JERICHO HIGH SCHOOL

Course Offerings

2024-2025

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Updated June 2022

New York State Diploma Requirements Applicable to All Students Enrolled in Grades 9-12

Credit Requirements

(Apply to all diploma types: local, Regents, Regents with advanced designation)

	Minimum number of credits
English	4
Social Studies *Distributed as follows:* *U.S. History (1)* *Global History and Geography (2)* *Participation in Government (½)* *Economics (½)*	4
Science *Distributed as follows:* *Life Science (1)* *Physical Science (1)* *Life Science or Physical Science (1)*	3
Mathematics	3
World Languages	1(**)
Visual Art, Music, Dance, and/or Theater	1
Physical Education *(participation each semester)*	2
Health	½
Electives	3 ½
Total	**22**

(**)Students with a disability may be excused from the requirement for 1 unit of credit in World Languages if so indicated on their IEP, but they must still earn 22 units of credit to graduate.

1.) **Pathways**

A student must either:

- earn the Seal of Civic Readiness; or
- pass an additional Regents Exam or Department Approved Alternative in a different course (English, mathematics, science, or social studies); or
- pass a Department Approved Pathway Assessment (Arts, CDOS, World Languages); or
- successfully complete a NYSED-approved CTE program, including the associated 3-part technical assessment; or
- successfully complete all the requirements for earning the CDOS Commencement Credential.

Beginning in fall 2022, a select number of NYS schools will pilot the Individual Arts Assessment Pathway (IAAP). Reference Multiple Pathways and Department Approved Alternative Examinations.

2.) **Traditional Appeals**

All appeals are subject to local district approval. Reference: Appeals, Safety Nets, and Superintendent Determination

3.) **Special Endorsements**

Honors: A student earns a computed average of at least 90 on the Regents Exams applicable to either a Regents diploma or a Regents diploma with advanced designation. No more than 2 Department approved alternatives can be substituted for Regents Exams. The locally developed Checkpoint B examination in World Languages is not included in the calculation.

Mastery in Math and/or Science: A student meets all the requirements for a Regents diploma with advanced designation AND earns a score of 85 or better on 3 math Regents Exams and/or 3 science Regents Exams.

Technical Endorsement: A student meets the requirements for either a local diploma, a Regents diploma or a Regents diploma with advanced designation AND successfully completes a Department approved CTE program including the 3-part technical assessment.

Seal of Biliteracy: A student meets the criteria for earning the NYS Seal of Biliteracy.

Seal of Civic Readiness: A student meets the criteria for earning the NYS Seal of Civic Readiness.

Reference the Endorsements and Seals webpage or NYS Diploma/Credential Requirements for additional information related to awarding special endorsements to students with exam exemptions due to COVID-19.

4.) **World Languages Exemption**

Students with a disability may be excused from the required units of credit in World Languages if so indicated on their IEP, but they must still earn 22 units of credit to graduate. Such student who seeks a Regents diploma with advanced designation does NOT have to complete the 5-unit sequence in the Arts or CTE in lieu of the sequence in World Languages in order to meet the assessment requirements for the advanced diploma.

5.) **Superintendent Determination of a Local Diploma**

Students with a disability who are unable to attain a local diploma through the various safety net provisions may be eligible for a Superintendent Determination of a local diploma under certain conditions. Reference: Appeals, Safety Nets, and Superintendent Determination

6.) **Flexibilities due to the COVID-19 Public Health Emergency**

Exemptions: Students granted an exemption from any exam due to COVID-19 are not required to pass such specific exam to meet the assessment requirements for any diploma type. Reference the following FAQs: June/August 2020, January 2021, June/August 2021, and January 2022

Special Appeals: Eligible students may use lower scores (50-64) on Regents Exams taken during the 2021-22 or 2022-23 school year to meet the assessment requirements for any diploma type. Reference: Special Appeals Memo and FAQ.

Special Determination: Students who are scheduled to graduate in **June 2022** and either do not qualify for a Special Appeal or who are unable to participate in one or more required Regents Exam(s) because of illness, including isolation restrictions due to COVID, may request a Special Determination to Graduate with a Local Diploma in June 2022.

7.) **Exemptions from the Regents Exam in US History and Government (Framework)**

Eligible students shall be granted an exemption from the June 2022, August 2022, or January 2023 Regents Exam in US History and Government (Framework). Reference: FAQ on Cancellation of Regents Exam in US History and Government (Framework)

Updated June 2022

Assessment Requirements

	Regents Diploma for **All Students**		Regents Diploma via Appeal for **All Students**		Local Diploma via Appeal for **All Students**		Local Diploma for **Students with a Disability**		Local Diploma via Appeal for **English Language Learners**	
REGENTS EXAM or passing score on a Department approved alternative	# of Exams	Passing Score	# of Exams	Passing Score	# of Exams	Passing Score	# of Exams	Passing Score	# of Exams	Passing Score
English Language Arts (ELA)	1	65[!]	1	1 Regents exam with a score of 60-64 for which an appeal has been granted by the district and all remaining Regents exams with a score of 65[!] or above	1	2 Regents exams with a score of 60-64 for which appeals have been granted by the district and all remaining Regents exams with a score of 65[!] or above	1	55[*^]	1	Either the ELA Regents exam with a score of 55-59 for which an appeal has been granted by the district, and all remaining Regents exams with a score of 65[!] or above, OR 1 Regents exam with a score of 60-64 and the ELA Regents with a score of 55-59 for which appeals have been granted for both by the district, and the remaining Regents exams with a score of 65[!] or above [†]
Math	1	65[!]	1		1		1	55[*^]	1	
Science	1	65[!]	1		1		1	55[*^]	1	
Social Studies	1	65[!]	1		1		1	55[*^]	1	
Pathway *(See note 1 on reverse side)*	1 or CDOS	65[!] if Regents Exam	1 or CDOS		1 or CDOS		1 or CDOS	55[*^] if Regents Exam	1 or CDOS	
Compensatory Safety Net	*Non-Applicable*		*Non-Applicable*		*Non-Applicable*		Scores of 45-54 on any required Regents exam (except ELA and Mathematics) can be compensated by a score of 65[!] or above on another required Regents exam including ELA and Mathematics.		*Non-Applicable*	

Regents Diploma with Advanced Designation

Students seeking the Regents diploma with advanced designation must:

- Meet the credit and assessment requirements for a Regents diploma; and
- Pass **two additional** Regents **exams** or Department approved alternatives **in mathematics**; and
- Pass **one additional** Regents **exam** or Department approved alternative in **science**
  - students seeking advanced designation must pass at least one Regents exam or Department approved alternative in both sciences (**one life** and **one physical**); and
- Complete a **sequence**:
  - earn an additional 2 units of credit in World Languages and pass a locally developed Checkpoint B World Languages examination, or
  - complete a 5 unit sequence in the Arts, or
  - complete a 5 unit sequence in CTE.

Assessment Combinations for Advanced Designation

Traditional Combination	ELA, Global History and Geography, US History and Government, 3 mathematics, 2 science (1 life science, 1 physical science) = 8 assessments
Pathway Combination (other than STEM)	ELA, 1 social studies, 3 math, 2 science (1 life science, 1 physical science), 1 Pathway (other than science or math) = 7 (+Pathway) or 8 assessments.
STEM (Mathematics) Pathway Combination	ELA, 1 social studies, 4 math[‡], 2 science (1 life science, 1 physical science) = 8 assessments.
STEM (Science) Pathway Combination	ELA, 1 social studies, 3 math, 3 science (at least 1 life science, at least 1 physical science) = 8 assessments.

* A student with a disability may appeal scores between 52 and 54 on up to two Regents examinations in any discipline and graduate with the local diploma. Reference New York State Diploma/Credential Requirements: Local diploma for Students with Disabilities.

^ In the event a student with a disability is unable to attain a passing score on any Regents examination, the student may be eligible for a Superintendent Determination of a local diploma. Reference Appeals, Safety Nets, and Superintendent Determination.

[†] English Language Learners seeking an appeal for a score of 55-59 on the ELA Regents Exam are only eligible if they entered the United States in grade 9 or after and were classified as an English Language Learner when they took the test the second time. Reference New York State Diploma/Credential Requirements: Local diploma for English Language Learners.

[‡] The 4th mathematics examination can be selected from the list of Department Approved Alternative Examinations.

[!] For the purposes of determining a student's diploma type, exemptions and Special Appeals should be considered passing scores. Both exemptions and Special Appeals may be applied to all diploma types.

Business Education

4711: The Science & Business of Agriculture *(formerly Agriscience 1)*

This is an interdisciplinary course that explores science, business, and family and consumer science curriculum. It is a hands-on, project-based course focusing on topics including gardening, farming, botany, hospitality management, and food science. The course seeks to analyze these topics all the while considering the impacts of technology, culture, and externalities. Students will develop understandings of natural and agricultural sciences, evaluate impacts of agricultural practices on output and the environment, and create outdoor gardens conducive to plant growth. This course will review and evaluate the food system and industries surrounding it, agriculture business systems, and food entrepreneurship while considering environmental, societal, and corporate governance. Students will have the opportunity to research the cultural heritage and relevance of food and the role it plays in communities. By leveraging an interdisciplinary co-teaching model, the course will highlight the intersections of these three content areas while engaging students in authentic learning experiences.

Prerequisite(s): None
Grades: 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

6121: Entrepreneurship

This course is designed to provide students interested in a business venture the opportunity with class instruction of how to establish a business. Once this business is established groups of students will be charged with the responsibility of designing and producing a marketable product. They will utilize the school community to promote sales and show a profit for their local group product. Tax ramifications of local, state and federal governments will also be highlighted. This group project may utilize talents of members of other departments of the school community to enhance their marketable product.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 0.5
Meets: 5 periods weekly

6136: Marketing/Advertising (C)

Marketing presents an overview of global marketing strategy starting with target market identification and ending with consumption. Using a variety of classroom activities, students participate in step-by-step methods of creating a marketing mix, pricing, designing appropriate advertising, creating new products and services. Case study analysis, computer programs, and videos enhance the content of this valuable course. A must for prospective college business majors.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 0.5
Meets: 5 periods weekly

6141: Personal Finance & Wealth Management

Real world topics covered will include income, money management, spending and credit, as well as saving and investing. Students will design personal and household budgets utilizing checking and saving accounts, gain knowledge in finance, debt and credit management, and evaluate and understand insurance and taxes. This course gives students an overview of how to manage their individual financial circumstances. Topics covered will include basic financial recordkeeping, personal, auto, mortgage and home equity loans, investing fundamentals, property and casualty insurance, life insurance, health insurance, and tax planning. Students learn core skills in creating budgets, developing long-term financial plans to meet their goals, and making responsible choices about income and expenses. They gain a deeper understanding of capitalism and other systems so they can better understand their role in the economy of society. Students are inspired by the experiences of finance professionals and stories of everyday people and the choices they make to manage their money.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 0.5
Meets: 5 periods weekly

6151: Personal Law I

Students develop an understanding of the law as it relates to day-to-day activities. They explore criminal law, juvenile law, individual rights law, forensic science. Students apply their learning through an introduction to mock trials.

