do not need to have prior knowledge of any programming language.

Summer work and AP exam are required.

COMPUTER PROGRAMMING I

Course No. 3561

Grades 10, 11, 12

Phase 4

2.5 Credits

Prerequisites: None

This course introduces students to the basic concepts of high-level programming languages. The course covers current top-down modular programming techniques used in the computer industry. Students use a C-Based programming language such as JavaScript to become familiar with important programming concepts. This is an introductory course designed for students who are interested in exploring Computer Science and programming. Students should be able to work independently on assigned projects.

COMPUTER PROGRAMMING II

Course No. 3562

Grades 11, 12

Phase 4

2.5 Credits

Prerequisites: Computer Programming I

This course allows students to build on the background knowledge gained in Programming I to learn more about C-based programming languages, modular programming, web development, and game design. Working independently or in small groups, programmers complete a long-term project from start to finish. Students should be able to work independently on assigned projects. **(This class may be used to satisfy the Capstone requirement with additional work and with teacher approval.)**

COMMUNICATING THROUGH TECHNOLOGY

Course No. 3570

Grades 9, 10, 11, 12

Phase 4

2.5 Credits

Prerequisites: None

This course focuses on 21st century communication skills as it teaches students to communicate effectively and responsibly through available technology. Students work with Microsoft Office Suite – Word, Excel, and PowerPoint – as well as other web-based solutions. Students also learn the finer points of digital, online and oral presentations. In addition to creating presentations, students examine the prudent and responsible use of social networks, mobile devices and Smart Phones.

ROBOTICS: MECHANICS

Course No. 3541

Grades 10, 11, 12

Phase 4

Lab Based Science

2.5 Credits

Prerequisites: Algebra II, Geometry

Robotics is a hands-on course built around the Vex Robotics System and Vex Labs. This course allows students to investigate the basics of computer control systems, programming logic, power transmission, mechanical design, and basic materials science. Students compete against their classmates in robot design competitions. Students design, build and operate robots constructed from Vex Robotics Kits. The curriculum includes basic mechanics in linear and circular systems. Students will also learn about mechanical power transmission including bearings, friction and gearing. This class is an excellent choice for the student intending to pursue engineering or other technical careers.

ROBOTICS: ELECTRICAL**Course No. 3542****Grades 10, 11, 12****Phase 4****Lab Based Science****2.5 Credits****Prerequisites: Algebra II, Geometry**

Robotics is a hands-on course built around the Vex Robotics System and Vex Labs. This course allows students to investigate the basics of computer control systems, programming logic, electricity and magnetism, mechanical design, and basic materials science. Students compete against their classmates in robot design competitions. Students design, build and operate robots constructed from Vex Robotics Kits. The curriculum is focused around electrical concepts including circuit design, motor theory and energy conversions. This class is an excellent choice for the student intending to pursue engineering or other technical careers.

TECHNICAL DRAWING and DESIGN**Course No. 3545****Grades 10, 11, 12****Phase 4****2.5 Credits****Prerequisite: Algebra I**

This course provides students with the opportunity to further develop their skills in the graphical language field and prepare themselves for technical fields. Orthographic projection techniques will be mastered as well as practicing pictorial illustrations by completing both hand and computer drawings. Students will explore various drafting techniques including technical sketching, section views, auxiliary views, and basic dimensioning. Students will utilize 3-dimensional computer modeling software to complete mechanical design and drafting problems. Complicated assemblies will be modeled on the computer and students will animate these assemblies to demonstrate practical knowledge of mechanical concepts. Students will participate in a design competition where they will apply all aspects of the design process.

WEB DESIGN I - Accepted as an Art elective**Course No. 3551****Grades 10, 11, 12****Phase 4****2.5 Credits****Prerequisites: None**

This course introduces students to the internet as they learn how the worldwide network functions. The focus of the course is web site creation through the use of HTML (Hypertext Mark Up Language) - the programming language of the World Wide Web. Topics include an introduction to graphic design concepts, and learning the effective use of graphics within web pages and other presentations. Image creation and manipulation will be completed using Adobe Photoshop. Students should be able to work independently on the projects that are assigned.

WEB DESIGN II - Accepted as an Art elective**Course No. 3552****Grades 11, 12****Phase 4****2.5 Credits****Prerequisite: Web Design I**

This course expands upon the basic concepts learned in Web Page Design I. Students will take their knowledge of web site building beyond HTML coding – using Adobe Photoshop and Adobe Dreamweaver – to create elegant and professional web sites. Helping students evolve as 21st century citizens, we will continue to investigate and discuss the effective and responsible use of technology in our daily lives. Students should be able to work independently on the projects that will be assigned. **(This class may be used to satisfy the Capstone requirement with additional work and with teacher approval.)**

ADVANCED PLACEMENT BIOLOGY (Part1, Part 2, & Part 3)**Course No. 3526, 3527, 3528****Grades 10, 11, 12****Phase: 6****Lab Based Science****7.5 Total Credits****Prerequisite: Biology**

This college-level course is designed to prepare students for the AP Biology examination. This course is for motivated, self-directed students who wish to learn more depth about biology concepts. Inquiry-based lab investigations, mathematical modeling, statistical analysis of data are performed by students. The major topics covered are Evolution and Natural

Selection, Biodiversity of Life, Biochemistry and Energy's Role in Living Systems, Cell Biology and Homeostasis, Genetics and Heredity. *Summer work and AP Exam required.*

IB BIOLOGY – HIGHER LEVEL

Grades 11 & 12

(This course runs over junior and senior years)

Grade 11 – Part 1 & Part 2

Course No. 3421 & 3422

5.0 Total Credits

Lab Based Science

Grade 12 – Part 3, Part 4, & Part 5

Course No. 3423, 3424, 3425

7.5 Total Credits

Phase 7

Prerequisites: None

This course is designed to give students a secure knowledge of a body of facts and at the same time a global understanding of the field of biology. The course topics include: cells, biochemistry, genetics, ecology, evolution, and human health and physiology. HL extensions include further depth in nucleic acids, metabolism, plant biology, genetics and evolution, and animal physiology. All IB science courses develop students' skills to enable them to conduct independent lab investigations as well as a group science project. *Fulfills the Biology graduation requirement. IB exam required.*

IB BIOLOGY – STANDARD LEVEL (Part 1, Part 2, & Part 3)

Grades 11 or 12

(This course is a single year option)

Course No. 3431, 3432, 3433

Phase 6

Lab Based Science

7.5 Total Credits

Prerequisites: None

This course is designed to give students a discrete knowledge of facts and at the same time a global understanding of the field of biology. The course topics include: cells, biochemistry, genetics, ecology, evolution, and human health and physiology. All IB science courses develop students' skills to enable them to conduct independent lab investigations as well as a group science project. *Fulfills the Biology graduation requirement. IB exam required.*

IB ENVIRONMENTAL SYSTEMS & SOCIETIES – STANDARD LEVEL*

Grades 11 or 12

(This course is a single year option)

(Part 1, Part 2, & Part 3)

Course No. 3481, 3482, 3483

Phase 6

Lab Based Science

7.5 Total Credits

Prerequisites: None

This interdisciplinary course (Experimental Science - Group 4, and Individuals and Societies - Group 3) is unique in that it contains various sciences coupled with a societal viewpoint, all intertwined to help students understand the environment and its sustainability. The purpose of this course is to expose students to the interrelationships of the environment and societies, and the nature of their interactions, so that they can make an informed personal response to a wide range of pressing global issues. The course requires field experiences which will further extend the interrelationships between the environment and societies. As a result of this course, students will develop a holistic appreciation of complexities of local and global environmental issues and how different societies influence them. The students will consider the costs and benefits of human activities both for the environment and societies. In addition, they will consider cultures as they make informed decisions and justify their opinions on how societies and environments influence each other in a regional and global range. *Fulfills lab-based science graduation requirement. IB exam required.*

*Interdisciplinary course that may be taken to fulfill Group 3 and Group 4 requirements, diploma programme students enrolling in this course must complete 5 additional IB courses.

IB PHYSICS – HIGHER LEVEL

Grades 11 & 12

(This course runs over junior and senior years)

Grade 11 – Part 1 & Part 2

Course No. 3590 & 3591

5.0 Total Credits

Lab Based Science

Grade 12 – Part 3, Part 4, & Part 5

Course No. 3592, 3593, 3594

7.5 Total Credits

Phase 7

Prerequisites: IPS and Pre-Calculus and Trigonometry

Physics is a fundamental experimental science that seeks to explain the universe from the subatomic particles to the distances between galaxies. Problem solving in physics requires a strong background in mathematics, which is the language of physics. The HL Physics course includes all of the topics of the SL course plus the following HL extensions: wave phenomena, fields, electromagnetic induction, quantum and nuclear physics, and medical imaging. All IB science courses develop students' skills to enable them to conduct independent lab investigations as well as a group science project. *Summer work and the IB exam are required.*

IB PHYSICS – STANDARD LEVEL (Part 1, Part 2, & Part 3)

(This course is a single year option)

Grades 11 or 12

Course No. 3584, 3585, 3586

Phase 6

Lab Based Science

7.5 Total Credits

Prerequisites: IPS and Pre-Calculus and Trigonometry

Physics is a fundamental experimental science that seeks to explain the universe from the subatomic particles to the distances between galaxies. Problem solving in physics requires a strong background in mathematics, which is the language of physics. The SL Physics course topics include kinematics and dynamics, work and energy, momentum, thermal physics, gas laws, simple harmonic motion, sound and light, electricity and magnetism, circular motion and gravitation, atomic, nuclear, and particle physics, energy production, and imaging. All IB science courses develop students' skills to enable them to conduct independent lab investigations as well as a group science project. *Summer work and the IB exam are required.*

SOCIAL STUDIES DEPARTMENT

The Social Studies department implements the Massachusetts Curriculum Frameworks by developing and honing the intellectual skills special to history including the ability to understand and produce narration, and to gain awareness of chronology and geography, important detail and its placement in larger contexts, and the comparison of events from different times and places. Most importantly, it demands analytical reading and clear, insightful writing. Also, the Quabbin Regional High School Mission Statement, Core Values and Beliefs, and Learner Expectations are embedded in the course curriculum.

Courses in the Social Studies Department:

- fulfill the Social Studies graduation requirement
- implement academic expectations in critical thinking, effective use of technology, active learning, responsible citizenship, and written and non-written communication.

Course Offerings

World History: A Changing World
World History: A World in Conflict
US History I: A New Nation
US History I: A Nation Divided
US History II: Urbanization & Industrialization
US History II: Modern America Emerges
Advanced Placement US History (3 Parts)
General Psychology
Abnormal Psychology
American Government
Sociology
Contemporary US History

Criminology
Global Issues
Global Research & Presentation
Personal Economics
Introduction to Philosophy
African Studies
IB History of the 20th Century Standard Level (3 Parts)
IB History of the Americas/20th Century World History Higher Level (5 Parts)
IB Psychology Higher Level (5 Parts)
IB Psychology Standard Level (3 Parts)

WORLD HISTORY: A CHANGING WORLD

Course No. 3601

Grade: 9

Phase 5

2.5 Credits

Prerequisites: None

This intensive world history survey course includes both a history and a geography component. Content spans the time period from the age of revolutionary change in Europe through the Age of Imperialism. With Europe as its focus, the course also examines corresponding events in Asia, Africa, Latin America and the United States. In addition, students will have extensive practice in essay writing through the various topics of study.

WORLD HISTORY: WORLD IN CONFLICT

Course No. 3602

Grade: 9

Phase 5

2.5 Credits

Prerequisites: None

This intensive world history survey course includes both a history and a geography component. Content spans the time period from World War I to modern times. With Europe as its focus, the course also examines corresponding events in Asia, Africa, Latin America and the United States. In addition, students will have extensive practice in essay writing through the various topics of study.

US HISTORY I: A NEW NATION

Course No. 3610

Grade: 10

Phase 5

2.5 Credits

Prerequisites: 5 Credits of World History

This course surveys American history from pre-Columbian discovery through Jefferson. In examining the historical and intellectual origins of the United States, students study the basic framework of American democracy and the basic concepts of American government. The historical framework includes themes from the Revolutionary and Constitutional era.

US HISTORY I: A NATION DIVIDED

Course No. 3611

Grade: 10

Phase 5

2.5 Credits

Prerequisites: 5 Credits of World History

This course surveys American history from Jacksonian Democracy to Reconstruction. In examining the historical and intellectual origins of conflict in the United States, students will understand the political, economic and social events that led to the Civil War and Reconstruction.

US HISTORY II: URBANIZATION & INDUSTRIALIZATION

Course No. 3619

Grade: 11

Phase 5

2.5 Credits

Prerequisites: 5 Credits of World History and 5 Credits of USI

This course surveys American history from the Gilded Age through the 1920s. Students analyze the causes and consequences of the Industrial Revolution and America's growing role in diplomatic relations. The historical framework of this course includes themes from the Gilded Age, the Progressive Movement and the Roaring Twenties.

US HISTORY II: MODERN AMERICA EMERGES

Course No. 3620

Grade: 11

Phase 5

2.5 Credits

Prerequisites: 5 Credits of World History and 5 Credits of USI

This course surveys American history from the Great Depression through the 1970's. The historical framework of this course includes themes from the Great Depression, the New Deal, World War II, and the Cold War.

ADVANCED PLACEMENT US HISTORY (Part1, Part 2, & Part 3)

Grades: 11

Course No. 3640, 3641, 3642

Phase 6

7.5 Total Credits

Prerequisites: World History II & US History I

This course examines the historical and intellectual origins of the United States. Students study the basic historical framework including themes from the Revolutionary and Constitutional eras through the Civil War and Reconstruction. Students also analyze the causes and consequences of the Industrial Revolution and America's growing role in diplomatic relations. The historical framework of this course includes themes from the Progressive movement and the New Deal, World War II, the Cold War and recent events and trends that have shaped modern America. This course is an in-depth study of American history that prepares students for the Advanced Placement examination. Ratings on the Advanced Placement Exam in US History may enable students to receive college credits. Students are expected to do a considerable amount of writing including responses to Document Based Questions and to take the Advanced Placement Exam in US History. *AP Exam required.*

GENERAL PSYCHOLOGY

Course No. 3655

Grades: 11, 12

Phase 4

2.5 Credits

Prerequisites: None

This course will enable students to study in depth the field of psychology, human behavior and the major schools of psychological thought. The course covers both the history and principles of learning, personality theories and memory.

ABNORMAL PSYCHOLOGY

Grades: 11, 12

Course No. 3656

Phase 4

2.5 Credits

Prerequisites: None

This course provides an examination of the various psychological disorders as well as theoretical, clinical, and experimental perspectives of the study of psychopathology. Emphasis is on terminology, classification, assessment, and treatment of the

major disorders. Upon completion, students should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic treatment. There will also be a major focus on the function of the human brain. Group projects and oral presentations are a major component of this course.

SOCIOLOGY

Course No. 3665

Grades: 10, 11, 12

Phase 4

2.5 Credits

Prerequisites: None

This course enables students to understand social forces that influence individuals' actions in society or social settings. The course considers conformity, social control, group dynamics, socialization, social institutions and social problems. This course is very student-centered and relies on students' active participation.

GLOBAL ISSUES

Course No. 3630

Grade: 12

Phase 4

2.5 Credits

Prerequisites: 5 credits of World History, US I and US II

This history course considers significant concerns of the late 20th to 21st century in their historical context. Students draw upon their knowledge of social studies as they develop an understanding of the issues that confront them as citizens of the modern world. Research topics will be required and developed with focus on source analysis in regard to an international perspective. *Completion of 5 credits in Global Issues and in Global Research & Presentation meet the Capstone requirement for graduation.*

GLOBAL: RESEARCH AND PRESENTATION

Course No. 3631

Grade 12

Phase 4

2.5 Credits

Prerequisites: 5 credits of World History, US I and US II

This capstone history course requires students to undertake a significant personal research project. Products of the project will include a formal research paper, class and public presentations. The class will also formulate and carry through of a group initiative on a global issue. Average reading, writing and comprehension skills are necessary. *Completion of 5 credits in Global Issues and in Global Research & Presentation meet the Capstone requirement for graduation.*

PERSONAL ECONOMICS

Course No. 3675

Grades: 11, 12

Phase 4

2.5 Credits

Prerequisites: None

This one-trimester course provides students with basic personal financial tools and knowledge. Its content includes setting financial goals, developing budgets, calculating pay and taxes and assessing how career choices affect one's financial future. Students create a personal budget based on their career choice, evaluate various savings and investment plans, examine credit cards and the role that credit plays in their lives and evaluate various taxation plans.

INTRODUCTION TO PHILOSOPHY

Course No. 3662

Grades: 11, 12

Phase 4

2.5 Credits

Prerequisites: None

This course provides an introduction to some of the central problems of philosophy including the existence of God, the relation of Mind and Body, the possibility of Free Will, and the nature and limits of Human Knowledge. Readings will be from both historical and contemporary sources. Alternative theories will be considered on each topic, and the emphasis will be on giving and evaluating logical arguments and reasoning in support of competing positions.

AFRICAN STUDIES

Course No. 3660

Grades: 11, 12

Phase 4

2.5 Credits

Prerequisites: None

This course provides an introduction to the history of the continent of Africa to the present day. Students make their study through the African viewpoint of the European involvement in Africa's history and its implications to today's complex and multifarious problems/issues. The study of major trends and their impact on culture including ancient, medieval and modern history (pre/colonial/post-independence), as well as influences from literature (oral and written), film, religion, art and music are explored. Students are expected to read topical trade books, as well as to complete research and presentation projects in a variety of mediums.

CONTEMPORARY US HISTORY

Course No. 3650

Grades: 12

Phase 4

2.5 Credits

Prerequisites: US History I and II

This course is designed to introduce students to the forces, events, and people that have shaped and altered American society and our relations with other nations. Through this course, students will have the opportunity to experience post-Vietnam America and therefore relate to present day conditions and events.

CRIMINOLOGY

Course No. 3666

Grades: 11, 12

Phase 4

2.5 Credits

Prerequisites: none

This course provides an introduction of Criminology, or the study of crime, with exploration of some of the most influential explanations for criminal deviance and behavior, as well as an overview of the legal system. As a social context shapes general beliefs, however, it also shapes belief about crime. We will consider how different explanations have emerged at different times and work to understand how social context contributes to explanations of crime. To develop credible explanations for crime, we must first understand the nature of crime, the relationship of crime to society, and a basic understanding of the legal system. We will examine a range of criminal activity throughout the course.

AMERICAN GOVERNMENT

Course No. 3670

Grades: 11, 12

Phase 4

2.5 Credits

Prerequisites: US History I

US History II (Preferred)

This course is an examination of our national government and political institutions. It will provide a detailed study of the executive, legislative and judicial branches. There will also be a thorough study of other important areas such as: constitutional law, federalism, American foreign policy, political parties and state government.

IB HISTORY OF THE AMERICAS/ 20TH CENTURY WORLD HISTORY – HIGHER LEVEL

(This course runs over junior and senior years)

Grades 11 & 12

Grades 11 – Part 1 & Part 2

Course No. 3680 & 3681

5.0 Total Credits

Grades 12 - Part 3-5

Course No. 3682, 3683, 3684

7.5 Total Credits

Phase 7

Prerequisites: US History I

This course is designed to promote the acquisition and understanding of historical knowledge in breadth and in depth, and across different cultures; an appreciation and understanding of history as a discipline, including the nature and diversity of its

sources, methods and interpretations; international awareness and understanding by promoting the achievement of empathy with and understanding of people living in diverse places and at different times; a better understanding of the present through an understanding of the past; an appreciation of the historical dimension of the human condition; an ability to use and communicate historical knowledge and understanding, and a lasting interest in history. All students study a selection of the following topics in 20th century world history and history of the Americas: the move to global war, causes, practices, and effects of war; authoritarian and single party states; the emergence of Americas in global affairs, the Great Depression in the Americas; and political development in the US and Canada post World War II. Students also complete one or more written research projects on an historical subject of their choice. **IB exam required.**

IB HISTORY OF THE 20TH CENTURY – STANDARD LEVEL

(This course is a single year option)

Grades 11 or 12

Course No. 3686, 3687, 3688

Phase 6

7.5 Total Credits

Prerequisites: US History I

This course is designed to promote the acquisition and understanding of historical knowledge in breadth and in depth, and across different cultures; an appreciation and understanding of history as a discipline, including the nature and diversity of its sources, methods and interpretations; international awareness and understanding by promoting the achievement of empathy with and understanding of people living in diverse places and at different times; a better understanding of the present through an understanding of the past; an appreciation of the historical dimension of the human condition; an ability to use and communicate historical knowledge and understanding; and a lasting interest in history. All students study a selection of the following topics in twentieth century world history: the move to global war, causes, practices, effects of war, as well as authoritarian and single party states. Students also complete one or more written research projects on an historical subject of their choice. **IB exam required.**

IB PSYCHOLOGY- HIGHER LEVEL

(This course runs over junior and senior years)

Grade 11 & 12

Grade 11 – Part 1 & Part 2

Course No. 3690 & 3691

5.0 Total Credits

Grade 12 – Part 3, Part 4, & Part 5

Course No. 3692, 3693, 3694

7.5 Total Credits

Phase 7

Prerequisites: None

This course can be used as either an International Baccalaureate Group 3 selection or as an IB elective. IB Psychology is the study of human behavior from an empirical perspective. Students learn to design and execute experiments, as well as to interpret their findings. Course content includes a study of psychologists and their theories as well as the most recent research findings across the various fields of the discipline. A primary emphasis in this course is on utilizing appropriate research to support points made in essays and class discussions. **IB exam required.**

IB PSYCHOLOGY- STANDARD LEVEL (Part1, Part 2, & Part 3)

(This course is a single year option)

Grades 11 or 12

Course No. 3696, 3697, 3698

Phase 6

7.5 Total Credits

Prerequisites: None

This course can be used as either an International Baccalaureate Group 3 selection or as an IB elective. Students can take the course in either the junior or senior year. IB Psychology is the study of human behavior from an empirical perspective. Students learn to design and execute experiments, as well as to interpret their findings. Course content includes a study of psychologists and their theories as well as the most recent research findings across the various fields of the discipline. A primary emphasis in this course is on utilizing appropriate research to support points made in essays and class discussions. **IB exam required.**

SPECIAL EDUCATION DEPARTMENT

The Special Education Department implements the Massachusetts Curriculum Frameworks by providing active student involvement in the subject matter of the common core of learning and by promoting respect for a diverse community of learners.

Courses in the Special Education Department

- implement academic expectations in critical thinking, effective use of technology, active learning, responsible citizenship, written and non-written communication

INCLUSION

The Quabbin Regional Special Services Department uses an inclusionary model for all students. Each year curriculum demands as well as individual student needs vary. Program offerings change to meet those needs. Inclusionary models used include consultation, collaboration and academic support. Regular and special educators work together to develop appropriate program models designed to meet the needs of diverse learners.

HIGH SCHOOL STUDY SKILLS /LEARNING CENTER I-IV

Study Skills

Grades 9, 10

Course No. 4601 (Tri One); 4602 (Tri Two); 4603 (Tri Three)

Learning Center

Grades 11, 12

Course No. 4611 (Tri One); 4612 (Tri Two); 4613 (Tri Three)

Unphased

2.5 Credits

Prerequisites: These courses include a TEAM Evaluation carried out under the Chapter 766 Special Education regulations and an Individualized Education Program (IEP)

This course is designed to provide students with a structured learning environment based on individual strengths and needs. Specific instruction focuses on the development of study strategies and organizational skills needed to improve performance in content area classes. A variety of methods, including reinforcement, re-teaching and guided practice, are incorporated into the daily curriculum. Students will not be eligible for as many elective course offerings due to the placement of Study Skills or Learning Center on their schedules.

PROJECT INVOLVE

Grades 9, 10, 11, 12

English - Course No. 4631, 4632, 4633

Alternate Art – Course No. 4658, 4659, 4660

Math- Course No. 4634, 4635, 4636

Internship - Course No. 4646, 4647, 4648

Social Studies - Course No. 4640, 4641, 4642

Alternate PE – Course No. 4652, 4653, 4654

Science - Course No. 4637, 4638, 4639

Career Skills - Course No. 4649, 4650, 4651

Alternate Health – Course No. 4655, 4656, 4657

Unphased

2.5 Credits

Prerequisites: These courses include a TEAM Evaluation carried out under the Chapter 766 Special Education regulations and an Individualized Education Program (IEP) and approval from the special education director.

This course offers pre-vocational, functional academic and daily life-skill training to those students found eligible through the Chapter 766 process. The students who attend Project INVOLVE may experience job-related internships both on and off the Quabbin Regional High School campus. Upon graduation from this program, students receive a *Certificate of Attendance*.

WELLNESS DEPARTMENT

The Wellness Department implements the Massachusetts Curriculum Frameworks by promoting student involvement in activities that develop lifelong physical fitness and healthy lifestyles. This program meets the requirements of the learning standards in personal, physical and emotional health.

Courses in the Wellness Department

- fulfill the graduation requirement of 10 credits in Wellness
- implement academic expectations in critical thinking, effective use of technology, active learning, responsible citizenship, written and non-written communication

Health I: Strategies for Wellness

Health II: Health & Safety for Schools & Community

Exercise Physiology

Health III –Contemporary Health Issues

Sports Medicine

Course Offerings

Inquiry Skills

Physical Education I

Physical Education II

Recreation for Life

Lifetime Strength & Conditioning

HEALTH I: STRATEGIES FOR WELLNESS

Course No. 4405

Phase 4

2.5 Credits

Prerequisites: None

This course focuses on the human anatomy and physiology that covers the main body systems and their functions. It stresses the relationship between structure and function in human organ systems. Students study the functioning of major organ systems and their integration to maintain a homeostatic balance in the body. Students are able to identify and describe the impact of behavior and environment on these systems. This course contains topics relating to human sexuality and sex education.