Prerequisite(s): None
Grade(s): 10, 11, 12
Credit: 0.5
Meets: 5 periods weekly, one semester

6161: Personal Law II

Students examine and analyze criminal law and civil law, expanding their understanding of mock trial procedures utilized in courtroom simulations.

Prerequisite(s): None
Grade(s): 10, 11, 12
Credit: 0.5
Meets: 5 periods weekly, one semester

6171: Retail and Fashion Merchandising

Students will develop an understanding of the retail and fashion industries as a major segment of the global economy, including the history and growth of the industry. Students are introduced to core marketing activities including market segmentation, market research, consumer behavior, product strategy, pricing, promotion and distribution. Students will be able to analyze fashion trends and directions of apparel and be familiar with current designers and manufacturers. Students will study fashion classification, garment detail and construction, sources of fashion information and the modern history of fashion. This course introduces the various principles and methods of advertising and promotion used by producers, manufacturers, designers and retailers in the fashion industry. Students will analyze how marketing objectives and strategies influence advertising and other forms of promotion. Guest speakers and field trips will enhance the learning process.

Prerequisite(s): None

Grade(s): 10, 11, 12
Credit: 0.5
Meets: 5 periods weekly, one semester

6181: Sports and Entertainment Management

The American market place can be an economic jungle. You need to know the rules to survive and become successful. Sports, Entertainment, and Business Management is designed to help you develop the skills and the confidence to manage a business successfully. The everyday operations of athletic teams and stadium management, player contracts, agent representation, and athletic events require management skills.
The production of movies, plays, and commercials involves strategies designed for each media. Making financial decisions and managing risks involve knowing how to use insurance, financial institutions, and the stock market to keep a business competitive. These management skills will enable your business to thrive even in the jungle!

Prerequisite (s): None
Grade(s): 9, 10, 11, 12
Credit: 0.5
Meets: 5 periods weekly, one semester

6191: International Business

The course will provide students with an understanding of how and why businesses choose to expand their operations into other countries. This course exposes students to the unique challenges facing firms doing business internationally and to the potential opportunities and markets that are lost to firms that choose not to do business in the global marketplace. Emphasis is on the effect of sociocultural, demographic, economic, technological, and political-legal factors in the foreign trade environment.

Building on concepts introduced in earlier Business Education coursework, International Business will broaden student understanding of how businesses operate and how they grow and thrive in our dynamic world economy.

Information technology will be a learning tool that students will need to use. Students will develop transferable skills through their experience with word processing, journals, flow charts, and telecommunication tools, as would be expected in an accounting environment. Information and communication technologies will be integrated into the curriculum in a way that mirrors the dynamic environment in which international business is conducted today, creating an authentic and relevant learning environment. Guest speakers and field trips will enhance the learning process.

Prerequisite(s): Successfully completed at least one other Business course.
Grade(s): 10, 11, 12
Credit: 0.5
Meets: 5 periods weekly, one semester

6216: College Real Estate (C)

The first step in becoming a licensed real estate salesperson in NYS is to pass a 75-hour NYS approved real estate salesperson course. The *College Real Estate* course would meet this requirement for students interested in pursuing this credential. Students participating in this course would have to earn a 70 or higher in order to meet the requirement set by the state. Once they have passed this course and turned 18, they would be eligible to sit for the NYS Real Estate Salesperson licensing examination.

The LIU HSS Program offers students the opportunity to earn three college credits for this class as it aligns with their *Introduction to Real Estate* course.

The benefits of this course are completing the first step in becoming a licensed real estate salesperson in NYS, gaining three college credits through the Long Island University High School Scholars (LIU HSS) Program, and fulfilling the mission of CTE. Teacher, Michael Goldin is a licensed real estate salesperson and certified instructor.

Prerequisite(s): None
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

6316: Accounting (C)

College Accounting is a first-year college accounting course. Topics covered include sole proprietorships, partnerships, corporations, financial statements (balance sheets, income statements, cash flow statements) analysis, interpretation, and current value accounting. This course may be taken for college credit through C.W. Post University.

Prerequisite(s): None
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

6326: Business Law (C)

Business Law emphasizes text and case study of laws applicable to business, including the organization of courts and court procedures, the law of contracts, sales, agency, negotiable instruments, partnerships, and personal and real property. Students also gain experience in rendering decisions in cases. Students apply their learning through mock trials. This course may be taken for college credit through C.W. Post University.

Prerequisite(s): None
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

6416: Virtual Enterprise (C)

This course is designed around a virtual business environment, allowing students to experience all facets of employment in an actual business setting while remaining in the classroom. Students enrolled in this course will work collaboratively to develop an original business concept and become immersed in every aspect of business management, including human resources, accounting, product development, production, distribution, marketing and sales. During the daily classroom simulation, students will engage in trade with other virtual firms around the world, enabling them to understand how employees, workgroup teams, and departments interact and work together toward the achievement of established company goals. Students will be exposed to a rigorous curriculum, richly enhanced by hands-on applications, and covering a wide range of academic skills. The skills and experiences gleaned from this course may better prepare students for advancement to a post-secondary institution and a career in business. Students will also create and run a trade show booth at the Virtual Enterprise International Trade Show in New York City. To learn more about the

program, visit **www.veinternational.org.** This course may be taken for college credit through C.W. Post University.

Prerequisite(s): Successfully completed at least one other Business course.
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

English Language Arts

1111: English I

English I is the first year of a four-year sequence in English required of all students for high school graduation. Based on the theme Self and Others and on a variety of thinking skills, English I presents a wide range of activities designed to extend mastery in literature and reading, writing, grammar, word study, discussion, and study/research skills. Literary works studied include To Kill a Mockingbird, Old Man and the Sea, The Glass Menagerie, Romeo and Juliet, and a wide selection of short stories, essays and poetry.

Prerequisite(s): None
Grade(s): 9
Credit: 1
Meets: 5 periods weekly

1211: English II

Students continue to develop and refine their language skills in English II. In writing, they develop a sense of form and methods of discourse for descriptive, narrative and expository paragraphs and essays using the writing process. Gaining an awareness of sentence variety, transitions, and topic sentences, students increase their proficiency in editing and proofreading. In literature students focus on the theme Individual and Society as they read novels, short stories, drama, and poetry. Literary works include The Catcher in the Rye, Lord of the Flies, and Julius Caesar. Students expand their understanding of the nature and functions of language, develop listening habits, enlarge their vocabularies, and enhance their study skills.

Prerequisite(s): None
Grade(s): 10
Credit: 1
Meets: 5 periods weekly

1217: Advanced Placement Seminar / English II

The course is designed to teach the skills necessary to understand and produce evidence-based arguments in a variety of methods. Students investigate real-world issues from multiple perspectives, gathering and analyzing information from various sources in order to develop credible and valid evidence-based arguments. The course uses an interdisciplinary approach to explore complex questions using diverse perspectives and points of view. The skills practiced in the course will be assessed throughout by such things as: individual research presentations, team research presentations, and college level reading and writing skills examinations. 10th Grade Students Only (1 English Credit) - Must be co-registered with College Prep Writing.

Prerequisite(s): None
Grade(s): 10
Credit: 1
Meets: 5 periods weekly

1211A/1217A: College Prep Writing (Co-registered with English II and AP Seminar)

The goal of this course is to provide superior composition instruction for Jericho students - instruction that exceeds the minimal standards set by the State and prepares students for the writing demands of the most selective colleges. In this course, students write and present research reports, feature articles and

thesis/support papers on a variety of topics related to all school subjects. Students practice such genres of writing argument, description and narration-genres important to college writing as well as to the new English and Social Studies Regents and AP Examinations. Students learn effective prewriting and revision strategies and employ an increasingly apt vocabulary to write insightfully to a variety of audiences for a variety of purposes.

Prerequisite(s): None
Grade(s): 10
Credit: 0.5
Meets: 2.5 periods weekly

1311: English III

The points of view and themes of American writers comprise the major elements of this eleventh-grade English course. Specific literary works include: The Scarlet Letter, The Adventures of Huckleberry Finn, The Great Gatsby, The Crucible, and Death of a Salesman. In addition, students read the English tragedy Macbeth. As each piece of literature is read, its historical, psychological, and philosophical backgrounds are presented and discussed. Speaking and listening are important aspects of this learning process. The analytical and argumentative essays as well as narration and description are emphasized in students' writing. SAT preparation is included in the study of vocabulary, grammar and reading comprehension.
Students taking this course complete the English Regents.

Prerequisite(s): None
Grade(s): 11
Credit: 1
Meets: 5 periods weekly

1317: Advanced Placement Language and Composition

Students gain an understanding of the principles of effective writing. They read and analyze fiction, drama and various prose texts for use as models of effective writing styles. They complete a variety of writing assignments employing different styles for various purposes. They aim for rhetorical effects through diction and sentence patterns. AP Comp is designed for students with a high interest in reading, analysis, and writing. Students electing to take this course as juniors should have demonstrated an outstanding level of achievement in writing and in reading literature. The course requires a summer reading and writing assignment as well as independent coursework during the year. Students taking this course complete the English Regents. All students take the AP Exam at the conclusion of the course.

Prerequisite(s): None
Grade(s): 11
Credit: 1
Meets: 5 periods weekly

1411: English IV

English IV is the required full-year course of fourth-year English. Students trace the development of the hero through a survey of literature from the Greek Age to the Anglo- Saxon Period to the Modern Era. Literary works, such as Oedipus Rex, Beowulf, Hamlet, and The Stranger, are included as well as poetry. In addition, students research atopic of their own choice and use the resources of the library to locate information. In mastering the format of the research paper, students focus on unity and coherence in their writing and prepare for future academic work.