HEALTH II: HEALTH & SAFETY FOR SCHOOLS & COMMUNITY

Course No. 4406

Phase 4

2.5 Credits

Prerequisites: None

In the first half of this course, students work toward obtaining certification in Community CPR and First Aid from the American Red Cross. This is done through demonstration and hands-on practice and activities with CPR mannequins. Students learn to use an AED (automated external defibrillator). During the second half of the course, students explore physical activity issues related to their own personal health and wellness. Topics covered include, but are not limited to, nutrition, exercise and fitness, stress management and alcohol and other drug use prevention. Students learn about these topics through individual and group projects, written research and presentations. This course does not contain topics of human sexuality or sex education.

FOUNDATIONS OF KINESIOLOGY

Course No. 4408

Grades 10, 11, 12

Phase 4

2.5 credits

Prerequisites: None

This course emphasizes the basics of exercise physiology & sports medicine and includes lifelong fitness and sport-specific strength and conditioning programs, as well as prevention and care of injuries. Students spend academic classroom time studying the principles of exercise physiology and training, and also apply knowledge in the gym or weight room by participating in functional, lifelong fitness activities. Lifetime fitness goal-setting and functional /differentiated training plan design and application based on individual fitness levels are a focus.

HEALTH III: CONTEMPORARY HEALTH ISSUES

Course No. 4407

Phase 4

2.5 Credits

Prerequisites: None

This course focuses on current events and issues in local, national and global health. This class is highly interactive and engages students through class discussions, group work and projects. Students also participate in a service learning project prior to the end of the trimester. Current news sources both in print and online are used to keep students informed and to critically analyze current events throughout the world and how they relate to personal and social health and wellness. This course may include topics related to human sexuality and sex education.

INQUIRY SKILLS (Part 1 & Part 2)

Course No. 4410 & 4411

Grades 9, 10

Phase 5

5 Total Credits

Prerequisites: None

This course requires students to gather and analyze information with the goal of reaching logical and defensible conclusions based on evidence found through research. Students are encouraged to practice critical thinking and reading skills that enable them to develop their own conclusions. The goal of the class is to provide students with activities that increase their confidence and self-awareness, and to develop the skills necessary for success in future studies.

PHYSICAL EDUCATION

Course No. 4401

Grades 9, 10

Unphased

2.5 Credits

Prerequisites: None

This course is comprised of learning units that are designed to stress development of basic skills and active participation in team/dual & individual sports and activities such as soccer, badminton, football, field hockey, track and field, softball, Olympic team handball, as well as functional movement training. A District determined cardiorespiratory assessment will be administered twice during the trimester.

PHYSICAL EDUCATION: ADVANCED

Course No. 4402

Grades 10, 11, 12

Unphased

2.5 Credits

Prerequisites: None

This course is comprised of learning units that are designed to stress development of advanced skills and active participation in team, dual, and individual sports and activities. Emphasis is placed upon skill development and advanced tactics in many lifelong recreational activities and games. Written assessments designed to measure progress and knowledge may be given periodically. A district determined cardiovascular measurement will be given twice during the trimester. *This course can be taken repeatedly.*

RECREATION FOR LIFE

Course No. 4404

Unphased

2.5 Credits

Prerequisites: None

This course is designed for students in grades 11 & 12 who wish to participate in a variety of advanced recreational activities. Emphasis is on teaching skills and activities that can be used throughout the students' lifetime. Activities include; tennis, aerobics, strength training, yoga, golf and table tennis. International activities such as bocce, croquet and badminton will be introduced.

LIFETIME STRENGTH & CONDITIONING

Course No. 4403

Unphased

2.5 Credits

Prerequisites: None

This course is an elective course that involves daily active participation. This course is based on the four aspects of Physical Fitness: cardiorespiratory fitness, muscular strength/endurance, flexibility and body composition. Students will design their own personal strength and conditioning program and the majority of class time will be spent exercising according to these personal plans. Students will apply systematic aerobic conditioning concepts to find target training zones and F.I.T. (frequency, intensity, and time) measures for their cardio-respiratory plans. Students will learn and apply many exercise physiology fitness principles and will also employ the F.I.T. principle to meet their goals. An opportunity for Body Composition Analysis will also be available, but not mandatory. We will use the entire Fitness Center, including the cardio machines, free standing weight machines, stability balls, weight balls, bosu trainers, and resistance tubes.

WORLD LANGUAGE DEPARTMENT

The World Language Department implements the Massachusetts Curriculum Frameworks by providing students with opportunities to gain proficiency in another language and an understanding of other cultures. Such proficiency facilitates business, enhances social connections and promotes appreciation of diversity. Multiple robust research studies have now clearly demonstrated that the learning of a foreign language supports academic achievement, provides cognitive benefits and positively affects attitudes and beliefs about other cultures and peoples.

To better prepare students for the professional and social challenges of the 21st century, Quabbin Regional High School offers world language courses in Chinese, French, Spanish, as well as American Sign Language. The Quabbin World Language Department follows the National Standards for Foreign Language Learning (*The Five C's: Communication, Cultures, Connections, Comparisons, and Communities*) and the Massachusetts Foreign Language Curriculum Framework.

Two years (four trimesters or ten credits at Quabbin) of the same foreign language is a minimum requirement for Massachusetts state colleges and fulfills the Quabbin graduation requirements for World Language. Some universities require three years (six trimesters or fifteen credits at Quabbin). Students whose first language is other than English and who have been designated as English Language Learners follow the Massachusetts and Quabbin Regional School District regulations established for them.

Course Offerings

Intro to American Sign Language *ab initio*
American Sign Language *ab initio* 1
American Sign Language *ab initio* 2
American Sign Language *ab initio* 3
American Sign Language *ab initio* 4
American Sign Language Fluent Level

Introduction to French *ab initio*
French *ab initio* 1
French *ab initio* 2
French *ab initio* 3
Introduction to French IB Standard Level
French IB Standard Level-
 -Communication & Media
 -Global Issues
 -Cultural Diversity
Introduction to Spanish *ab initio*
Spanish *ab initio* 1

Spanish *ab initio* 2
Spanish *ab initio* 3
Introduction to Spanish IB Standard Level
Spanish IB Standard Level -
 -Communication & Media
 -Global Issues
 -Cultural Diversity

Introduction to Chinese Basics
Chinese Daily Topics 1: All About Me
**Chinese Daily Topics 2: Individual &
 Community**
Chinese Daily Topics 3: Leisure & Work
**Introduction to Chinese *ab initio* (Learning Chinese
 through Songs and Movie Making)**
**Chinese *ab initio* 1 (Culture in the Chinese Speaking
 Countries)**
Chinese *ab initio* 2
Chinese *ab initio* 3

AMERICAN SIGN LANGUAGE

INTRODUCTION TO AMERICAN SIGN LANGUAGE *AB INITIO*

Course No. 3801

Phase 5

2.5 credits

Prerequisite: None

This course is a basic level course that students take before moving on to the higher levels. Student outcome at the completion of this course is communication in a manual language with basic conversational skills. Fingerspelling, numbers, basic signs, facial expressions, non-manual markers and Deaf Culture are all the foundations of ASL and are covered in this course. A research project on a famous deaf person and that person's impact on the deaf community is part of the requirements for this class.

AMERICAN SIGN LANGUAGE *AB INITIO* 1

Course No. 3802

Phase 5

2.5 credits

Prerequisite: Completion of Introduction to ASL *ab initio*

This class is the next level after Introduction to American Sign Language. The class is conducted in the target language, and builds upon all that was learned in the first level. While students increase their vocabulary the grammatical structure of the language is focused upon. Cultural differences between hearing and Deaf people is a major unit studied in this level and students analyze the scientific miracle of the cochlear implant and its ramifications on the Deaf Community. This level has students engage in basic conversations, the ability to sign time, age and tense as well as demonstrate basic ASL storytelling skills. Students will be expected to sign about themselves and their families in a self-introduction in front of the class.

AMERICAN SIGN LANGUAGE *AB INITIO* 2

Course No. 3803

Phase 5

2.5 credits

Prerequisite: Completion of ASL *ab initio* 1

This level covers more in-depth grammatical structures of signing that involve facial expression and space. Translation of English to ASL structured sentences and vice versa are practiced on a daily basis and students are expected to be able to identify and name different grammatical practices that make up the true form of ASL. Communication as a whole and the diverse modes of manual communication among deaf people are highlighted in this level, resulting in the students completing a written narrative fictional essay. Classifiers are studied and used as students build their storytelling skills to perform a storytelling test.

AMERICAN SIGN LANGUAGE *AB INITIO* 3

Course No. 3804

Phase 5

2.5 credits

Prerequisite: Completion of ASL *ab initio* 2

ASL students are expected to have an extensive vocabulary in the target language. Deaf History and Culture are explored further with the perspective of how technology has helped Deaf people. Students need to research this topic and write a paper discussing different types of technology that deaf people use to communicate. At this higher level, students should feel comfortable signing in front of others; they will create stories and they sign them in front of the class for a grade. At this level, students are expected to remember and repeat longer pieces of signed information. Discourse in the target language between peers and the teacher is used in the classroom on a regular basis

AMERICAN SIGN LANGUAGE *AB INITIO* 4

Course No. 3805

Phase 5

2.5 credits

Prerequisite: Completion of ASL *ab initio* 3

This course builds upon basic skills initiated in the first three levels by helping students develop expressive and receptive skills at an intermediate level. Building upon the basic classifiers previously learned, students expand their vocabulary and

their knowledge of ASL storytelling, ASL grammar, facial expressions and other non-manual behavior. Students are expected to complete a research project focused on residential deaf schools and the importance of them in a deaf person's life.

AMERICAN SIGN LANGUAGE FLUENT LEVEL

Course No. 3806

Phase 5

2.5 credits

Prerequisite: Completion of ASL *ab initio* 4

This course is the highest level of ASL for students who wish to further continue their language skills. More complex grammar is incorporated in this course and areas that were touched upon previously, such as mouth morphemes, classifiers and ASL idioms will be explored more in depth. Students are expected to build upon their previous knowledge, sign fluently and comprehend the language at a faster pace. Students research the topic of deafness and emergency situations; writing a paper on how to prepare and handle being deaf in a crisis.

CHINESE

INTRODUCTION TO CHINESE BASICS

Course No. 3950

Phase 5

2.5 credits

Prerequisite: None

This course is designed for students with no prior academic knowledge in Chinese. Students practice spoken Chinese and listening and speaking proficiencies are emphasized. Cultural topics and activities are integrated in the curriculum. Students are expected to master PINYIN- the Chinese sound system by the end of this course.

CHINESE DAILY TOPICS 1: ALL ABOUT ME

Course No. 3951

Phase 5

2.5 credits

Prerequisite: Completion of Introduction to Chinese Basics

This course reinforces and expands on the program developed in Introduction to Chinese Basics. Students engage in real-life conversations of theme based topics (All About Me). Chinese word processing is also introduced. Students learn to interpret both spoken and written Chinese on these topics. This course enhances student communicative proficiency as well as their awareness of the Chinese speaking world. A wide range of media is used.

CHINESE DAILY TOPICS 2: INDIVIDUAL AND COMMUNITY

Course No. 3952

Phase 5

2.5 credits

Prerequisite: Completion of Chinese Daily Topics 1

This course, an extension of the Chinese Daily Topics I program, further develops student communicative proficiency within the context of real-life situations. Topics about society and community are discussed in the target language. Students will expand their vocabulary and structure base as well. The study of Chinese culture, history and art are integrated systematically in the curriculum.

CHINESE DAILY TOPICS 3: LEISURE AND WORK

Course No. 3953

Phase 5

2.5 credits

Prerequisite: Completion of Chinese Daily Topics 2

This course devotes equal attention to listening, speaking, reading and writing proficiencies. Students are more active and creative with the language on a variety of practical topics. Students should be committed to improving speaking fluency. Authentic video, audio and print materials are used at this level to supplement the text and to teach strategies for understating more advanced material.

INTRODUCTION TO CHINESE AB INITIO (LEARNING CHINESE THROUGH SONGS AND MOVIE MAKING)

Course No. 3954

Phase 5

2.5 credits

Prerequisite: Completion of Chinese Daily Topics 3

NOTE: *IB diploma candidates who are filling the IB diploma language requirement with the three trimester ab initio course must take Introduction to ab initio 1 before the third trimester of their junior year.*

This multimedia course is designed for students who are interested in Chinese language and pop culture. We use song lyrics to supply authentic and natural language for students, which gives students exposure to the target language and enable them to learn the language effectively in a relaxed environment. Songs of the different styles of artists are used, lyrics with different grammatical points are covered and discussed. Culture facts conveyed in the songs will be discussed and explored. Students will make MTV to show their understanding and progress on topics covered in the songs. Through writing lyrics/transcripts, students can develop creative thinking and writing skills. Students are expected to appreciate Chinese culture in great depth after taking this course and will develop language proficiency to be prepared to participate in Chinese *ab initio* 1.