Prerequisite(s): None

Grade(s): 12
Credit: 1
Meets: 5 periods weekly

1417: Advanced Placement Literature and Composition (C)

In this full-year college-level course, students are engaged in an intensive study of literature as they read short stories, novels, plays and poetry. A sampling of readings includes Oedipus, Hamlet, Jane Eyre, Hedda Gabler, Heart of Darkness, The Stranger, The Sun Also Rises, short stories by J.D. Salinger and James Joyce, and poetry from Wordsworth to T.S. Eliot. Students write frequently and assignments are varied. Through conferences with the teacher, students develop recognition of their strengths and strategies to improve their writing. There is a summer reading and writing assignment. All students take the Advanced Placement Examination at the conclusion of the course. Seniors may take this course for college credit through Stony Brook University.

Prerequisite(s): None
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

1426: Ways of Seeing I (C)

Ways of Seeing is a humanities-based course for 11th and 12th graders will explore how writers and artists can shape the course of history. This course will analyze literary and visual texts (art, architecture, film, graphic novels, and media) and their impact on history, as well as current society. This blended learning classroom combines class discussions, field trips, guest speakers, online resources, and real world experiences to deepen student understanding of the curriculum. Assessments will come in the forms of analytical and argumentative essays, as well as multi- media presentations, film documentaries, hands-on activities, personal responses, and independent research projects. This elective course will offer 11th and 12th grade students an opportunity to choose a topic of study and develop an inquiry project culminating in a term paper that incorporates digital research. Seniors may take this course for college credit through St. John's University.

Prerequisite(s): None
Grade(s): 11, 12
Credit: 0.5
Meets: 5 periods weekly

1436: Ways of Seeing II (C)

This is a humanities-based course for 11th and 12th graders that will explore how writers and artists can shape the course of history. This course will analyze literary and visual tests (art, architecture, film, graphic novels, and media) and their impact on history, as well as current society. This blended learning classroom combines class discussions, field trips, guest speakers, online resources, and real world experiences to deepen student understanding of the curriculum. Assessments will come in the forms of analytical and argumentative essays, as well as multimedia presentations, film documentaries, hands-on activities, personal responses, and independent research projects. This elective course will offer the 11th and 12th grade students an opportunity to choose a topic of study and develop an inquiry project culminating in a term paper that incorporates digital research. Seniors may take this course for college credit through St. John's University.

Prerequisite(s): None
Grade(s): 11, 12

Credit: 0.5
Meets: 5 periods weekly

1516: Creative Writing (C)

In this collaborative course with Molloy College, students will develop creativity in such forms as short story, informal essay, and original verse. Using new and traditional media, students will read and analyze texts, and produce their own works for personal enjoyment, publication and contest entry. Seniors for whom this course is their fourth year English requirement will complete a research project. A variety of writing rubrics will differentiate criteria for students in different grade levels. This course is open to juniors and sophomores but only for high school credit. Seniors may take this course for college credit through Molloy College.

Prerequisite(s): None
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

1526: Film Study (C)

Students view films ranging from the earliest to the most current experiment in the medium. With visual literacy as the goal of the course, students examine film as literature and ultimately learn how to read a film. Students are responsible for various projects and papers throughout the course. Juniors and seniors may take this course for college credit through Stony Brook University.

Prerequisite(s): None
Grade(s): 11, 12
Credit: 0.5
Meets: 5 periods weekly

1531: Introduction to Public Speaking

This half-year elective course is designed to equip freshmen and sophomore students with the speech and communication tools that will be useful for their entire high school career and beyond. Students will improve their ability to speak effectively to their peers and larger audiences, find solutions for stage-fright or speech anxiety, explore their "voice," learn how to use technology to enrich their presentations, perform monologues and skits, enhance their interview skills, analyze and deliver speeches, and understand the interplay between verbal mechanics (vocal variety, volume, speed, enunciation, and pronunciation) and body language (poise, posture, body language, eye contact, facial expressions).

Prerequisite(s): None
Grade(s): 9, 10
Credit: 0.5
Meets: 5 periods weekly

1536: Public Speaking (C)

Public Speaking II is a half-year course that introduces students to the basic elements of effective communication. By developing a theoretical foundation in rhetoric, engaging in playful improvisation exercises, and analyzing, writing, and delivering speeches, students will obtain the practical skills that are necessary for successful public speaking in their daily and professional lives. Juniors and seniors may take this course for college credit through St. John’s University.

Prerequisite(s): None
Grade(s): 11 & 12
Credit: 0.5
Meets: 5 periods weekly

1551: Dramatic Arts

Students will acquire a general background of theatre in this interactive course. They will have the opportunity to study a variety of performance pieces ranging from classical to contemporary theatre. Students will explore the various aspects of the world of theatre, including topics such as the history of drama and theatre in Western civilization, acting, scenic design, stage lighting, costume, props, make-up, theatre organization and management, and theatrical critique.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

1611: New Media Communications/Journalism

New Media Communications/Journalism will teach students the skills necessary for communication in the digital age. This course will use the production of the new online newspaper as the vehicle to teach students skills of traditional literacy as well as those of: information literacy, media literacy, videography, digital audio recording and editing, web design, and digital publication. Students will learn the skills of reporting, writing, and editing including: interviewing skills, research methods, copy writing and editing, and news broadcasting. In addition to these real world skills, students will consider the ethics and business of producing news with particular emphasis on the issues presented when doing so on the Internet. The students in the course will be responsible for planning and producing the new JerEcho —a most important record of life at Jericho High School.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

1621: New Media Communications II

In New Media Communications II (NMC II), students will further their exploration of the role of journalists in society. They will produce longer, more in-depth news features and documentaries employing each of the four types of media commonly used by today's on-line journalists: article writing, photojournalism, video broadcasting, and audio podcasting. Students in NMC II are expected to take leadership roles in producing our school's on-line news service and in working closely with the members of our school's JerEcho club to produce the highest quality content possible for publication on our website.

Prerequisite(s): New Media Communications
Grade(s): 10, 11, 12
Credit: 1
Meets: 5 periods weekly

1636: New Media Communications III (C)

In New Media Communications III (NMC III), students will strengthen their communication and leadership skills by focusing their learning and efforts on the publication of the *JerEcho* domain. NMC III students will learn web design and be responsible for publishing the Wordpress site. In addition, they will coordinate promotion and distribution efforts including social media and traditional publicity outlets. Students will evaluate current ways information is shared in our community and work to solve problems that interfere with how students stay informed of school news. NMC III students will work to increase outreach to student organizations, sports, and clubs in order to increase the *JerEcho's* mission of being the journal of student life at Jericho High School.

Prerequisite(s): New Media Communications I & II
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

1646: New Media Communications IV (C)

In New Media Communications IV (NMC IV), students will explore in-depth investigative and documentary news while continuing to grow as leaders in high school journalism. Students will conduct research to learn about the process of investigative journalism before beginning their own projects. NMC IV students will continue to lead our journalism program as editors, web designers, social media coordinators, and public relations specialists. They will take on the responsibilities for managing all aspects of the JerEcho's publication and mentor younger members to gain the necessary skills to do the same the following year.

Prerequisite(s): New Media Communications III
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

1651: Sports Journalism

Many of Jericho High School's students are avid sports fans and dedicated athletes who love the game and want more opportunities to report on it. The Sports Journalism course will provide students with the training and experiences they need to become highly skilled sports writers, broadcasters, podcasters, announcers, social media coordinators, and bloggers/vloggers. Students in Sports Journalism will explore the fullness of the genre, and produce reports that cover all aspects of high school, collegiate, and professional sports. They will produce projects such as: athlete profiles, game analyses, season predictions and reviews, and event broadcasts. Students will have opportunities to announce at games, photograph and video record sporting events, regularly update and maintain sports-centered social media accounts, and create their own sports blogs/vlogs. Their work will be published on the *JerEcho* and be submitted to the *Syosset-Jericho Tribune*. Sports Journalism students will benefit from the real-world experiences covering Jericho High School sports, and our athletes and athletic program will benefit from all the coverage. The course is destined to be a win for all involved.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

1711: New Media Broadcasting

This course will be a study of the principles of writing news and information for Radio, TV, Podcasts, and Livestreaming. Basics of television news and broadcast style will be discussed and practiced. Emphasis is placed on the fundamentals of television studio production. This course provides a bridge between production and journalism. It emphasizes the importance of understanding technical processes as they apply to creative decisions. Students will learn how video cameras make pictures, how light and lighting instruments affect aesthetics, how edit systems function, how audio signals are created and how to plan and design facilities. Students gain practical experience in media news gathering, working as part of a team to produce news reports and complete newscasts.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

NEW COURSE

1446: The Pursuit of Happiness- Exploring Mindfulness, Writing, and Literature (C)

In this senior-level full-year English course, students will explore and understand happiness through the lenses of mindfulness practices, diverse literature, film, music, and expressive writing activities. Through a study of literature in a book club setting, this course aims to equip high school seniors with essential skills to become better thinkers and problem solvers and to cultivate personal well-being, resilience, and self-reflection. The blended learning classroom combines journaling, vision boards, class discussions, field trips, guest speakers, online resources, and real-world experiences to deepen student understanding of the curriculum. Assessments will come in the forms of analytical and argumentative writing, including the personal statement for the college essay, presentations, hands-on activities, personal responses and journals, independent research, and participation and practice of mindful activities. This core course will allow students an opportunity to choose a topic of study related to mindfulness and develop an inquiry project that culminates in a “last lecture” presentation that incorporates digital research. Seniors may take this course for college credit through St. John’s University.

Prerequisite(s): None
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

Family & Consumer Science

6511: Gourmet Basics

Students will explore basic cooking and baking skills, as well as the relationship between food preparation and nutrition. In the foods laboratory, students work in small groups to develop planning, preparing, and evaluation skills. Product packaging, labeling, and advertising, catering projects, and garnishing will also be included.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 0.5
Meets: 5 periods weekly

6521: International Foods

Students will learn about food and culture from around the world. Food, nutrition, culture and meal taking customs will be discussed. Students will work in the kitchen labs on a regular basis, preparing dishes and evaluating the outcome…by tasting the dishes! Students will research and present information about healthy eating and nutrition around the world.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 0.5
Meets: 5 periods weekly

Fine Arts

7111: Studio Art

This is a comprehensive foundation course that is suitable for all students with varying abilities who are interested in hands-on creative experiences. Students will have the opportunity to explore not only a variety of 2-dimensional materials but will also experiment with a variety of 3-dimensional materials. Examples are kiln fired clay, wire, wood, paper mache and plaster. With a focus on Elements of Art and the Principles of Design in accordance with the New York State Visual Art Standards, this full year course will satisfy a broad spectrum of student interest. This course fulfills the art/music requirement for graduation.