CHINESE AB INITIO 1 (CULTURE IN THE CHINESE SPEAKING COUNTRIES)

Course No. 3955

Phase 5

2.5 credits

Prerequisite: Completion of Learning Chinese through songs and movie making (Intro to Chinese ab initio)

NOTE: *IB diploma candidates who are filling the IB diploma language requirement with the three trimester ab initio course must take this course the third trimester of their junior year.*

This course examines and compares various cultures of the Chinese-speaking world from the mainland China to Singapore, Malaysia, and from Hong Kong to Taiwan. Students study the socioeconomic variables in these countries as well as their art, music and literature. This course expands students' communicative abilities and develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. The skills of listening, speaking, reading and writing are equally emphasized and are taught and developed through the study of a range of authentic oral and written texts chosen by the teacher. Students are prepared to take Chinese *ab initio* 2 after this course.

CHINESE AB INITIO 2

NOTE: *IB diploma candidates who are filling the IB diploma language requirement with the three trimester ab initio course must take ab initio 2 the first trimester of their senior year.*

Course No. 3956

Phase 6

2.5 credits

Prerequisite: Completion of Chinese *ab initio* 1

Part two of this three-part course further develops students' use of the language in a range of situations and contexts for a variety of purposes. Students further develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. The skills of listening, speaking, reading and writing are equally emphasized, and are taught and developed through the study of a range of authentic oral and written texts chosen by the teacher. A variety of oral and written examinations are used to assess students' listening, speaking, reading and writing skills.

CHINESE AB INITIO 3

NOTE: *IB diploma candidates who are filling the IB diploma language requirement with the three trimester ab initio course must take ab initio 3 the second trimester of their senior year.*

Course No. 3957

Phase 6

2.5 credits

Prerequisite: Completion of Chinese *ab initio* 2

Part three of this three-part course further develops students' use of the language in a range of situations and contexts for a variety of purposes. Students further develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. The skills of listening, speaking, reading and writing are equally emphasized, and are taught and developed through the study of a range of authentic oral and written texts chosen by the teacher. A variety of oral and written examinations are used to assess students' listening, speaking, reading and writing skills.

FRENCH

INTRODUCTION TO FRENCH *AB INITIO*

Course No. 3850

Phase 5

2.5 credits

No prerequisite

Students will develop language proficiency to be prepared to participate in French *ab initio* 1.

FRENCH *AB INITIO* 1

NOTE: IB diploma candidates who are filling the IB diploma language requirement with the three trimester ab initio course must take ab initio 1 the third trimester of their junior year.

Course No. 3851

Phase 5

2.5 credits

Prerequisite: Teacher recommendation or completion of Introduction to French *ab initio*

Part one of this three-part course prepares students to use the language appropriately in a range of situations and contexts for a variety of purposes. Students develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. The skills of listening, speaking, reading and writing are equally emphasized, and are taught and developed through the study of a range of authentic oral and written texts chosen by the teacher. A variety of oral and written examinations are used to assess students' listening, speaking, reading and writing skills. *Freshmen enrolling in the ab initio class will not be eligible to receive the IB certificate at the completion of the course and are not required to participate in the May external exam.*

FRENCH *AB INITIO* 2

NOTE: IB diploma candidates who are filling the IB diploma language requirement with the three trimester ab initio course must take ab initio 2 the first trimester of their senior year.

Course No. 3852

Phase 5

2.5 credits

Prerequisite: Completion of French *ab initio* 1

Part two of this three-part course further develops students' use of the language in a range of situations and contexts for a variety of purposes. Students further develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. The skills of listening, speaking, reading and writing are equally emphasized, and are taught and developed through the study of a range of authentic oral and written texts chosen by the teacher. A variety of oral and written examinations are used to assess students' listening, speaking, reading and writing skills. *Freshmen enrolling in the ab initio class will not be eligible to receive the IB certificate at the completion of the course and are not required to participate in the May external exam.*

FRENCH *AB INITIO* 3

NOTE: IB diploma candidates who are filling the IB diploma language requirement with the three trimester ab initio course must take ab initio 3 the second trimester of their senior year.

Course No. 3853

Phase 5

2.5 credits

Prerequisite: Completion of French *ab initio* 2

Part three of this three-part course further develops students' use of the language in a range of situations and contexts for a variety of purposes. Students further develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. The skills of listening, speaking, reading and writing are equally emphasized, and are taught and developed through the study of a range of authentic oral and written texts chosen by the teacher. A variety of oral and written examinations are used to assess students' listening, speaking, reading and writing skills. *Freshmen enrolling in the ab initio class will not be eligible to receive the IB certificate at the completion of the course and are not required to participate in the May external exam.*

INTRODUCTION TO FRENCH IB STANDARD LEVEL

Course No. 3854

Phase 5

2.5 credits

Prerequisite: Completion of French 2B or French *ab initio* 3

This course provides additional speaking, listening and writing practice of the French language to prepare students for participation in French IB Standard Level courses.

NOTE: *IB diploma candidates must complete all three French IB Standard Level courses (below) by second trimester senior year if filling diploma requirement*

FRENCH IB STANDARD LEVEL – COMMUNICATION AND MEDIA

NOTE: *IB diploma candidates who are filling the IB diploma language requirement with the three trimester Standard Level course must take IB Standard Level – Communication and Media the third trimester of their junior year.*

Course No. 3855

Phase 6

2.5 credits

Prerequisite: Teacher recommendation, completion of Introduction to French IB Standard Level

This rigorous course allows students to develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. Students develop significant fluency and accuracy through the study of a wide range of authentic texts and multimedia materials pertaining to communication and media. Communication of original ideas is emphasized and refined in dynamic discussions, realistic problem solving and frequent writing assignments about various socio-cultural topics related to communication and media. Oral and written examinations are used to assess students' listening, speaking, reading and writing skills. Students enrolled in the IB certificate program will also have the IB external assessments.

FRENCH IB STANDARD LEVEL – GLOBAL ISSUES

NOTE: *IB diploma candidates who are filling the IB diploma language requirement with the three trimester Standard Level course must take IB Standard Level – Global Issues the first trimester of their senior year.*

Course No. 3856

Phase 6

2.5 credits

Prerequisite: Teacher recommendation, completion of Introduction to French IB Standard Level

This rigorous course allows students to develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. Students develop significant fluency and accuracy through the study of a wide range of authentic texts and multimedia materials pertaining to global issues. Communication of original ideas is emphasized and refined in dynamic discussions, realistic problem solving and frequent writing assignments about various socio-cultural topics related to global issues. Oral and written examinations are used to assess students' listening, speaking, reading and writing skills. Students enrolled in the IB certificate program will also have the IB external assessments.

FRENCH IB STANDARD LEVEL – CULTURAL DIVERSITY

NOTE: *IB diploma candidates who are filling the IB diploma language requirement with the three trimester Standard Level course must take IB Standard Level – Cultural Diversity the second trimester of their senior year.*

Course No. 3857

Phase 6

2.5 credits

Prerequisite: Teacher recommendation, completion of Introduction to French IB Standard Level

This rigorous course allows students to develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. Students develop significant fluency and accuracy through the study of a wide range of authentic texts and multimedia materials pertaining to cultural diversity. Communication of original ideas is emphasized and refined in dynamic discussions, realistic problem solving and frequent writing assignments about various socio-cultural topics related to cultural diversity. Oral and written examinations are used to assess students' listening, speaking, reading and writing skills. Students enrolled in the IB certificate program will also have the IB external assessments.

SPANISH

INTRODUCTION TO SPANISH AB INITIO

Course No. 3900

Phase 5

2.5 credits

Prerequisite: None

Students will develop Spanish language proficiency to be prepared to participate in Spanish *ab initio* 1.

SPANISH AB INITIO 1

NOTE: IB diploma candidates who are filling the IB diploma language requirement with the three trimester ab initio course must take ab initio 1 the third trimester of their junior year.

Course No. 3901

Phase 5

2.5 credits

Prerequisite: Teacher recommendation or completion of Introduction to Spanish *ab initio*

Part one of this three-part course prepares students to use the language appropriately in a range of situations and contexts for a variety of purposes. Students develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. The skills of listening, speaking, reading and writing are equally emphasized, and are taught and developed through the study of a range of authentic oral and written texts chosen by the teacher. A variety of oral and written examinations are used to assess students' listening, speaking, reading and writing skills. *Freshmen enrolling in ab initio class will not be eligible to receive the IB certificate at the completion of the course and are not required to participate in the May external exam.*

SPANISH AB INITIO 2

NOTE: IB diploma candidates who are filling the IB diploma language requirement with the three trimester ab initio course must take ab initio 2 the first trimester of their senior year.

Course No. 3902

Phase 5

2.5 credits

Prerequisite: Spanish *ab initio* 1

Part two of this three-part course further develops students' use of the language in a range of situations and contexts for a variety of purposes. Students further develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. The skills of listening, speaking, reading and writing are equally emphasized, and are taught and developed through the study of a range of authentic oral and written texts chosen by the teacher. A variety of oral and written examinations are used to assess students' listening, speaking, reading and writing skills. *Freshmen enrolling in the ab initio class will not be eligible to receive the IB certificate at the completion of the course and are not required to participate in the May external exam.*

SPANISH AB INITIO 3

NOTE: IB diploma candidates who are filling the IB diploma language requirement with the three trimester ab initio course must take ab initio 3 the second trimester of their senior year.

Course No. 3903

Phase 5

2.5 credits

Prerequisite: Completion of Spanish *ab initio* 2

Part three of this three-part course further develops students' use of the language in a range of situations and contexts for a variety of purposes. Students further develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. The skills of listening, speaking, reading and writing are equally emphasized, and are taught and developed through the study of a range of authentic oral and written texts chosen by the teacher. A variety of oral and written examinations are used to assess students' listening, speaking, reading and writing skills. *Freshmen enrolling in the ab initio class will not be eligible to receive the IB certificate at the completion of the course and are not required to participate in the May external exam.*

INTRODUCTION TO SPANISH IB STANDARD LEVEL

Course No. 3904

Phase 5

2.5 credits

Prerequisite: Spanish *ab initio* 3

This course provides additional speaking, listening and writing practice of the Spanish language to prepare students for participation in Spanish IB Standard Level courses.

SPANISH IB STANDARD LEVEL – COMMUNICATION AND MEDIA

NOTE: IB diploma candidates who are filling the IB diploma language requirement with the three trimester Standard Level course must take IB Standard Level – Communication and Media the third trimester of their junior year.

Course No. 3905

Phase 6

2.5 credits

Prerequisite: Teacher recommendation or completion of Introduction to Spanish IB Standard Level

This rigorous course allows students to develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. Students develop significant fluency and accuracy through the study of a wide range of authentic texts and multimedia materials pertaining to communication and media. Communication of original ideas is emphasized and refined in dynamic discussions, realistic problem solving and frequent writing assignments about various socio-cultural topics related to communication and media. Oral and written examinations are used to assess students' listening, speaking, reading and writing skills. Students enrolled in the IB certificate program will also have the IB external assessments.

SPANISH IB STANDARD LEVEL – GLOBAL ISSUES

NOTE: IB diploma candidates who are filling the IB diploma language requirement with the three trimester Standard Level course must take IB Standard Level – Global Issues the first trimester of their senior year.

Course No. 3906

Phase 6

2.5 credits

Prerequisite: Teacher recommendation or completion of Introduction to Spanish IB Standard Level

This rigorous course allows students to develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. Students develop significant fluency and accuracy through the study of a wide range of authentic texts and multimedia materials pertaining to global issues. Communication of original ideas is emphasized and refined in dynamic discussions, realistic problem solving and frequent writing assignments about various socio-cultural topics related to global issues. Oral and written examinations are used to assess students' listening, speaking, reading and writing skills. Students enrolled in the IB certificate program will also have the IB external assessments.

SPANISH IB STANDARD LEVEL – CULTURAL DIVERSITY

NOTE: IB diploma candidates who are filling the IB diploma language requirement with the three trimester Standard Level course must take IB Standard Level – Cultural Diversity the second trimester of their senior year.

Course No. 3907

Phase 6

2.5 credits

Prerequisite: Teacher recommendation or completion of Introduction to Spanish IB Standard Level

This rigorous course allows students to develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. Students develop significant fluency and accuracy through the study of a wide range of authentic texts and multimedia materials pertaining to cultural diversity. Communication of original ideas is emphasized and refined in dynamic discussions, realistic problem solving and frequent writing assignments about various socio-cultural topics related to cultural diversity. Oral and written examinations are used to assess students' listening, speaking, reading and writing skills. Students enrolled in the IB certificate program will also have the IB external assessments.

International Baccalaureate (IB) Programme

Mission Statement: The International Baccalaureate (IB) School of Quabbin complements the Quabbin Regional High School's mission as it offers a collaborative learning community, where all students have opportunities to achieve personal excellence in a safe and accepting environment. The IB School of Quabbin prepares students to become self-reliant, life-long learners who are responsible and resourceful citizens in a global society through an inquiry based learning approach.

As an Innovative School the IB School of Quabbin offers high school juniors and seniors an opportunity to learn in an academically challenging and rigorous course environment following the guidelines of International Baccalaureate Diploma Programme's course of studies. The curriculum of the 2-year program provides the content knowledge, critical thinking, and independence necessary for college success and aligns with the Quabbin Regional High School's newly adopted 21st century learning expectations. The IB School of Quabbin provides opportunities to students enrolled in the IB Diploma Programme as well as to all Quabbin High School juniors and seniors to receive certificates in individual IB courses. This 2-year Diploma Programme will build upon the existing strengths of Quabbin, a high school which offers many individual honors and Advanced Placement (AP) classes.