Prerequisite(s): None
Grade(s): 9, 10, 1, 12
Credit: 1
Meets: 5 periods weekly

7121: Drawing/Painting

The concentration in this course is to develop individual expression, personal style and artistic vision through drawing and painting in traditional and non-traditional ways. Students will have an opportunity to work at an easel in a studio setting, create in plein air and engage in printmaking with a professional press. The use of a variety of drawing and painting materials will be explored for themes such as life drawing, landscape and still life. (Formerly Drawing and Painting I and II.)

Prerequisite(s): Studio Art or Media Arts or Photo I/II
Grade(s): 10, 11, 12
Credit: 1
Meets: 5 periods weekly

7131A: Ceramics & Sculpture

This alternate day course is designed to offer students, of all levels, an opportunity to explore three dimensional materials and techniques in art. Each student will have the opportunity to create functional ceramics pieces, as well as representational and abstract sculpture. Students will have the opportunity to explore: clay, plaster, resin, and found materials. The development of each student's individual artistic expression will be emphasized through class discussions and self-reflection. **This class <u>does not</u> satisfy the art/music graduation requirement.**

Prerequisite(s): none
Grade(s): 10, 11, 12
Credit: 1
Meets: 2.5 periods weekly (every other day)

7167: Advanced Placement Studio Art

This course will prepare students for an AP Studio Art portfolio that meets the requirements for AP college credit. The portfolio will consist of a minimum of 15 digital images that include works of art and design and process documentation. Students will also be required to create typed responses to prompts, providing

information about the questions that guided their investigation and how they practiced, experimented, and revised, guided by their questions. This is a rigorous program that will challenge students to push themselves creatively and conceptually. Students considering this course must fulfill prerequisites as listed below.

Prerequisite(s): Art Seminar/Advanced Art Studio
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

7231: Photography I

A beginning course of photography which is highlighted by instruction in the use of a 35 mm. camera and the development and printing of photographs you have taken. The class will also include a variety of photo printing techniques and field trips to interesting photo opportunity sites on Long Island or in New York City. Each student will participate in activities which are centered around the computer and Photoshop software.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 0.5
Meets: 5 periods weekly (half year)

7241: Photography II

This course will provide the student with further exploration of new and advanced techniques in enlarging (double exposure photographs), color printing, and coloring black & white photos. They will experiment with toning, watercolors, pen & ink, along with special mounting techniques. The student will also be introduced to the digital camera and its unique capabilities with the computer and the software package Photoshop. This course will enable the student to broaden his/her art portfolio.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 0.5
Meets: 5 periods weekly (half year)

7251: Photography III (Digital)

This course would be a follow-up to the basic photography courses. Students will work in digital format only, learning the ins and outs of a digital camera and the image enhancement with Photoshop. This course is a must for students interested in taking AP Photo. The course will include several photo assignments that may be used for their AP Portfolio. Students will also be able to print large digital images suitable for framing.

Prerequisite(s): Photo I, Photo II or Media Arts or Studio Art
Grade(s): 10, 11, 12
Credit: 1
Meets: 5 periods weekly

7256: SJU Photography (C)

This course develops the serious art or photography student into a strong specialist with an excellent background for college or the photography industry. The student will learn special Photoshop skills to customize their art work and college portfolio. The course will help the advanced student with their portfolio

and any slides or CDs that they may need to make for college. This course may be taken for college credit through St. John's University.

Prerequisite(s): Photo III (Digital Photo) or Drawing/Painting
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

7267: Advanced Placement 2D Design Portfolio: Photography (AP Photo)

The course is designed to teach the skills necessary to understand and produce evidence-based arguments in a variety of methods. Students investigate real-world issues from multiple perspectives, gathering and analyzing information from various sources in order to develop credible and valid evidence-based arguments. The course uses an interdisciplinary approach to explore complex questions using diverse perspectives and points of view. The skills practiced in the course will be assessed throughout by such things as: individual research presentations, team research presentations, and college level reading and writing skills examinations.

Prerequisite(s): Photo III (Digital Photo) or Drawing/Painting
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

7316: Creative Concepts (C) - *formerly known as Art Seminar/Advanced Art Studio*

This course will advance the individual student's skills with an emphasis on developing conceptual threads, composition and execution of ideas. Students will demonstrate technique, ideation and problem-solving through a multitude of media which may include a variety of paints, drawing and printmaking materials, and digital/computer images. Although the focus of this course will be to prepare students to participate in the Advanced Placement Studio Art portfolio, the class is not limited to only students interested in achieving this goal. This course may be taken for college credit through St. John's University.

Prerequisite(s): Studio Art or Drawing/Painting Studio
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

7411: Media Arts

Arts is a foundation level course that incorporates the New York State Standards for art education. This course will give each student an opportunity to explore the elements and principles of design through the use of electronic media. Students will utilize graphic programs, scanners, digital cameras and experiment with a wide variety of art materials. Within the Media Arts curriculum, students will develop aesthetic sensitivity, practical experiences, technical terminology and a multicultural and historical perspective on the Media Arts. Units in art history, computer graphics, film history, animation and photography will be explored throughout the year. Students successfully completing this course for one unit of credit satisfy the Art graduation requirement.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

7421: Advanced Media Arts II

This course will build upon computer techniques acquired in the foundation level Media Arts I. Through a series of advanced level Photoshop assignments, students will begin to create digital works of art for the Breadth section of the AP Media Portfolio. Students will work with a variety of mixed media materials including computers, digital cameras and other electronic equipment. Students will be encouraged to experiment with various techniques combining traditional and non- traditional materials.

Prerequisite(s): Media Arts
Grade(s): 10, 11, 12
Credit: 1
Meets: 5 periods weekly

7451: Graphic Design

This course is designed to familiarize students with industry standard graphic design software including Adobe Illustrator, Adobe Photoshop, Adobe InDesign, Adobe Lightroom, and more. Students will have the opportunity to create digital works of art and design ranging from digital illustration to basic logos, advertisements, and posters. Students will develop design skills by creating real-world inspired projects, participating in multiple in-class practice assignments as well as guided-learning lessons, and engaging in thoughtful and purposeful critiques. Students will also work to make meaningful artistic choices and be able to verbally explain their decisions by "pitching" their work. This class does not satisfy the Art graduation requirement.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

Mathematics

3111: Algebra I

This is the first course in the New York State Mathematics sequence. This course will assist students in developing skills and processes to be applied using a variety of techniques to successfully solve problems in a variety of settings. Problem situations may result in all types of linear equations in one variable, quadratic functions with integral coefficients and roots as well as absolute value and exponential functions. Students will solve problems that require right triangle trigonometry. Elementary probability theory will be used to determine the probability of independent, dependent and mutually exclusive events. The graphing calculator will be used as a tool to enhance instruction. The New York State Algebra I Regents exam will be administered in June.

Prerequisite(s): Math 8
Grade(s): 9
Credit: 1
Meets: 5 periods weekly

3211: Geometry

This is the second course in the New York State Mathematics sequence. Students will have the opportunity to make conjectures about geometric situations and prove in a variety of ways, both formal and informal, that their conclusion follows logically from their hypothesis. Congruence and similarity of triangles will be established using appropriate theorems. Transformations including rotations, reflections, translations, and glide reflections and coordinate geometry will be used to establish and verify geometric relationships. A major emphasis of this course is to allow students to investigate geometric situations. It is intended that students will use the traditional tools of compass and straightedge as well as dynamic geometry software that models these tools. Geometry is meant to lead students to an understanding that reasoning and proof are fundamental aspects of mathematics and something that sets it apart from the other sciences. The New York State Geometry Regents exam will be administered in June.

Prerequisite: Algebra 1
Grade(s): 9, 10
Credit: 1
Meets: 5 periods weekly

3311: Algebra II

This is the third course in the New York State Mathematics sequence. Students will build on their work with linear, quadratic, and exponential functions, and extend their repertoire of functions to include polynomial, rational and radical functions. Students will hone their abilities to model situations and solve equations, including quadratic equations, exponential equations and logarithmic equations. The Algebra 2 Regents exam will be administered in June.

Prerequisite(s): Geometry
Grade(s): 9, 10, 11
Credit: 1
Meets: 5 periods weekly

3410: Precalculus Research

This course will include topics in our current Precalculus syllabus, with students delving deeper into mathematical concepts. Additional topics such as three dimensional geometry, vectors, mathematical induction, and fields will be included. The TI89 graphing calculator will be used as a tool to enhance instruction. A research paper is required.

Prerequisite(s): Algebra II (and a desire to explore research in the area of mathematics)
Grade(s): 10, 11
Credit: 1
Meets: 5 periods weekly

3411: Precalculus

This course will focus on functions and their transformations including polynomial, rational, exponential, logarithmic, and trigonometric. Trigonometric identities, rates of change, limits, and sequences and series will be studied. This course (or Precalculus Research) is required for students in grade 10 or 11 who intend to enroll in Advanced Placement Calculus AB or BC. The TI89 graphing calculator will be used as a tool to enhance instruction.

Prerequisite(s): Algebra II
Grade(s): 10, 11
Credit: 1
Meets: 5 periods weekly

3416: Precalculus (C)

This course will build on the intermediate and advanced algebraic skills of the students, having students apply these skills with a higher level of critical thinking. This course will focus on functions and their transformations, limits and derivatives. The TI89 graphing calculator will be used as a tool to enhance instruction. This course may be taken for college credit through Molloy College.

Prerequisite(s): Algebra II
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

3431: Precalculus BC (Alternate day, full year course)

This course is designed for juniors who are currently taking Algebra II have a desire to take AP Calculus AB in their senior year. This course is condensed to include only those topics that are prerequisites for AP Calculus AB. These topics include polynomial, rational, exponential, logarithmic, and trigonometric functions and their transformations. An introduction to calculus is embedded in the course which includes a study of limits, derivatives, Power Rule, Product Rule, Quotient Rule, and Chain Rule. The TI89 graphing calculator will be used as a tool to enhance instruction.

Co-requisite: Algebra II (and a desire to take AP Calc BC as a junior)
Grade: 10
Credit: 0.5
Meets: 2.5 periods weekly, full year

3481: Concepts in Mathematics

Arithmetic and algebra will be integrated throughout the semester. Emphasis will be placed on fundamental operations of integers and rational numbers, ratio and proportion, percent, factoring, linear and fractional equations, exponents, radicals, quadratic equations and right triangles. Mathematical functions will be represented numerically, algebraically, verbally and graphically. Formal symbolic logic, arguments and methods of proof will be explored. This course will prepare students for an entrance level mathematics test for first semester college students.

Prerequisite(s): Algebra II or Intermediate Algebra
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

3516: Calculus (C)

This course affords students the opportunity to investigate calculus concepts through applications related to a variety of fields including business, science, engineering, and technology. Topics such as: limits and continuity, derivatives, maxima and minima, antiderivatives, definite integral, Fundamental Theorem of Calculus, and techniques for integration will be studied. The TI89 graphing calculator will be used as a tool to enhance instruction. This course may be taken for college credit through Molloy College.

Prerequisite(s): Precalculus
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

3517: Advanced Placement Calculus AB

In this course, students study topics from analytic geometry and calculus. They study lines, conic sections, limits, derivatives, related rates, maxima and minima, curve sketching, slope fields, Mean Value Theorem, differentiation of trigonometric, exponential, and logarithmic functions, differential equations, area under a curve, volumes of revolution and volumes of cross sections, integration, and differential equations. The TI89 graphing calculator will be used as a tool to enhance instruction. Students are required to take the Advanced Placement Examination in Calculus (AB level) in May.

Prerequisite(s): Precalculus
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

3527: Advanced Placement Calculus BC

This course consists of a full academic year of work in calculus. In addition to the topics studied in Calculus AB, the BC course includes additional topics such as infinite series, logistic growth, vector functions, L'Hospital Rule, polar coordinates, improper integrals, partial fractions and arc length. The TI89 graphing calculator will be used as a tool to enhance instruction. Students are required to take the Advanced Placement Examination (BC level) in May. The AP exam will have both a BC score and an AB sub-score.

Prerequisite(s): Precalculus or Precalculus Research
Grade(s): 11, 12
Credit: 1

Meets: 7 ½ periods weekly (double period every other day)

3531: Multivariable Calculus

Students will learn the calculus of multivariable functions and vector fields. Before they can study the calculus of multiple dimensions, students will need to learn some concepts in Linear Algebra, such as: linear systems, matrices, matrix multiplication, properties of matrix operations, matrix transformations, solutions of linear systems of equations, the inverse matrix, cross product, dot product, Gauss- Jordan Elimination, orthogonal matrices, and determinants. Topics in the calculus component of the course will include: multivariable functions and their derivatives, partial derivatives, vector fields, gradient, divergence, curl, double and triple integrals, parameterized curves, flows, line integrals, Green's theorem, and flux integrals. Additionally, students will study other topics from multivariable calculus, including: Stoke's Theorem and the Divergence Theorem. The TI89 graphing calculator will be used as a tool to enhance instruction.

Prerequisite(s): AP Calculus BC (Score of at least 3 on the Advanced Placement Exam)
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

3611: Exploratory Programming

This course is an introductory course to computer programming. The basic concepts of how a computer works will be taught. Students will create websites by writing HTML using notepad ++. Java applets will be embedded into HTML documents and executed using a web browser. Students will create interactive programs and games using Python, while learning about functions, loops, classes and a number of different aspects of coding. Finch robots will be used as a way to help students bring their codes and programs to life.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

3637: Advanced Placement Computer Science Principles

AP Computer Science Principles is an introductory college-level computing course. Students cultivate their understanding of computer science through working with data, collaborating to solve problems, and developing computer programs as they explore concepts like creativity, abstraction, data and information, algorithms, programming, the internet, and the global impact of computing.

Prerequisite(s): Strong foundation in Algebra
Grade(s): 10, 11, 12
Credit: 1
Meets: 5 periods weekly

3647: Advanced Placement Computer Science A

This is a college level course in programming using the Java language. The course emphasizes object-oriented programming methodology with a concentration on problem-solving and algorithm development. This includes important concepts such as inheritance and data structures. Students will complete hands-on structured labs throughout the curriculum as required by the College Board.

Prerequisite(s): Algebra II

Grade(s): 10, 11, 12
Credit: 1
Meets: 5 periods weekly

3621: Advanced Computer Programming

The first semester of the course will have a major focus on abstract data types and data structures. These include Linked lists (singly, doubly, circular), Stacks, Queues, Priority queues, Sets, Maps, Trees, Heaps and Hash Tables. The following additional Java topics will be taught: Big-Oh notation, Worst-case and Average-case time, space analysis, Quick Sort and Heapsort. The second semester will include the basics of the Python Language. Students will learn to read as well as write simple Python code.

Prerequisite(s): Advanced Placement Computer Science A
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

3717: Advanced Placement Statistics

This course is designed to be comparable to a typical non-calculus-based-technology introductory statistics course taught in a college/university. The course emphasizes (1) exploring data, (2) planning a study, (3) anticipating patterns and (4) statistical inference. The TI-84 graphing calculator will be the chief tool for data analysis. Students are required to take the Advanced Placement Examination in Statistics in May.

Prerequisite(s): Geometry
Grade(s): 10, 11, 12
Credit: 1
Meets: 5 periods weekly

7511: Intro to Music Theory & Composition

Students will explore music through guided and student-proposed composition projects using notation and digital audio workstation programs and software. Additionally, students will study and explore perspectives of music and its role in society through readings, discussions, and projects. Students may be asked to be peer mentors and / or discussion leaders. This course may be taken in grades 9, 10, 11, or 12.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

7566: Music Theory (C)

This course follows the topics of the Advanced Placement curriculum closely, but students will focus additionally on expressing their understanding of harmony and voice-leading through composition. Students will gain experience using notation and digital audio workstation programs and software. This course is offered for college credit through St. John's University for 3 or 6 credits to students ages 16 and older at the time of the course.

Prerequisite(s): Intro to Music Theory or Department Approval
Grade(s): 10, 11, 12
Credit: 1
Meets: 5 periods weekly

7567: A.P. Music Theory

This course is available to all students, regardless of musical background, and focuses on developing an understanding of harmony and voice-leading principles through: sight singing; score analysis; part-writing; and aural skills. This AP course is available to students in grades 10, 11, and 12 (no prerequisite courses required).

Prerequisite(s): Intro to Music Theory or Department Approval
Grade(s): 10, 11, 12
Credit: 1
Meets: 5 periods weekly

7571: Advanced Harmony & Songwriting

Advanced Harmony and Composition is a course offered to students who have completed Music Theory II / Advanced Placement. This project oriented course builds upon the skills developed in our Music Theory I and Music Theory II / Advanced Placement courses, and further explores structures for organizing musical compositions across a wide range of genres.

Prerequisite(s): AP Music Theory or Department Approval
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

7611/7621: Orchestra 9-10 / 11-12

As members of the orchestra students who play string instruments study and perform mature orchestra literature. They participate in concerts, assemblies, and musicals. *Course fulfills Art/Music requirement for graduation.

Prerequisite(s): Sufficient previous training
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

7711: Concert Band

Members of the concert band perform music of medium difficulty. They perform at concerts, football games, and pep rallies. *Course fulfills Art/Music requirement for graduation.

Prerequisite(s): Some instrumental training
Grade(s): 9, 10
Credit: 1
Meets: 5 periods weekly

7721: Symphonic Band

Members of the band study and perform music of symphonic caliber. They provide the music for concerts, football games, and pep rallies. *Course fulfills Art/Music requirement for graduation.

Prerequisite(s): Sufficient instrument training
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

7731: Jazz Ensemble

Jazz ensemble is a class for instrumentalists to perform music rooted in jazz and related commercial styles. Corequisite: Concurrent enrollment in one of JHS's large ensembles (Concert Band, Symphonic Band, Orchestra 9-10, Orchestra 11-12, or Chorus) and departmental approval is required.

Prerequisite: Department Approval
Corequisite(s): Active enrollment in a music ensemble
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: weekly after school hours

7811: Chorus

The chorus provides a vocal experience for students. They sing music of varying styles, languages, and difficulty. *Course fulfills Art/Music requirement for graduation.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

9411: Dance I

This course explores the basic techniques of various styles of dance. Throughout the year we will be studying dance using creative expression and technical achievement. We will be exploring jazz, modern/contemporary, hip hop, and composition through various exercises and floor work. The movement portion of the class consists of a compilation of warm ups, center floor exercises including balancing skills, body alignment, and stretches, as well as across the floor exercises. Students learn the beginning skills of choreography through guided group projects. Students will work with partners and start providing dance feedback using dance language. ***Course fulfills Art/Music requirement for graduation. Students seeking to take Dance I as their PE course must enroll in the half credit, alternate day, version of the course listed in the Physical Education section of the course catalog (9411A).**

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 1.0
Meets: 5 periods weekly

Physical Education

9111A: Team Sports and Fitness

Physical Education is based upon the acquisition of knowledge and skills as a foundation for engaging in physical activity. However, the mere acquisition of knowledge and skills is not enough. The mission of this physical education course would be to enable all students to actively participate in sports that include teamwork. While, all students work to sustain regular, lifelong physical activity as a foundation for a healthy, productive, and fulfilling life. Our vision is to provide all students with a sequential program based on physical activities undertaken in an active, caring, supportive, meaningful and non-threatening atmosphere in which every student is challenged and successful while learning how to work as a team for the common goal.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 1.0
Meets: 2.5 periods weekly

This course may be taken for varsity release

Activities may include:

Team Sports	Fitness Concepts	Cooperative Games
Basketball	Aerobics	Project Adventure
Diamond Sports	Cardio Training	
Flag Football	CrossFit	
Pillow Polo	Weight Training	
Ultimate Frisbee	Yoga	
Soccer		
Team Handball		
Volleyball		

9121A: Individual Sports and Fitness

Physical Education is based upon the acquisition of knowledge and skills as a foundation for engaging in physical activity. However, the mere acquisition of knowledge and skills is not enough. The mission of physical education is to enable all students to sustain regular, lifelong physical activity as a foundation for a healthy, productive, and fulfilling life. Our vision is to provide all students with a sequential program based on physical activities undertaken in an active, caring, supportive, meaningful and non-threatening atmosphere in which every student is challenged and successful.