The school's mission, core beliefs, and core values guide all decisions for the Quabbin Regional High School. These align with the mission and student profile of the IB Organization.

As part of our innovative schools mission the IB Diploma Programme at Quabbin will prepare our students for the world in which they live and for what lies ahead, The International Baccalaureate Programme (IB):

- incorporates a level of academic rigor that will position our students for success in a world where global competition is the norm
- promotes the education of the whole person emphasizing intellectual, personal, emotional and social growth
- aligns with Quabbin's values and goals
- sets the stage for inquiry, critical thinking and problem solving
- encourages wonder and thinking from various perspectives
- teaches students the skills to ask questions and find new solutions

Diploma Programme:

Students pursuing the IB Diploma are required to take three (3) HL courses and three (3) SL courses: select one class from Groups 1-5 and one elective from Groups 1-6, fulfill the core requirements, and adhere to IB assessment standards/expectations in order to earn the IB Diploma. Most IB courses begin in junior year and culminate in a final assessment administered in May of senior year. Credit is awarded only upon completion of the final assessment. Students who meet the requirements of the IB Diploma Programme meet or exceed the requirements for graduation which have been established by the Quabbin Regional School District.

IB Certificates:

All IB courses can be taken independently as certificate options during the Junior and Senior year. All IB courses follow the Diploma Programme scheduling, and the certificate is not awarded until completion of the final assessment.

Higher Level Courses - HL

All IB courses follow a prescribed syllabus upon which the IB examinations are based. Courses offered at the higher level must be taught for a minimum of 240 hours over the two year diploma program: completed in five trimesters. With a greater number of required hours, higher level (HL) courses allow students to pursue a subject in more depth than at the standard level.

Standard Level Courses - SL

All IB courses follow a prescribed syllabus upon which the IB examinations are based. Courses offered at the standard level must be taught for a minimum of 150 hours: completed in three trimesters. Some standard level (SL) courses can be taught in one year while others are designed to be taught over two years.

Quabbin Regional High School: IB Diploma Programme Four-Year IB Diploma Programme Planning Chart

Students seeking an IB Certificate should refer to the QRHS Graduation Requirements Chart

Students pursuing the IB Diploma are required to take three (3) HL courses and three (3) SL courses: select one class from Groups 1-5 and one elective from Groups 1-6, fulfill the core requirements, and adhere to IB assessment standards/expectations in order to earn the IB Diploma. Most IB courses begin in junior year and culminate in a final assessment administered in May of senior year. Credit is awarded only upon completion of the final assessment.

	9 th grade	10 th grade	11 th grade	12 th grade
Group 1: Language and Literature	English 9: Elements of Fiction English 9: Studies in Genre	English 10: American Voice English 10: World Voice	English Literature HL11/SL11 Literature & Performance SL**	English Literature HL12/SL12 Literature & Performance SL**
Group 2: Language Acquisition	Students should take 10 credits in one language in preparation for Language Studies in Grades 11 & 12. Languages: American Sign Language, Chinese, French, or Spanish		Students can take the ab initio series to fulfill the DP if they decide to take a language they have not had before. They can take the SL series of the language they took in 9 th and 10 th grades. Languages: Chinese (ab initio only), French, or Spanish NOTE: American Sign Language cannot be pursued as part of DP	
Group 3: Individuals & Societies	World History: A Changing World World History: A World in Conflict	US History I: A New Nation US History I: A Nation Divided Required	History of the Americas HL11 History of the 20 th Century SL Psychology HL11/SL Environmental Systems SL**	History of the Americas HL12 History of the 20 th Century SL Psychology HL12/SL Environmental Systems SL**
Group 4: Experimental Sciences	IPS: Motion IPS: Energy	Chemistry: Atoms & Molecules Chemistry: Reactions (if pursuing Bio) <i>Honors Recommended</i>	Biology HL11/SL Environmental Systems SL** Physics SL/HL	Biology HL12/SL Environmental Systems SL** Physics SL/HL
Group 5: Math and Computer Science	Algebra I (Pt. 1-3) Algebra II Honors (Pt. 1-3)	Algebra II (Pt. 1& 2) Geometry(Pt. 1& 2) Pre-calculus Trigonometry <i>Honors Recommended</i>	Mathematical Studies SL 11 Mathematics HL11/SL 11	Mathematical Studies SL12 Mathematics HL12/SL12
Group 6: The Arts (Optional)	Art I None Required	Art Elective Communications in Mass Media I	Visual Art HL11/SL11 IB Music SL Film HL11/SL11 Literature and Performance SL11	Visual Art HL12/SL12 IB Music SL Film HL12/SL12 Literature and Performance SL12
T.O.K.	Inquiry Skills (Pt. 1&2) <i>Grade 9 or 10 Recommended</i>	Inquiry Skills (Pt. 1&2) <i>Grade 9 or 10 Recommended</i>	TOK11	TOK12

* Not required: History of the Americas **HL** fulfills World History and US History II graduation requirements

** Interdisciplinary courses fulfill requirement in both groups, diploma candidates must select a total of 6 IB courses.

- Students must choose 1 course from each group for the 9th and 10th grades (with the exception of Group 6/Fine Arts only needing one class prior to 11th grade).
- All students must successfully complete: English 9 and 10, US History I (or equivalent), IPS, and a minimum of Algebra I and Geometry. We also recommend that students complete Algebra II and Inquiry Skills.
- In addition, students must complete PE/Health and Fine Arts requirements in order to graduate.

CORE REQUIREMENTS: Theory of Knowledge, Extended Essay, and C.A.S. (Approximately 50 hours of qualifying work in each objective: Creativity, Action, and Service).

IB GROUP 1 COURSES: STUDIES IN LANGUAGE AND LITERATURE

IB LITERATURE AND PERFORMANCE– STANDARD LEVEL Year 1

Part 1 & Part 2

Course No. 3035 & 3036

Grade 11

Phase 6

5.0 Total Credits

Prerequisites: English 10

IB LITERATURE AND PERFORMANCE- STANDARD LEVEL Year 2

Part 3 & Part 4

Course no. 3057 (formerly 3037) & 3058

Grade 12

Phase 6

5.0 Total Credits

Prerequisites: IB Literature and Performance Year 1

This interdisciplinary (Group 1: Language and Literature and Group 6: The Arts) course incorporates the essential elements of literature and performance and seeks to explore the dynamic relationship between the two. Students who wish to take a more active, hands-on approach to literature may find this course to be the perfect fit. To approach texts imaginatively, students will experiment, take risks, work collaboratively, and communicate their own interpretations through writing, oral presentations, class discussions, and performance. At the heart of the course is the interaction between a conventional literary emphasis on close reading, critical writing and discussion, and the practical, aesthetic and symbolic elements of performance. Performance in this course emphasizes informal collaborative ensemble work and performing, rather than the technical aspects of theatre. The course as a whole examines poetic, literary and dramatic texts and seeks to develop intellect, imagination and creativity. **IB exam required.**

*For IB diploma candidates only, this course fulfills junior and senior year graduation requirements. *Interdisciplinary course that may be taken to fulfill Group 1 and Group 6 requirements. Diploma Programme students enrolling in this course must complete 5 additional IB courses.*

English 11: IB ENGLISH LITERATURE– STANDARD LEVEL Year 1

Part 1 & Part 2

Course No. 3025, 3026

Grade 11

Phase 6

5.0 Total Credits

Prerequisites: English 10

English 12: IB ENGLISH LITERATURE- STANDARD LEVEL Year 2

(This course can be taken even if Part 1 & 2 have not been completed.)

Part 3 & Part 4

Course no. 3028 & 3029

Grade 12

Phase 6

5.0 Total Credits

Prerequisites: Junior year English

This course promotes an appreciation of literature and knowledge of a student's own culture and that of other societies. The course is designed to develop students' powers of expression, both in oral and written communication by emphasizing the skills involved in writing and speaking one's native language in a variety of styles and situations. Students read several texts grouped by themes or genres. The texts are chosen from a broad list of prescribed authors and works representing different literary genres and styles in the target language, as well as literature from other languages and cultures read in translation. Oral and written examinations are used to assess students' individual language skills, their ability to critically analyze and comment upon familiar and unfamiliar texts and their ability to express a personal and independent response to literature.

IB ENGLISH LITERATURE – HIGHER LEVEL

This course runs over two years and can be taken in place of English 11 and English 12.

Grade 11 – Part 1, Part 2, & Part 3

Grades 11 & 12

Course No. 3030, 3031, 3032
7.5 Total Credits

Grade 12 – Part 4 & Part 5
Course No. 3033 & 3034
5.0 Total Credits

Phase 7

Prerequisites: English 10

This course promotes an appreciation of literature and knowledge of a student's own culture and that of other societies. The course is designed to develop students' powers of expression, both in oral and written communication by emphasizing the skills involved in writing and speaking one's native language in a variety of styles and situations. Students read fifteen (15) texts grouped by themes or genres. The texts are chosen from a broad list of prescribed authors and works representing different literary genres and styles in the target language, as well as literature from other languages and cultures read in translation. Oral and written examinations are used to assess students' individual language skills, their ability to critically analyze and comment upon familiar and unfamiliar texts and their ability to express a personal and independent response to literature. *Fulfills junior and senior year English graduation requirements.*

IB GROUP 2 COURSES: LANGUAGE ACQUISITION

Students enrolling in Language B *ab initio* courses are expected to have **no more than one** year of study in the target language prior to enrolling.

Students enrolling in a Standard Level Language B courses, are expected to have studied the target language for several years prior to enrolling.

SPANISH AB INITIO 1

Course No. 3901

Phase 5

2.5 credits

Prerequisite: Teacher recommendation or completion of Introduction to Spanish *ab initio*

Part one of this three-part course prepares students to use the language appropriately in a range of situations and contexts for a variety of purposes. Students develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. The skills of listening, speaking, reading and writing are equally emphasized, and are taught and developed through the study of a range of authentic oral and written texts chosen by the teacher. A variety of oral and written examinations are used to assess students' listening, speaking, reading and writing skills. *Freshmen enrolling in the ab initio class will not be eligible to receive the IB certificate at the completion of the course and are not required to participate in the May external exam.*

SPANISH AB INITIO 2

Course No. 3902

Phase 5

2.5 credits

Prerequisite: Completion of Spanish 1B or Spanish *ab initio* 1

Part two of this three-part course further develops students' use of the language in a range of situations and contexts for a variety of purposes. Students further develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. The skills of listening, speaking, reading and writing are equally emphasized, and are taught and developed through the study of a range of authentic oral and written texts chosen by the teacher. A variety of oral and written examinations are used to assess students' listening, speaking, reading and writing skills. *Freshmen enrolling in the ab initio class will not be eligible to receive the IB certificate at the completion of the course and are not required to participate in the May external exam.*

SPANISH AB INITIO 3

NOTE: IB diploma candidates must complete ab initio 1, 2 and 3 by the end of second trimester senior year if filling diploma requirement

Course No. 3903**Phase 5****2.5 credits****Prerequisite: Completion of Spanish *ab initio* 2**

Part three of this three-part course further develops students' use of the language in a range of situations and contexts for a variety of purposes. Students further develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. The skills of listening, speaking, reading and writing are equally emphasized, and are taught and developed through the study of a range of authentic oral and written texts chosen by the teacher. A variety of oral and written examinations are used to assess students' listening, speaking, reading and writing skills. *Freshmen enrolling in the ab initio class will not be eligible to receive the IB certificate at the completion of the course and are not required to participate in the May external exam.*

SPANISH IB STANDARD LEVEL – COMMUNICATION AND MEDIA**Course No. 3905****Phase 6****2.5 credits****Prerequisite: Teacher recommendation, completion of Introduction to Spanish IB Standard Level or completion of Spanish 3B**

This rigorous course allows students to develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. Students develop significant fluency and accuracy through the study of a wide range of authentic texts and multimedia materials pertaining to communication and media. Communication of original ideas is emphasized and refined in dynamic discussions, realistic problem solving and frequent writing assignments about various socio-cultural topics related to communication and media. Oral and written examinations, including IB external assessments, are used to assess students' listening, speaking, reading and writing skills.

SPANISH IB STANDARD LEVEL – GLOBAL ISSUES**Course No. 3906****Phase 6****2.5 credits****Prerequisite: Teacher recommendation, completion of Introduction to Spanish IB Standard Level or completion of Spanish 3B**

This rigorous course allows students to develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. Students develop significant fluency and accuracy through the study of a wide range of authentic texts and multimedia materials pertaining to global issues. Communication of original ideas is emphasized and refined in dynamic discussions, realistic problem solving and frequent writing assignments about various socio-cultural topics related to global issues. Oral and written examinations, including IB external assessments, are used to assess students' listening, speaking, reading and writing skills.