This course may be taken for varsity release

Prerequisite(s): None

Grade(s): 9, 10, 11, 12

Credit: 0.5

Meets: 2.5 periods weekly

Activities that may be offered:

Racquet/Net Sports	Fitness Concepts	Individual Sports
Badminton	Aerobics	Disc Golf
Table Tennis	Cardio Training	Golf
Tennis	Cross Fit	Outdoor Games
Pickelball	Yoga	
Volleyball	Weight Training	

9231A: Self Defense/Judo

The students will learn the basics of self defense with an emphasis on Judo. Traditional as well as the Olympic competition styles of Judo will be emphasized. The students will learn the history of Judo as well as other martial arts and how they relate to self-defense. The students will be able to attain the first rank (yellow belt) in Judo by learning all essential techniques. If a student chooses to continue with the program, they will earn another rank each of the following years based on completion of Kata test at the end of each year.. A second year student will obtain the rank of Orange Belt. A third year student will obtain the rank Green Belt. A fourth year student will obtain the rank of Blue Belt. There will be a fitness component included that directly relates to Judo. Upon completion of the yellow belt a student may take the course the following school year to achieve the next belt level. Students receive P.E. credit.

Course is not eligible for Varsity Release.

Prerequisite(s): None

Grade(s): 9, 10, 11, 12

Credit: 0.5

Meets: 2.5 periods weekly

9241A: Strength and Conditioning

A Physical Education course geared towards covering strength and cardio muscular endurance training. The class will also have lessons geared to physical fitness and health as a lifetime sport. The students will incorporate specific types of training such as CrossFit, Yoga, Free Weight and Machine assisted workouts. Different types of Cardio endurance workouts such as running, swimming and biking (if possible).
Students will gain knowledge of muscle function, physiology, and human movement, while understanding how physical activity enhances health-related physical fitness. They will look at the relationship between nutrition and performance. Students will assess their health-related fitness, learn specific activities to develop or maintain fitness, and design a personal exercise program.

Course is not eligible for Varsity Release.

Prerequisite(s): None

Grade(s): 9, 10, 11, 12

Credit: 0.5

Meets: 2.5 periods weekly

9261A: Yoga

Yoga is all about harmonizing the body with the mind and breath through the means of various breathing exercises, yoga poses and mindfulness practices. Some of the benefits of practicing yoga on a regular basis include the following: increased flexibility, fostering emotional awareness, stress reduction, increased focus and concentration, supports healthy sleep hygiene and overall physical wellness. Additional benefits include introducing students to self-reflection, the practice of kindness and self-compassion, and continuing growth in their self-awareness. The students will learn to observe their needs and their environment, and respect their bodies for the long-term.

<u>The techniques that will be developed throughout the year are as follows:</u>

Breathe: The breath is one of the most powerful tools for self-regulation. Breath activities help students learn to reduce anxiety, stabilize energy, and create a sense of safety and peace in the body.
Move: The poses help students maintain a state of alert engagement, and allows for them to feel strong and energetic.
Focus: Lead through a mindfulness practice, children will learn step-by-step, how to apply their focus and foster a sense of self-awareness.
Relax: This allows the student to learn the tools necessary for relaxation and restoration.

Course is not eligible for Varsity Release.

Prerequisite(s): None

Grade(s): 9, 10, 11, 12

Credit: 0.5

Meets: 2.5 periods weekly

9271A: Lifeguarding/Water Safety Instructor

We will be combining our Lifeguarding and WSI courses to enable students to earn Red Cross Certification in both areas.

Course is not eligible for Varsity Release.

Prerequisite(s): Strong swimming background. At least 16 years of age before the last scheduled class session.

Grade(s): 10, 11, 12

Credit: 0.5

Meets: 2.5 periods weekly

Water Safety Instructor Course Description

The American Red Cross Water Safety Instructor's Course will train instructor candidates to teach Parent and Child Aquatics, Preschool Aquatics, Learn-to-Swim, Adult Swim, and Water Safety Courses and Presentations. Water Safety instructor candidates must be 16 years old on or before the last scheduled day of the Water Safety Instructor course.

Instructor candidates will learn principles associated with teaching swimming skills from a developmental and motor learning perspective. In addition, students will learn related instructional methods that will help them to become effective teachers of children, adults, and students with various disabilities and special needs. As a result, this course will provide students with the career readiness skills, values, and knowledge needed to become productive citizens in today's workforce. Consequently, this course will satisfy the New York State Learning Standards in Physical Education, as well as emphasize the connection between teaching, volunteerism, and service to the community.

PREREQUISITE: To be eligible to enroll in the Lifeguarding course you must be at least 16 years of age before the last scheduled class session and be able to successfully demonstrate the following skills:

- Front Crawl-25 yards Back Crawl-25 yards
- Breaststroke-25 yards Elementary
- Backstroke-25 yards Sidestroke-25 yards
- Butterfly-15 yards
- Maintain position on back for 1 minute in deep water (floating or sculling) Tread water for 1 minute

Lifeguarding Course Description

The purpose of the American Red Cross Lifeguarding Course is to teach candidates the knowledge and skills needed to prevent and respond effectively to aquatic emergencies and prevent drownings and injuries.

Successful completion requires full and active participation in all land and water skills practice. The practice sessions will require some strenuous physical activity. Students are encouraged to check with their healthcare professional before enrolling in the course.

PREREQUISITE: To be eligible to enroll in the Lifeguarding course you must be at least 15 years of age before the last scheduled class session and be able to successfully demonstrate the following skills:

- Swim 300 yards continuously, using these strokes in the following order:
    - 100 yards of front crawl using rhythmic breathing and a stabilizing, propellant kick. Rhythmic breathing can be performed either by breathing to the side or the front.
    - 100 yards of breaststroke using a pull, breath, kick and glide sequence.
    - 100 yards of either the front crawl or breaststroke, The 100 yards may be a combination of front crawl and breaststroke.

  Note: There is no time requirement for this skill. The candidates must show only that they can swim 300 yards using the above strokes without stopping. The purpose of the swim is to demonstrate comfort in the water.

- Starting in the water,
    - swim 20 yards using front crawl or breaststroke
    - surface dive 7-10 feet
    - retrieve a 10 pound object, return to the surface
    - swim 20 yards back to the starting point with the object and exit the water without using a ladder or steps, within 1 minute 40 seconds. NO GOGGLES ALLOWED
    - Tread water for 2 minutes with both hands out of the water.

  Note: When returning to the starting point, the participants must hold the 10-pound object with both hands, placing the brick on their chest, and must keep their face above the water. The time is complete once the participant has exited the water and is standing up on the pool deck. The purpose of the timed event is to ensure that the participant demonstrates comfort in the water, along with enough speed, strength and endurance to perform a combination of basic skills that are required and built upon throughout the course.

9281A: Aquatic Training 101

This course will offer a variety of challenging aquatic activities for swimmers of all abilities. The program will be designed with a "menu"of options to provide classes that are personalized. Instructional training may include refining basic swimming strokes & skills, aquatic games such as water polo, preparation for more advanced swimming courses such as Water Safety Instructor or Lifeguarding, improving competitive swimming & diving techniques and preparation for Event Training such as short & long course endurance swim races, triathlon competitions, and military swim requirements.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 0.5
Meets: 2.5 periods weekly

9711A: Health

In an atmosphere conducive to discussion, students express their feelings and attitudes and discuss behavior patterns. They focus on the individual personality and mental health; health problems of social significance; disease prevention and control; community health, family life, nutrition, and drug use and abuse. Ultimately, each student further develops the ability to make reasonable decisions based on available information. **Required for graduation.**

Prerequisite(s): None
Grades: 9, 10, 11, 12
Credit: 0.5
Meets: 2.5 periods weekly (full-year course)

DANCE SEQUENCE
COURSES ARE NOT ELIGIBLE FOR VARSITY RELEASE

9411A: Dance I

This course explores the basic techniques of various styles of dance. Throughout the year we will be studying dance using creative expression and technical achievement. We will be exploring jazz, modern/contemporary, hip hop, and composition through various exercises and floor work. The movement portion of the class consists of a complication of warm ups, center floor exercises including balancing skills, body alignment, and stretches, as well as across the floor exercises. Students learn the beginning skills of choreography through guided group projects. Students will work with partners and start providing dance feedback using dance language.

***Dance I (9411A) can be taken as a student's PE course, but does not count toward meeting the Art/Music requirement for graduation. Students seeking to satisfy the Art/Music requirement by taking Dance I must enroll in the full credit version of the course listed in the Performing Arts section of the course catalog (9411).**

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 0.5
Meets: 2.5 periods weekly

9421A: Dance II

This course explores the intermediate techniques of the various styles of dance. The focus is on developing and enhancing previously learned skills/ techniques and expanding into performance and composition. Students will become more conversant with useful terminology. Students will review the elements of movement, as well as learn components of choreography. Small group choreography will be emphasized to enhance creativity, expression, movement, and use of space. Students will work with partners and start providing dance feedback using dance language and start exploring the art of critique.

Prerequisite(s): Dance I or a qualifying audition for students in grades 11 & 12 only
Grade(s): 10, 11, 12
Credit: 0.5
Meets: 2.5 periods weekly

9431A: Dance III

This course explores the advanced techniques of the various styles of dance. The focus is on developing and enhancing previously learned skills/ techniques and expanding into a much more advanced level of

performance. Students will be conversant with useful terminology and use it while describing movement and choreography. Students will create pieces using the elements of dance, as well as learn more advanced components of choreography. Individual choreography will be emphasized and encouraged for our annual CHOREO showcase. Students will be introduced to dance criticism and the art of critique.

Prerequisite(s): Dance I &II or a qualifying audition for students in grades 11 & 12 only

Grade(s): 11, 12

Credit: 0.5

Meets: 2.5 periods weekly

9441A: Dance IV

This course explores the most advanced techniques of the various styles of dance. The focus is on developing and enhancing previously learned skills/ techniques and expanding in into a much more advanced level of performance. Students will be conversant with useful terminology and use it while describing movement and choreography. Students will create pieces using the elements of dance, as well as learn more advanced components of choreography. Individual choreography will be required for our annual CHOREO showcase. Different techniques like ballet, jazz, modern/contemporary, hip hop, and tap will be covered both stylistically, technically, and gesturally. A major portion of the course will be on Dance Criticism and the art of critique in enhancing our overall performance.

Prerequisite(s): Dance I, II & III and/or a qualifying audition for students in grades 12 only.

PHYSICAL EDUCATION ELECTIVES

CAN NOT BE TAKEN FOR PHYSICAL EDUCATION CREDIT

9511A: Intro to Sports Medicine

This is an introductory course for the sports medicine program. The topics that will be covered in this course are: the concept of the sports injury, the sports medicine team, the law of sports injury, nutritional considerations, emergency plan, anatomy, recognition and evaluation of common injuries to the body, skin conditions, thermal injuries, taping and bracing. With successful completion of this course each student will gain American Red Cross Certification in First Aid, CPR and AED for Adult/Child and Epi Pen.

Prerequisite(s): None

Grade(s): 10, 11, 12

Credit: 0.5

Meets: 5 periods weekly

9521A: Adv. Sports Medicine

This is the second course in Sports Medicine. This course will include: comprehensive management and rehabilitation of injuries focusing on therapeutic exercise programs. It will cover advanced taping skills, protective equipment fitting, specific injury padding as well as cast covering, etc. The students will examine in great depth concussion identification and evaluations that adhere to specific NATA guidelines. The students

will also develop a working knowledge of the entire individual/athlete from pre, post and in-season conditioning as well as injury rehabilitation. The class will focus on specific injury identifications such Fractures, ACL Tears, Rotator Cuff Tears, etc., in combination with detailed information about neurological functioning with regard to muscle actions specifically involving cranial and spinal nerves and their firing.

Prerequisite(s): Introduction to Sports Medicine

Grade(s): 10, 11, 12

Credit: 0.5

Meets: 5 periods weekly

Science

4111: Earth & Space Sciences (formerly PS:Earth Science)

This Next Generation Science course invites students to explore the universe and its stars, travel back through the history of the Earth, examine interactions between materials and Earth's systems, identify climate patterns, determine factors that impact weather and climate and develop solutions for global concerns. Students will apply modeling, engineering design, and problem-solving techniques to reinforce their understanding of Earth and space systems. Successful completion of NYS Required Investigations and laboratory activities are required for admission to the Earth & Space Science Regents exam. All students take the Earth & Space Science Regents exam at the conclusion of course.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 7.5 periods weekly

4211: Life Science/Biology (formerly Living Environment)

This is a comprehensive Next Generation Science Standards aligned course that applies inquiry and hands-on learning to delve into topics including structure and specialized functions of cells, metabolic processes and interacting body systems, living organisms and their role within ecosystems, inheritance of traits, and evolution. This course develops understanding of cause and effect relationships, identification of patterns,and evaluation of evidence to support or refute claims. Students will ask questions, create models and apply engineering design to solve problems and gain a deeper understanding of biological concepts. Successful completion of NYS Required Investigations and laboratory activities are required for admission to the Biology Regents Examination. All students take the Biology Regents exam at the conclusion of the course.

Prerequisite(s): Earth Science or Earth & Space Science
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 7.5 periods weekly

4311: Physical Setting/Chemistry

In this course students learn how to observe and describe experiences, to organize facts, to generalize relationships, and to predict future experiences. They gain a modern view of the fundamental concepts of chemistry. This includes a thorough understanding of the following topics: matter and energy, atomic structure, bonding, the periodic table, the mathematics of chemistry, kinetics and equilibrium, acids and bases, redox and electrochemistry, organic chemistry, applications of chemical principles, and nuclear chemistry. Laboratory work is a major part of the course. Successful completion of laboratory assignments is required for admission to the Regents Examination. All students take the Physical Setting: Chemistry Regents Examination at the end of the course.

Prerequisite(s): Integrated Algebra and Living Environment/ Biology
Grades: 10, 11, 12
Credit: 1
Meets: 7.5 periods weekly

4321: Discrete Chemistry

Discrete Chemistry is an activity, project and laboratory based physical setting course for students interested in completing their science requirements but may not become science majors in college. Students will develop and use knowledge of matter and its chemical properties to make informed decisions about the application of Science and Technology to enhance the quality of their lives. Students take advantage of a valuable chemistry curriculum that will benefit them in their everyday lives as well as in their college years.

Prerequisite(s): Living Environment or Biology
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

4411: Regents Physical Setting/Physics

Class discussions involving descriptions and explanations of various physical phenomena, related lab experiments, and interactive online apps enable students to have an understanding of 11 course topics involving objects' motion, the forces that change objects' motion, the work done on objects that change their energy; we also study electricity, magnetism, waves, and nuclear processes. Through lab work, the students properly apply the scientific method, and refine their understanding of physics. Through discussions and problem solving, students develop patterns and efficient practice of logical thinking. Successful completion of laboratory assignments is required for admission to the Regents Examination. All students take the Physical Setting/Physics Regents examination at the end of the course.

Prerequisites: Algebra I and Geometry
Grade(s): 11, 12
Credit: 1
Meets: 7.5 periods weekly

4417: Advanced Placement Physics I

Advanced Placement Physics I is the equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power. This course will also cover Fluid Dynamics. College credits may be earned based upon the score achieved on the AP Exam. AP Physics covers more topics than Regents Physics and moves at a faster pace. Subject matter is treated in a highly mathematical and conceptual manner and is discussed in greater depth than in the Regents course. Successful completion of the laboratory assignments is a requirement for admission to the Regents. All students enrolled in AP Physics will be required to take the AP Exam in May in addition to the Regents Exam in June.

Prerequisite(s): Regents Chemistry and Algebra 2 (Precalculus may be taken concurrently)
Grade(s): 11, 12
Credit: 1
Meets: 10 periods weekly

4427: Advanced Placement Physics II

An algebra-based, introductory college-level physics course that explores topics such as thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with resistors, capacitors, and non-ideal, real batteries; a detailed study of magnetism and its effects, electromagnetism; physical and geometric optics, standing waves and sound waves, and quantum,atomic, and nuclear physics.

Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills. All students enrolled in AP Physics
2 will be required to take the AP Exam in May.

Prerequisite(s): AP Physics I
Grade(s): 11, 12
Credit: 1
Meets: 7.5 periods weekly

4437: Advanced Placement Physics C: Mechanics

This is a calculus-based physics course that is equivalent to a semester of college- level work in mechanics. Instruction and laboratory experiences will be provided in the following content areas: kinematics; Newton's laws of motion; work, energy, and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. AP Physics C is intended to enhance and extend many of the topics and lab activities that the students experienced in their first physics course while providing the opportunity to earn college credit. Since much of it involves the use of introductory differential and integral calculus, it is strongly recommended that the students take an AP calculus BC course either prior to, or concurrently with, AP Physics C. All Students will take the AP examination as the conclusion of this course.

Prerequisite(s): AP Physics I, AB or BC Calculus (may be taken concurrently)
Grade(s): 12
Credit: 1
Meets: 7.5 periods weekly

4447: Advanced Placement Environmental Science

Advanced Placement Environmental Science is designed to be the equivalent of an introductory college course in Environmental Science. Environmental science is the study of the natural sciences in an interdisciplinary context that always includes people and how they influence the system. It includes many aspects of biology, earth science, fundamental principles of chemistry and physics. This course will provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and man-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. Topics include scientific analysis, interdependence of earth systems, human population dynamics, renewable and nonrenewable resources, environmental quality, global changes and their consequences, environment and society. Field and laboratory investigations are an integral part of curriculum. All students take the Advanced Placement Examination at the conclusion of the course.

Prerequisite(s): Regents Chemistry
Grades: 11, 12
Credit: 1
Meets: 7.5 periods weekly

4457: Advanced Placement Biology

AP Biology is equivalent to a two-semester college biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes—energy and communication, genetics, information transfer, ecology, and interactions. The key concepts that define the AP Biology course and exam are organized around a few underlying principles called

the big ideas, which encompass the core scientific principles, theories and processes governing living organisms and biological systems.

- Big Idea 1: Evolution - The process of evolution drives the diversity and unity of life.
- Big Idea 2: Cellular Processes: Energy and Communication - Biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis.
- Big Idea 3: Genetics and Information Transfer - Living systems store, retrieve, transmit, and respond to information essential to life processes.
- Big Idea 4: Interactions - Biological systems interact, and these systems and their interactions possess complex properties

Prerequisite(s): Successful completion of Living Environment/ Life Science:Biology and Regents Chemistry
Grade(s): 10, 11, 12
Credit: 1
Meets: 7.5 periods weekly

4467: Advanced Placement Chemistry

The Advanced Placement Chemistry course is designed to be the equivalent of the General Chemistry course usually taken during the first year of college. The course stresses the development of student abilities to think clearly and logically and to express their ideas orally and in written form. Topics include structure of matter, kinetic theory of gasses, chemical equilibria, chemical kinetics, the basic concepts of thermodynamics, and descriptive chemistry. Laboratory work is an important component of the course requirement. Students must have successfully completed Regents Chemistry to manage this level of study. All students take the Advanced Placement Examination at the conclusion of the course.

Prerequisite(s): Regents Chemistry, Algebra 2 (or concurrent)
Grade(s): 11, 12
Credit: 1
Meets: 7.5 periods weekly

2811: Introduction to Research 9

Introduction to Research seeks to accomplish two objectives. One objective is to provide 9th graders with a sense of what it means to participate in the high school research program that begins in the 10th grade in either science or social science. The second objective is to teach 9th graders the basic skills in research and presentation, both written and oral, which are fundamental to academic success in high school, college and beyond. Those skills include: 1. How to evaluate the validity of websites. 2. How to utilize the High School Library's electronic databases. 3. How to build a bibliography. 4. How to write a science or social science research paper. 5. How to make an effective oral presentation. 6. How to use a spreadsheet program to create charts and graphs.