SPANISH IB STANDARD LEVEL – CULTURAL DIVERSITY**Course No. 3907****Phase 6****2.5 credits****Prerequisite: Teacher recommendation, completion of Introduction to Spanish IB Standard Level or completion of Spanish 3B**

This rigorous course allows students to develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. Students develop significant fluency and accuracy through the study of a wide range of authentic texts and multimedia materials pertaining to cultural diversity. Communication of original ideas is emphasized and refined in dynamic discussions, realistic problem solving and frequent writing assignments about various socio-cultural topics related to cultural diversity. Oral and written examinations, including IB external assessments, are used to assess students' listening, speaking, reading and writing skills.

FRENCH AB INITIO 1**Course No. 3851****Phase 5****2.5 credits****Prerequisite: Teacher recommendation or completion of Introduction to French *ab initio***

Part one of this three-part course prepares students to use the language appropriately in a range of situations and contexts for a variety of purposes. Students develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. The skills of listening, speaking, reading and writing are equally emphasized, and are taught and developed through the study of a range of authentic oral and written texts chosen by the teacher. A variety of oral and written examinations are used to assess students' listening, speaking, reading and writing skills. *Freshmen enrolling in the ab initio class will not be eligible to receive the IB certificate at the completion of the course and are not required to participate in the May external exam.*

FRENCH AB INITIO 2

Course No. 3852

Phase 5

2.5 credits

Prerequisite: Completion of French *ab initio* 1

Part two of this three-part course further develops students' use of the language in a range of situations and contexts for a variety of purposes. Students further develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. The skills of listening, speaking, reading and writing are equally emphasized, and are taught and developed through the study of a range of authentic oral and written texts chosen by the teacher. A variety of oral and written examinations are used to assess students' listening, speaking, reading and writing skills. *Freshmen enrolling in the ab initio class will not be eligible to receive the IB certificate at the completion of the course and are not required to participate in the May external exam.*

FRENCH AB INITIO 3

NOTE: *ab initio* 1, 2 and 3 must be completed by IB diploma candidates by the end of second trimester senior year if filling diploma requirement

Course No. 3853

Phase 5

2.5 credits

Prerequisite: Completion of French *ab initio* 2

Part three of this three-part course further develops students' use of the language in a range of situations and contexts for a variety of purposes. Students further develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. The skills of listening, speaking, reading and writing are equally emphasized, and are taught and developed through the study of a range of authentic oral and written texts chosen by the teacher. A variety of oral and written examinations are used to assess students' listening, speaking, reading and writing skills. *Freshmen enrolling in the ab initio class will not be eligible to receive the IB certificate at the completion of the course and are not required to participate in the May external exam.*

FRENCH IB STANDARD LEVEL – COMMUNICATION AND MEDIA

NOTE: IB diploma candidates must complete all three French IB Standard Level courses (below) by second trimester senior year if filling diploma requirement

Course No. 3855

Phase 6

2.5 credits

Prerequisite: Teacher recommendation, completion of Introduction to French IB Standard Level or completion of French 3B

This rigorous course allows students to develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. Students develop significant fluency and accuracy through the study of a wide range of authentic texts and multimedia materials pertaining to communication and media. Communication of original ideas is emphasized and refined in dynamic discussions, realistic problem solving and frequent writing assignments about various socio-cultural topics related to communication and media. Oral and written examinations, including IB external assessments, are used to assess students' listening, speaking, reading and writing skills.

FRENCH IB STANDARD LEVEL – GLOBAL ISSUES

Course No. 3856

Phase 6

2.5 credits

Prerequisite: Teacher recommendation, completion of Introduction to French IB Standard Level or completion of French 3B

This rigorous course allows students to develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. Students develop significant fluency and accuracy through the study of a wide range of authentic texts and multimedia materials pertaining to global issues. Communication of original ideas is emphasized and refined in dynamic discussions, realistic problem solving and frequent writing assignments about various socio-cultural topics related to global issues. Oral and written examinations, including IB external assessments, are used to assess students' listening, speaking, reading and writing skills.

FRENCH IB STANDARD LEVEL – CULTURAL DIVERSITY

Course No. 3857

Phase 6

2.5 credits

Prerequisite: Teacher recommendation, completion of Introduction to French IB Standard Level or completion of French 3B

This rigorous course allows students to develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. Students develop significant fluency and accuracy through the study of a wide range of authentic texts and multimedia materials pertaining to cultural diversity. Communication of original ideas is emphasized and refined in dynamic discussions, realistic problem solving and frequent writing assignments about various socio-cultural topics related to cultural diversity. Oral and written examinations, including IB external assessments, are used to assess students' listening, speaking, reading and writing skills.

CHINESE AB INITIO 1 (CULTURE IN THE CHINESE SPEAKING COUNTRIES)

Course No. 3955

Phase 5

2.5 credits

Prerequisite: Completion of Learning Chinese through songs and movie making (Intro to Chinese ab initio)

NOTE: IB diploma candidates who are filling the IB diploma language requirement with the three trimester ab initio course must take this course the third trimester of their junior year.

This course examines and compares various cultures of the Chinese-speaking world from the mainland China to Singapore, Malaysia, and from Hong Kong to Taiwan. Students study the socioeconomic variables in these countries as well as their art, music and literature. This course expands students' communicative abilities and develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. The skills of listening, speaking, reading and writing are equally emphasized and are taught and developed through the study of a range of authentic oral and written texts chosen by the teacher. Students are prepared to take Chinese *ab initio* 2 after this course.

CHINESE AB INITIO 2

Course No. 3956

Phase 6

2.5 credits

Prerequisite: Completion of Chinese ab initio 1

Part two of this three-part course further develops students' use of the language in a range of situations and contexts for a variety of purposes. Students further develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. The skills of listening, speaking, reading and writing are equally emphasized, and are taught and developed through the study of a range of authentic oral and written texts chosen by the teacher. A variety of oral and written examinations are used to assess students' listening, speaking, reading and writing skills.

CHINESE AB INITIO 3

Course No. 3957

Phase 6

2.5 credits

Prerequisite: Completion of Chinese ab initio 2

Part three of this three-part course further develops students' use of the language in a range of situations and contexts for a variety of purposes. Students further develop an awareness of and appreciation for the culture of the countries in which the target language is spoken. The skills of listening, speaking, reading and writing are equally emphasized, and are taught and

developed through the study of a range of authentic oral and written texts chosen by the teacher. A variety of oral and written examinations are used to assess students' listening, speaking, reading and writing skills.

IB GROUP 3 COURSES: INDIVIDUALS AND SOCIETIES

IB HISTORY OF THE AMERICAS/ 20TH CENTURY WORLD HISTORY – HIGHER LEVEL
(This course runs over junior and senior years) **Grades 11 & 12**

Grades 11 – Part 1 & Part 2

Course No. 3680 & 3681

5.0 Total Credits

Grades 12 - Part 3-5

Course No. 3682, 3683, 3684

7.5 Total Credits

Phase 7

Prerequisites: US History I

This course is designed to promote the acquisition and understanding of historical knowledge in breadth and in depth, and across different cultures; an appreciation and understanding of history as a discipline, including the nature and diversity of its sources, methods and interpretations; international awareness and understanding by promoting the achievement of empathy with and understanding of people living in diverse places and at different times; a better understanding of the present through an understanding of the past; an appreciation of the historical dimension of the human condition; an ability to use and communicate historical knowledge and understanding, and a lasting interest in history. All students study a selection of the following topics in 20th century world history and history of the Americas: the move to global war, causes, practices, and effects of war; authoritarian and single party states; the emergence of Americas in global affairs, the Great Depression in the Americas; and political development in the US and Canada post World War II. Students also complete one or more written research projects on an historical subject of their choice. *Fulfills World History and US History II graduation requirements.*

IB HISTORY OF THE 20TH CENTURY – STANDARD LEVEL

(This course is a single year option)

Grades 11 or 12

Course No. 3686, 3687, 3688

Phase 6

7.5 Total Credits

Prerequisites: US History I

This course is designed to promote the acquisition and understanding of historical knowledge in breadth and in depth, and across different cultures; an appreciation and understanding of history as a discipline, including the nature and diversity of its sources, methods and interpretations; international awareness and understanding by promoting the achievement of empathy with and understanding of people living in diverse places and at different times; a better understanding of the present through an understanding of the past; an appreciation of the historical dimension of the human condition; an ability to use and communicate historical knowledge and understanding; and a lasting interest in history. All students study a selection of the following topics in twentieth century world history: the move to global war, causes, practices, effects of war, as well as authoritarian and single party states. Students also complete one or more written research projects on an historical subject of their choice. *Fulfills World History graduation requirements.*

IB PSYCHOLOGY- HIGHER LEVEL

(This course runs over junior and senior years)

Grade 11 & 12

Grade 11 – Part 1 & Part 2

Course No. 3690 & 3691

5.0 Total Credits

Grade 12 – Part 3, Part 4, & Part 5

Course No. 3692, 3693, 3694

7.5 Total Credits

Phase 7

Prerequisites: None

This course can be used as either an International Baccalaureate Group 3 selection or as an IB elective. IB Psychology is the study of human behavior from an empirical perspective. Students learn to design and execute experiments, as well as to interpret their findings. Course content includes a study of psychologists and their theories as well as the most recent research findings across the various fields of the discipline. A primary emphasis in this course is on utilizing appropriate research to support points made in essays and class discussions.

IB PSYCHOLOGY- STANDARD LEVEL (Part1, Part 2, & Part 3)**(This course is a single year option)****Grades 11, 12****Course No. 3696, 3697, 3698****Phase 6****7.5 Total Credits****Prerequisites: None**

This course can be used as either an International Baccalaureate Group 3 selection or as an IB elective. Students can take the course in either the junior or senior year. IB Psychology is the study of human behavior from an empirical perspective. Students learn to design and execute experiments, as well as to interpret their findings. Course content includes a study of psychologists and their theories as well as the most recent research findings across the various fields of the discipline. A primary emphasis in this course is on utilizing appropriate research to support points made in essays and class discussions.

IB GROUP 4 COURSES: EXPERIMENTAL SCIENCES**IB BIOLOGY – HIGHER LEVEL****Grades 11 & 12****(This course runs over junior and senior years)****Grade 11 – Part 1 & Part 2****Course No. 3421 & 3422****5.0 Total Credits****Lab Based Science****Grade 12 – Part 3, Part 4, & Part 5****Course No. 3423, 3424, 3425****7.5 Total Credits****Phase 7****Prerequisites: None**

This course is designed to give students a secure knowledge of a body of facts and at the same time a global understanding of the field of biology. The course topics include: cells, biochemistry, genetics, ecology, evolution, and human health and physiology. HL extensions include further depth in nucleic acids, metabolism, plant biology, genetics and evolution, and animal physiology. All IB science courses develop students' skills to enable them to conduct independent lab investigations as well as a group science project. *Fulfills the Biology graduation requirement.*

IB BIOLOGY – STANDARD LEVEL (Part 1, Part 2, & Part 3)**Grades 11 or 12****(This course is a single year option)****Course No. 3431, 3432, 3433****Phase 6****Lab Based Science****7.5 Total Credits****Prerequisites: None**

This course is designed to give students a discrete knowledge of facts and at the same time a global understanding of the field of biology. The course topics include: cells, biochemistry, genetics, ecology, evolution, and human health and physiology. All IB science courses develop students' skills to enable them to conduct independent lab investigations as well as a group science project. *Fulfills the Biology graduation requirement.*

IB ENVIRONMENTAL SYSTEMS & SOCIETIES – STANDARD LEVEL***Grades 11 or 12****(This course is a single year option)**

(Part 1, Part 2, & Part 3)
Course No. 3481, 3482, 3483
Phase 6

Lab Based Science

7.5 Total Credits

Prerequisites: None

This interdisciplinary course (Experimental Science - Group 4, and Individuals and Societies - Group 3) is unique in that it contains various sciences coupled with a societal viewpoint, all intertwined to help students understand the environment and its sustainability. The purpose of this course is to expose students to the interrelationships of the environment and societies, and the nature of their interactions, so that they can make an informed personal response to a wide range of pressing global issues. The course requires field experiences which will further extend the interrelationships between the environment and societies. As a result of this course, students will develop a holistic appreciation of complexities of local and global environmental issues and how different societies influence them. The students will consider the costs and benefits of human activities both for the environment and societies. In addition, they will consider cultures as they make informed decisions and justify their opinions on how societies and environments influence each other in a regional and global range. *Fulfills lab-based science graduation requirement.*

*Interdisciplinary course that may be taken to fulfill Group 3 and Group 4 requirements, diploma programme students enrolling in this course must complete 5 additional IB courses.

IB PHYSICS – HIGHER LEVEL
(This course runs over junior and senior years)

Grades 11 & 12

Grade 11 – Part 1 & Part 2
Course No. 3590 & 3591

5.0 Total Credits

Lab Based Science

Grade 12 – Part 3, Part 4, & Part 5
Course No. 3592, 3593, 3594

7.5 Total Credits

Phase 7

Prerequisites: IPS and Pre-Calculus and Trigonometry

Physics is a fundamental experimental science that seeks to explain the universe from the subatomic particles to the distances between galaxies. Problem solving in physics requires a strong background in mathematics, which is the language of physics. The HL Physics course includes all of the topics of the SL course plus the following HL extensions: wave phenomena, fields, electromagnetic induction, quantum and nuclear physics, and medical imaging. All IB science courses develop students' skills to enable them to conduct independent lab investigations as well as a group science project. *Summer work and the IB exam are required.*

IB PHYSICS – STANDARD LEVEL **(Part 1, Part 2, & Part 3)**
(This course is a single year option)

Grades 11 or 12

Course No. 3584, 3585, 3586

Phase 6

Lab Based Science

7.5 Total Credits

Prerequisites: IPS and Pre-Calculus and Trigonometry

Physics is a fundamental experimental science that seeks to explain the universe from the subatomic particles to the distances between galaxies. Problem solving in physics requires a strong background in mathematics, which is the language of physics. The SL Physics course topics include kinematics and dynamics, work and energy, momentum, thermal physics, gas laws, simple harmonic motion, sound and light, electricity and magnetism, circular motion and gravitation, atomic, nuclear, and particle physics, energy production, and imaging. All IB science courses develop students' skills to enable them to conduct independent lab investigations as well as a group science project. *Summer work and the IB exam are required.*

IB GROUP 5 COURSES: MATHEMATICAS AND COMPUTER SCIENCES

IB MATHEMATICS – STANDARD LEVEL - Year One

Part 1 & 2

Course No. 3361 & 3362

Grades 11

Phase 6

5.0 Total Credits

IB MATHEMATICS – STANDARD LEVEL - Year Two

Part 3 & 4

Course No. 3363 & 3364

Grades 12

Phase 6

5.0 Total Credits

Prerequisites: Pre-Calculus is strongly recommended prior to taking this course.

This class is designed for students who will continue to study mathematics at university, and provides them with a background of mathematical thought and a reasonable level of technical ability. Course topics include logarithms; sequences and series; linear and quadratic functions and equations; the binomial theorem; arcs and sectors; trigonometry; functions and calculus; vectors; and probability and statistics. ***IB exam required.***

IB MATHEMATICAL STUDIES – STANDARD LEVEL –Year One

Part 1& 2

Course No. 3371 & 3372

Grades 11

Phase 6

5.0 Total Credits

IB MATHEMATICAL STUDIES – STANDARD LEVEL –Year Two

Part 3 & 4

Course No. 3373 & 3374

Grades 12

Phase 6

5.0 Total Credits

Prerequisites: Algebra II and Geometry

This course is designed for students with varied backgrounds and abilities to provide them with a realistic mathematics course. The course develops the skills needed to cope with the mathematical demands of a technological society with an emphasis on the application of mathematics to real-life, every-day situations. Course topics include linear, quadratic, and exponential functions; approximation and error; algorithms; probability and statistics; sets and logic; simple sequences and finance; linear programming; vectors; matrices; and trigonometry. A personal research project involving the collection, analysis and evaluation of data is required. ***IB exam required.***

IB GROUP 6 COURSES: THE ARTS

IB VISUAL ARTS – HIGHER LEVEL

(This course runs over junior and senior years)

Grades 11 & 12

Grade 11 – Part 1 & Part 2

Course No. 4040 & 4041

5.0 Total Credits

Grade 12 – Part 3, Part 4, & Part 5

Course No. 4042, 4043, & 4044

7.5 Total Credits

Phase 7

Prerequisites: None

This course is designed to provide students with opportunities to develop aesthetic, imaginative and creative facilities; stimulate and train visual awareness, perception and criticism of the arts of various cultures; enable students to discover, develop and enjoy means of creative visual expression; encourage the pursuit of quality through training; individual

experiment and persistent endeavor; and encourage a lively, inquiring and informed attitude toward art and design in all its forms, both in history and today. This course consists of Visual Arts A (Studio Work), an introduction to the principles of art and design, as well as practical experience in several media and techniques. Students develop a portfolio of studio work for assessment by an outside examiner. Visual Arts B (Research Workbook) concentrates on compiling one or more personal research workbooks that include visual and written entries illustrating a student's practical and experimental work, personal responses, and critical research.

IB VISUAL ARTS – STANDARD LEVEL (Part 1, Part 2, & Part 3)

(This course is a single year option)

Grades 11, 12

Course No. 4050, 4051, 4052

Phase 6

7.5 Total Credits

Prerequisites: None

This course is designed with the same aims and philosophy as HL, the difference being that SL students need to complete only one option, A or B. Visual Arts option A (Studio Work) SL includes an introduction to the principles of art and design, and practical experience in several media and techniques. Students following option A develop a portfolio of studio work for assessment by an outside examiner. Visual Arts option B (Research Workbook) SL concentrates on compiling one or more personal research workbooks that include visual and written entries illustrating a student's practical and experimental work, personal responses, and critical research.

IB FILM – HIGHER LEVEL

(This course runs over junior and senior years)

Grades 11 & 12

Grade 11 – Part 1 & Part 2

Course No. 4060 & 4061

5.0 Total Credits

Grade 12 – Part 3, Part 4, & Part 5

Course No. 4062, 4063, 4064

7.5 Total Credits

Phase 7

Prerequisites: None

This unique course covers film theory, film history and film production. Students watch entire films and film clips to learn about the language of film. They also will apply that language to look at how filmmakers create meaning in films. Students also will study the differences between films from different countries and cultures. Moreover, students see how the history of film has led us to where we are now and where we might go in the future. Finally, as students master these concepts, they are expected to become filmmakers themselves as they plan, shoot and edit their own movies. This course is quite different than any other film course, and students should be aware that while this class is meant to be fun and interesting, there are still assignments and work to complete so plan ahead.

IB FILM – STANDARD LEVEL

(This course is a single year option)

Grades 11, 12

Course No. 4070, 4071, 4072

7.5 Total Credits

Phase 6

Prerequisites: None

This unique course covers film theory, film history, and film production. Students will watch entire films and film clips to learn about the language of film. They also will apply that language to look at how filmmakers create meaning in films. Students also will study the differences between films from different countries and cultures. Moreover, students see how the history of film has led us to where we are now and where we might go in the future. Finally, as students master these concepts, they will become filmmakers themselves as they plan, shoot and edit their own movies. This course is quite different than any other film course, and students should be aware that while this class is meant to be fun and interesting, there are still assignments and work to complete so plan ahead.* **Indicates trans disciplinary course that may be taken as another group requirement.**

IB MUSIC - STANDARD LEVEL

Course No. 4170, 4171, 4172

Phase 7**7.5 Credits (classroom) + 5.0 Credits (of ensemble coursework)**

This course is designed for music students with varied backgrounds in music performance. The aim of IB music is to give music students the opportunity to explore and enjoy the diversity of music throughout the world by enabling them to creatively develop their knowledge, musical abilities and understanding through performance and composition. Students will be expected to demonstrate their understanding of music by performing, by using appropriate musical language and terminology in analyzing musical works from many and varied cultures and periods and by exploring music through music theory, sight-singing and composition. All IB students must enroll in one of the school's large ensembles (Concert Chorus, Quabbin Singers, Symphonic Winds and Orchestra) for at least two trimesters.

ADDITIONAL IB DIPLOMA REQUIREMENTS

THEORY OF KNOWLEDGE (TOK) – DIPLOMA

(This course runs over junior and senior years)

Grades 11, 12

Grade 11 (Part 1) Course No. 5005

Grade 12 (Part 2) Course No. 5006

Phase 6

5 Total Credits

Prerequisites: None – available to all students as an elective

The purpose of this course is to stimulate reflection on the knowledge and the experience of students both in and outside the classroom. Taught for a minimum of 100 hours during the program, TOK examines various areas of knowledge, truth, logic, value judgments and the role of language and thought in knowledge. The course challenges students to question the basis of knowledge, to be aware of subjective and ideological biases and to develop a personal mode of thought based on analysis of evidence and expressed in rational arguments. A presentation and an essay written on a prescribed topic comprise the TOK assessment.

EXTENDED ESSAY - IB Diploma Requirement

Course No. 3038

Grades 11, 12

Unphased

Prerequisites: IB Diploma Candidate

The Extended Essay is an independent research paper of no more than 4,000 words due the second year of the program. Written in a subject of the student's choosing under the direct supervision of a qualified teacher at the school, the essay offers students an opportunity to investigate a topic of special interest and acquaints them with the kind of independent research and writing skills expected at university. The essay is externally assessed by IB according to specific criteria.

CREATIVITY, ACTION, SERVICE (CAS)- IB Diploma Requirement

Course No. 3039

Grade 11, 12

Unphased

Prerequisites: IB Diploma Candidate

Creativity, Action, Service (CAS) is designed to complement the academic components of the diploma program and to counterbalance the self-absorption some students encounter while following a demanding curriculum. Over two years, students must engage in a minimum of 150 hours of extracurricular activities distributed equally among the areas of creativity, action and service. Fundamentally an experiential learning component of the diploma program, participation in activities such as theatre productions, sports and community service encourages students to share their energies and talents while developing awareness, concern and the ability to work with others. These hours are **not** in addition to the required Capstone community service hours; CAS and other IB Diploma Programme requirements fulfill the Capstone requirements.

CAS/EE WORKSHOP

Unphased

2.5 Credits

This course is a Pass/Fail workshop course that supports students in their completion of the IB Diploma Program Requirements.

ALTERNATIVE PROGRAMS

EDGENUITY (Online Learning)

Grades 9, 10, 11, 12

Course No. 4800

Phase is dependent on course taken

2.5, 5.0, or 7.5 Credits (Credits are dependent on course taken)

Prerequisites: Participation will be determined by Administration and Guidance

This program offers students the ability to learn in a fully online format. Courses are designed with a focus on understanding and comprehension versus timing. Students are able to move at their own pace with mechanisms and tools built in to the program to assist students in being successful. Students are able to work from home. Students are able to access a wide array of courses, including AP and test prep courses, available at various levels or phases. <http://www.edgenuity.com/>

DUAL ENROLLMENT

Course No. 4813

Grades 11, 12

Phase is dependent on college course taken.

5.0 Credits

This is a program where students earn both high school credit and college credit for taking a college course. In order to guarantee that QRHS awards credit for a course, students must gain prior approval from administration for any outside coursework. This is done by filling out the "Request for Outside Coursework" form in guidance. Students will have a dual enrollment placeholder course in their QRHS schedule. Once a student completes their college course and submits an official transcript to QRHS then the course and grade will be added to the student's QRHS transcript.

INTERNSHIP

Course No. 4720

Grades 11, 12

Phase 4

2.5 Credits

Prerequisites: Approval of Administration and Guidance

This course provides students with a practical learning experience that is tied to that student's post graduate goal. Students are encouraged to locate a site related to their post-graduate goals and identified college or career interests. Students who participate in this program have an opportunity to develop transferable skills and sound work attitudes which may lead to future employment as well as solidify a student's prospective course of study in college. Educational, professional, and occupational experiences are the responsibility of the student. Guidelines for the internship program are:

1. All students wishing to participate in the program must complete an application by October 1st. Applications are available in the Guidance office.
2. Students may not receive any monetary compensation for work completed during internship hours.
3. The student must complete all assigned work by the deadlines.
4. The student must complete weekly sheets reflecting the student's time on internship and have the supervisor sign off on the form. Both the job supervisor and the student must complete the two prescribed evaluations. The program coordinator works with each participating student to facilitate the completion of these evaluations and the assigning of the final grade.
5. Students will complete a final paper that clearly articulates how they have fulfilled the QRHS 21st Century Learning Expectations.

HONORS RESEARCH:

Course No. 4710

Grade 12

Phase 5

2.5 Credits

Prerequisites: Honors Research Proposal must be submitted and approved prior to enrollment

This course provides students with the opportunity to research an area or undertake a project in a specific subject that is not covered by an existing course. Students must define the project, find a faculty member willing to serve as an advisor, and complete an Honors Research Proposal form. The proposal form will specify: the topic(s) the student intends to pursue in depth, a research goal, an action plan appropriate to the research, and the intended final product or representation of the student's learning. The academic requirements must be equal in rigor to those of honors courses, and significant, in-depth,

original academic research or creation must be evident. Students who complete an honors research project must present their work and findings to a faculty review panel. The Honors Research Proposal form must be completed in its entirety by the date the course registration forms are due. Final approval is granted by the Capstone Coordinator.

STUDENT CLERK

Course No. 4820

Grades 11, 12

Pass/Fail

2.5 Credits

Prerequisites: Permission of the Principal. Students must complete an application form.

This course provides students in grades 11 and 12 with the opportunity to have a meaningful work experience in a professional setting within the school community. Each student is assigned a supervisor within the school. The supervisor oversees the student clerk's work and evaluates the student's performance at the end of each marking period.

SENIOR CAPSTONE SEMINAR

Course No. 4700

Phase 4

2.5 Credits

Students may take a Capstone seminar course that will support the independent work done to fulfill the capstone graduation requirement. Students will be required to submit a proposal for their Capstone Project in spring of their junior year.

Successful completion of the Capstone will be based on four components: a reflection journal, a process paper, an artifact or product, and an exhibition. The students must complete the first three components before the exhibition. The exhibition will take place at the end of the trimester that students are scheduled for Capstone, depending on which trimester the students have completed their Capstone Experience.

QRHS GRADUATION REQUIREMENTS

Students are expected to complete a comprehensive list of requirements in order to receive a high school diploma from Quabbin Regional High School. Students must show the ability to complete academic coursework, independent work, community service, as well as other benchmarks in order to graduate. Students must show proficient use of technology. They are required to demonstrate proficiency in accessing and completing online coursework. All requirements must be completed in order for a student to participate in the graduation ceremony and receive their diploma. The following is a list of graduation requirements. The charts below should serve as a quick reference.

High School Graduation Requirements	
Credits	Students must earn a minimum of 125 credits
Competency Testing	Students must meet the qualifying benchmark for state standardized testing required for graduation, currently MCAS in Math, English, and Science
Community Service	Students must earn 45 hours of community service
Capstone	Students must complete a Senior Capstone
Subjects	Students must take a minimum number of core courses in English, Math, Science, Social Studies, World Language, Wellness, and the Arts

QRHS Core Subject Requirements for Graduation	
English	20 credits of English, with a minimum of 5 credits each year of high school
Math	20 credits of Math, with a minimum of 5 credits each year of high school
Science	15 credits (5 credits each year) of lab Science
Social Studies	15 credits (5 credits each year) of Social Studies
World Language	10 credits of the same World Language
Arts	2 courses or 5 total credits in the Arts or Music
Wellness	10 credits of Wellness (strongly recommend credits are earned over four years)

CREDITS

Quabbin Regional High School runs a 5x3 Trimester Schedule. Students receive final grades and have the ability to earn credits for each block of instruction, each trimester. Students take five courses each trimester. Trimesters run an average of 14 weeks in duration, or 60 days. Traditionally, the first trimester runs from August to November, the second trimester runs from November to March, and the third runs from March to June. Students have five classes every day, which are an average of 60 minutes in length.

	Trimester One	Trimester Two	Trimester Three
Period 1	2.5 Credit Course	2.5 Credit Course	2.5 Credit Course
Period 2	2.5 Credit Course	2.5 Credit Course	2.5 Credit Course
Flex Block	Flex Block	Flex Block	Flex Block
Period 3	2.5 Credit Course	2.5 Credit Course	2.5 Credit Course
Period 4	2.5 Credit Course	2.5 Credit Course	2.5 Credit Course
Period 5	2.5 Credit Course	2.5 Credit Course	2.5 Credit Course
Credit Totals	Total Credits 12.5	Total Credits 12.5	Total Credits 12.5
	Total of 37.5 Credits for the School Year		

SENIOR CAPSTONE

All graduating students must complete a Capstone Experience that reflects achievement of the Quabbin Regional High School's 21st Century Learning Expectations. This is a student-centered experience; the students will decide how they will accomplish their Capstone. It may be in conjunction with a class that a student is taking, or it may be independent of a class through independent academic work. Students will be required to submit a proposal for their Capstone Experience in the spring of their junior year to the Capstone Coordinator.

Students may complete the following programs to complete their Senior Capstone requirement for graduation, this includes the following: Capstone Seminar, Dual Enrollment the courses Global Research and Global Presentation, by completing an Independent Capstone Project, Honors Research, Senior Internship, or by completing a Visual Capstone or Performance Capstone.

COMMUNITY SERVICE

Quabbin Regional High School students must demonstrate responsible citizenry through their ability to interact with the greater community in the form of community service. Students are encouraged to use this opportunity to make contacts, assist others, and volunteer their time and energy to worthy causes. Students can earn community service hours by engaging in service work with civic and non-profit organizations, school and town initiatives, and by assisting those people in need through organized programs. Students must earn a total of 45 documented hours in order to graduate. Blank community service forms are available in the main office and completed community service forms should be handed in to the main office so the hours can be recorded.

COMPETENCY DETERMINATION FOR GRADUATION (MCAS)

Students are required to meet the Commonwealth of Massachusetts Department of Elementary and Secondary Education competency determination standards. Students must pass their high school MCAS in English Language Arts (ELA), Mathematics, and Science. A score of 220 or above is considered passing. Scores of 220-238 are considered 'Needs Improvement', scores in the 240-258 range are considered 'Proficient', scores 260 and above are considered 'Advanced'.

The science MCAS requirement can be done by taking one of the following: Biology, Chemistry, Introductory Physics, or Technology/Engineering. Quabbin Regional High School students traditionally take their science MCAS in 9th grade, with most students taking the Introduction to Physical Science course that prepares them for the corresponding test. Students then traditionally take their English and math MCAS in grade 10. Retakes are given for any student who does not pass any of these tests.

Students who score between a 220-238 on ELA and/or Math have passed MCAS but because they fall in the 'Needs Improvement' category they must continue 'working toward proficiency' in standards based math and/or English courses as they continue through high school. These students are placed on an Educational Proficiency Plan, or EPP. The EPP is an educational planning tool that identifies student's areas of need and works to remediate those areas. The plan may include or require student's participation in school day attendance, academic support programs, enrollment in and successful completion of specific classes, and retaking of MCAS. Students will be qualified as making progress toward proficiency if they successfully complete a course, which means, at a minimum, the student has earned academic credit for the course under the Quabbin Regional School District's standards for awarding academic credit.

Students who earn top ELA and math MCAS scores at their high school are eligible to receive The John and Abigail Adams Scholarship. This award is for free tuition only at any Massachusetts state public university or college. This award can only be used if a student enters the Massachusetts public institution directly following high school and it is dependent on state discretion and funding. The names of the John and Abigail Adams Award winners will be announced in the fall of senior year.

GRADING

Students are issued alphabetical grades. Progress reports are issued midway through each trimester. Final grades are issued at the completion of each trimester. Courses are considered ‘stand-alone’ and students should work to pass each course or each part of a course as each 2.5 credit course will show on a student’s final transcript.

Grade Table		
A- to A+	90-100	Credit Bearing
B- to B+	80-89	Credit Bearing
C- to C+	70-79	Credit Bearing
D- to D+	60-69	Credit Bearing
F	59 and Below	No Credit is Awarded
W	Withdrawal	No Credit is Awarded
P	Pass	Credit Bearing
I	Incomplete	No Credit is Awarded
M	Medical Withdrawal	No Credit is Awarded

MID-TRIMESTER PROGRESS

During the middle of a trimester, teachers prepare progress reports for all students. The progress reports for students where a teacher is concerned regarding a student’s passing the course will indicate “Academic Failure Warning” in the comment section of a student’s progress report.

INCOMPLETE GRADE

If a student cannot be issued a final grade at the end of a marking period for any designated reason, such as suspension or an illness, the teacher may issue an “I” for Incomplete, after receiving authorization from administration. Incomplete work is due 10 days after the close of the term and if an updated grade is not submitted by the teacher after ten days, an “F” will automatically be entered as the student’s grade unless other arrangements have been made and approved by administration.

An Incomplete grade prohibits a student from being listed on academic achievement rolls such as the Honor Roll, and from participating on athletic teams and clubs and organizations.

WITHDRAWAL

Students who withdraw from a course once grades have been issued, for any reason, including scheduling concerns, placement, medical reasons or withdrawal from high school, will receive a Withdraw, or ‘W’, on their transcript with no credit awarded.

FAILING A COURSE

The QRHS Guidance Department recommends that students make up courses that are failed to ensure students stay on track toward graduation. A failed course at Quabbin Regional High School can be made up by successfully completing the course or course equivalent. Students who fail a class during the school year have the option of making up this course in an approved program or with outside coursework. Outside coursework or summer school must be pre-approved by completing a “Request for Outside Coursework” form. Failure to get pre-approval may result in Quabbin Regional High School not granting credit for the course or credit make-up that a student completes.

It is critical that the student meet with his/her guidance counselor to develop a plan for course, subject, and/or credit make-up in order to stay on track for graduation.

PROMOTION AND RETENTION POLICY

Students must meet both subject and credit requirements in order to be promoted to the next grade. Students are promoted or retained over the summer dependent on the courses they have completed and credits they have earned. Students who are deficient in credits to be a member of the senior class should meet with their guidance counselor to discuss options for making up credits. Any plans for credit make-up need to be approved by administration. All students must carry a full course load with any amendments to this approved by administration. Administration holds the right to promote or retain a student as needed dependent on testing requirements or other factors that may negatively impact a student's progress towards meeting graduation requirements.

Promotion to the following year:	Requirement:
Freshman	Successful completion of Grade 8
Sophomore	32.5 Credits Passing Grade in English 9 Passing Grade in Algebra
Junior	65 Credits
Senior	87.5 Credits
Graduating Senior	125 Credits Minimum (with a minimum of 32.5 credits earned in senior year)

OUTSIDE COURSEWORK

Students wishing to receive high school credit for any coursework completed outside of QRHS need to submit a "Request for Outside Coursework" approval form prior to taking the course. Students must complete this form, which requires administrative approval, prior to beginning the coursework. This applies to courses taken for credit make-up, summer school, online learning, supplemental learning, enrichment, or dual enrollment. The "Request for Outside Coursework" approval form is available in the Guidance Office. Students and their parents are financially responsible for transportation as well as any fees incurred for make-up courses or outside courses or programs.

An official transcript of grades to be received by the Guidance Office before the course will be added to the student's high school transcript. Official transcripts documenting outside coursework need to be provided by the last day of classes for seniors at the end of the school year for outside coursework to appear on that student's transcript.

TRANSFER STUDENTS

Students who transfer in to Quabbin Regional High School will be expected to complete QRHS graduation requirements. Credit will be given for previously completed comparable coursework, however coursework completed at a previous school will not count toward a student's GPA or rank. Previously completed coursework will be reflected on a student's Quabbin Regional High School transcript but not in the student's cumulative grade point average issued by Quabbin.

Students who were previously homeschooled will be issued general education transfer credits on their transcript. They will not have grades for any specific courses or partial coursework reflected on their QRHS transcript. It is the responsibility of the parent or guardian to supply proof of any previous schooling or coursework to any agency or institution that requires it, including but not limited to colleges, NCAA, or scholarship organizations.

Students who transfer out of Quabbin Regional High School will receive a "W" for Withdrawal on their transcript for any courses which they have not completed, with grades-to-date included in a transfer enrollment packet that is forwarded to their next educational institution. Records will be forwarded once a request for records is received by the high school from the next school or once a parent notifies the high school of the transfer.

ACADEMIC RECOGNITION & THE HONOR ROLL

Honor Rolls are published after each marking period to recognize students who have demonstrated high academic achievement. Honor Roll is based on unweighted term grades. All courses count towards honor roll recognition according to the following standards:

High Honors – Student must be enrolled in at least five courses and receive all A's

Honors – Student must be enrolled in at least five courses and receive all A's and B's

Students receive recognition based on their cumulative academic achievements. The following recognitions are completed at the end of a school year and are based on a students' weighted cumulative grade point average, or GPA.

Suma Cum Laude (4.25 – 5.00)

Magna Cum Laude (4.00 -4.24)

Cum Laude (3.50 - 3.99)

GPA & RANK

Quabbin Regional High School calculates GPA (Grade Point Average) on a cumulative basis. Class rank is based on a weighted, cumulative GPA, which is also used for college applications. GPA is updated for all students at the end of each trimester. The GPA is calculated based on a student's final grades and by factoring in the course credits as well as the phase, or weight, of the course.

The higher phased courses carry more weight and contribute to higher class standings. Unphased courses are not weighted and are not calculated in GPA. Students need to be enrolled in and attend QRHS for six terms in grades 9 through 12, to be named the school's valedictorian or salutatorian for purposes of graduation. Students must keep in mind that the level of courses they choose and the grades they earn affect their GPA. Final GPA for seniors will be determined by using the final grades for the year, with all grades needing to be reported or received by the guidance office by the last day of classes for seniors.

Regarding outside coursework, an official transcript from the college needs to be received by the Guidance Office before the course will be added to the student's high school transcript and before the course and grade will be factored in to a student's GPA. Students should complete the 'Request for Outside Coursework Form' prior to enrolling in an external course to determine both the credit and weight that will be awarded for the proposed college course to be taken.

Weighted 4.0 Scale for Class of 2014+

Alpha	Numeric					
Grade	Grade	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7
A+	97-100	4.00	4.33	4.83	5.33	5.55
A	93-96	3.66	4.00	4.50	5.00	5.25
A-	90-92	3.33	3.66	4.16	4.66	4.91
B+	87-89	3.00	3.33	3.83	4.33	4.55
B	83-86	2.66	3.00	3.50	4.00	4.25
B-	80-82	2.33	2.66	3.16	3.66	3.91
C+	77-79	2.00	2.33	2.83	3.33	3.55
C	73-76	1.66	2.00	2.50	3.00	3.25
C-	70-72	1.33	1.66	2.16	2.66	2.91
D+	67-69	1.00	1.33	1.83	2.33	2.55
D	63-66	0.66	1.00	1.50	2.00	2.25
D-	60-62	0.33	0.66	1.16	1.66	1.91
F	0-59	0.00	0.00	0.00	0.00	0.00

Course Level or Phase Grid	
Unphased	Courses do not count towards a student's GPA or rank
Phase 3	College Preparatory 2 – This course covers college preparatory material at a slower pace
Phase 4	College Preparatory 1 – This course covers college preparatory material
Phase 5	Honors/Advanced level of coursework presented
Phase 6	AP/IB Standard Level
Phase 7	IB Higher Level