Prerequisite(s): None
Grade(s): 9
Credit: .5
Meets: 5 periods weekly

4521: Science Research 10 *(Beginning Research Course in Science)*

The student will opt for a Beginning Research Course in the sciences, or social sciences. The instructional component of the course will focus on research methods and practices including, but not limited to such topics as: literature searches, bibliography development, choosing a research question, developing hypotheses, research paradigms, data collection, data analysis, communication of results, written abstracts, experimentation, scientific projects, presentations, and "hands-on" research completed in house, at university, hospital, government lab etc. The hands-on component of the course will involve the development of projects suitable for entry into a variety of competitions. This course is a prerequisite for remaining in the Research Program. Students shall also enter non- data driven competitions, fairs, or projects including but not limited to, the DUPONT Challenge, Toshiba ExploraVision, Young Naturalist Competition, MIT Think, Protein Challenge, Brain Bee and the National Science Bowl.

Prerequisite(s): None
Grade(s): 10
Credit: 1
Meets: 5 periods weekly

4531: Science Research 11 *(Intermediate Research Course in Science)*

The instructional component of the eleventh grade course would focus on: advanced research design, advanced data analysis and statistics, and research ethics. The hands-on component will be geared toward the design and execution of a project idea for investigation by the student, and hopefully lead to an "Intel level" research project. As appropriate, time will also be spent in the establishment of connections between students and professional mentors who will assist in the guidance of students as they perform their research. Eleventh grade students will be required to enter their research projects in a minimum of four research fairs and contests. The Intermediate Research Course and university level research during the summer between 11th and 12th grades are prerequisites for continuing in the Research Program.

Prerequisite(s): Science Research 10
Grade(s): 11
Credit: 1
Meets: 5 periods weekly

4541: Science Research 12 *(Advanced Research Course in Science)*

In Senior Year, students will complete their research projects, then write their research papers and prepare presentation materials. They will enter the senior level contests appropriate to their area of study, such as the Siemens Competition, the Intel Science Talent Search, SUNY Stony Brook's Junior Science and Humanities Symposium, Long Island Science and Engineering Fair, Long Island Science Congress, Manhattanville College Science Competition/Fair, Research Association Invitational, New York State Science and Engineering Fair, and the International Sustainable World-Energy, Engineering, and Environmental Project. Fall Semester.

Prerequisite(s): Science Research 11
Grade(s): 12
Credit: 0.5
Meets: 5 periods weekly

4611: Anatomy & Physiology

This is a comprehensive course devoted to the study of the structure and function of the human body. In addition to learning how our bodies normally work, we will study the many diseases and disorders with each system. This course is intended to prepare students for college biology or pre-profession, including medicine, veterinary medicine, physical and occupational therapies, nursing, cancer research, biotechnology, and molecular biology. A substantial portion of this course will be devoted to meaningful, hands-on laboratory experiences that include dissecting the fetal pig. With our new addition of the Anatomage Table, students are able to visualize a human body through a 3 dimensional, touch screen computer. This table is life size with tools to do a virtual dissection, allowing the students to see how the body systems and tissues are built upon one another, as well as allowing the learner to experience special features including blood pumping through the vascular system to the organs, pathology of a tumor, medical imaging scans, and a pregnant mother with her fetus. We will use the table to identify, review with games, and show how the body is built, system by system.

Prerequisite(s): Living Environment or Biology
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

4621: Astronomy

Astronomy is an introductory class that is modeled after an early college elective course in the Earth and Space Sciences, designed for students with a natural curiosity for understanding what we observe in our night sky and beyond, as well as what we experience below our feet. This course explores a broad range of topics including the history of space exploration, understanding Earth's geological processes, the fate of the sun, Einstein's theory of special relativity, black holes, and the roles of dark matter and energy in the formation of the universe. Students will be introduced to present theories about the composition, formation, and evolution of moons, planets, stars, galaxies, and the universe. Learnings will benefit students in their recognition, conceptualization and appreciation of our cosmic place in time and space, enhancing the quality of their lives while preparing them for a lower-level college curriculum in the natural and physical sciences.

Prerequisite(s): Regents Chemistry
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

4631: Forensics

Forensic Science is a unique and interesting forum to incorporate many different areas of science with real world technology and the criminal justice system. This challenging course will expose students to many new technological advances in forensic medicine and crime solving techniques like DNA Fingerprinting, serology, toxicology, and organic analysis intertwined with "tried and true" scientific processes. This hands-on course will focus on scientific inquiry, logical thinking skills and problem solving procedures to understand how science can be crucial in solving crimes and how this information is gathered and used in a court of law. This course will combine many types of teaching strategies including scientific inquiry, hands-on laboratories, use of the Internet and libraries for research papers, field trips, guest speakers, and "murder mystery" scenarios that encourage students to utilize their knowledge learned in class to "solve a crime."

Prerequisite(s): Chemistry or Discrete Chemistry
Grade(s): 12
Credit: 1
Meets: 7.5 periods weekly

4711: The Science & Business of Agriculture *(formerly Agriscience 1)*

This is an interdisciplinary course that explores science, business, and family and consumer science curriculum. It is a hands-on, project-based course focusing on topics including gardening, farming, botany, hospitality management, and food science. The course seeks to analyze these topics all the while considering the impacts of technology, culture, and externalities. Students will develop understandings of natural and agricultural sciences, evaluate impacts of agricultural practices on output and the environment, and create outdoor gardens conducive to plant growth. This course will review and evaluate the food system and industries surrounding it, agriculture business systems, and food entrepreneurship while considering environmental, societal, and corporate governance. Students will have the opportunity to research the cultural heritage and relevance of food and the role it plays in communities. By leveraging an interdisciplinary co-teaching model, the course will highlight the intersections of these three content areas while engaging students in authentic learning experiences.

Prerequisite(s): None
Grades: 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

Social Studies

2111: Global History I

Grade 9 begins with the Paleolithic Era and the development of the first civilizations, continues with an examination of classical societies, and traces the expansion of trade networks and their global impact and continues to a period of Global Interactions from approximately 1400 to 1750. The course emphasizes the key themes of interactions over time, shifts in political power, and the role of belief systems.

Co-requisite: None
Grade(s): 9
Credit: 1
Meets: 5 periods weekly

2211: Global History II

The second year of the two year Global History sequence culminates in the Global History Regents in June of the sophomore year. The Enlightenment and the global developments that emanated from the French Revolution begin this year-long examination of our modern world. The world-wide Age of Revolution, the Industrial Revolution, the expansion of Europe overseas with its concomitant nationalist reactions and the violent termination of empires, dynasties and tyrannies in Asia, Europe and Latin America permit students to study the effects of economic dislocations, racism, political extremism and totalitarianism have had on political and social institutions. The course challenges students to consider varying viewpoints, to analyze, interpret and evaluate primary sources and to integrate economic geography as a causal factor in our study of the past.

Prerequisite(s): None
Grade(s): 10
Credit: 1
Meets: 5 periods weekly

2217: Advanced Placement World History

Course content will begin in 1200CE and students will study civilizations in Africa, the Americas, Asia and Europe. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; making historical comparisons; reasoning about contextualization, causation, and continuity & change over time; and developing historical arguments. Students must take the Advanced Placement Examination in May and, following the AP exam, they continue to prepare for the New York State *Global History & Geography* Regents exam

Prerequisite(s): None
Grade(s): 10, 11, 12
Credit: 1
Meets: 5 periods weekly

2311: United States History and Government

Beginning with a survey of United States history and intellectual forces from 1607-1865, this course proceeds through five units focused on the United States since 1865. They are: the Industrialization of the United States; At Home and Abroad: Prosperity, Depression and War, 1917-1940; United States in an Age of Global Crisis:

Responsibility and Cooperation; A World in Uncertain Times: 1950- Present; and, Looking Backward. Throughout the course enduring constitutional issues will be studied. They include: National Power limits and Potentials: Federalism - the Balance between Nation and State; The Judiciary - Interpreter of the Constitution or Shaper of Public Policy; Civil Liberties - the Balance between the Government and the Individual; Criminal Liberties - Rights of the Accused and Protection of the Community; Equality - its Definition as Constitutional Value; The Rights of Women Under the Constitution; The Rights of Ethnic and Racial Groups under the Constitution; Presidential Power in Wartime and in Foreign Affairs; The Separation of Powers and the Capacity to Govern; Avenues of Representation; Property Rights and Change and Flexibility. At the end of the course students must take the United States History and Government Regents.

Prerequisite(s): None
Grade(s): 11
Credit: 1
Meets: 5 periods weekly

2317: Advanced Placement US History

The Advanced Placement Course in American History is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and issues in American History. The course prepares students for college by establishing high expectations and challenges equivalent to those of a full-year introductory college course. Students learn to assess historical materials - their relevance to a given interpretive problem, their reliability, and their importance and to weigh the evidence and interpretations presented in historical scholarship. Students must take the Advanced Placement Examination and, following the AP exam, they study additional units and prepare for the United States History and Government Regents

Prerequisite(s): None
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

2421: Economics

This one semester course introduces students to the workings of the American economic system through the use of current and historic newspaper articles. It will emphasize how economic decisions are made and how they affect our daily lives. Topics will include supply and demand, the business community, consumer activities, the role of government, and international trade.

Prerequisite(s): None
Grade(s): 12
Credit: 0.5
Meets: 5 periods weekly

2417: Advanced Placement Economics

This one year course of study will prepare students for both the macro and microeconomics exams administered by the College Board in May. The basic themes essential to all economics courses (scarcity, opportunity costs, the structure of the U.S. economy, demand, supply and market equilibrium, the price system and market elasticity) are followed by an examination of micro economics (consumers and firms, market imperfections, the role of government, and current macroeconomic issues including public finance, taxation and labor markets). The third component of the course focuses on macroeconomic theory (measuring national output and income, unemployment, inflation and growth; discussing aggregate expenditure and equilibrium

output monetary and fiscal policy as well as aggregate demand and aggregate supply, stabilization, the labor market and inflation). Each Advanced Placement exam is administered in a two, rather than the traditional three, hour time period. Students are required to take the Advanced Placement exams. Course meets state graduation requirement in economics.

Prerequisite(s): None
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

2427: Advanced Placement Government & Politics

This introductory college course is intended to answer the question posed by every political science student: Who (really) governs and to what end? Through the examination of competing theories of political power and through the analysis of competing interests (majoritarian politics, interest-group pressures, etc.), the process by which public policy is established is studied. A variety of contemporary issues including immigration policy, gun control, civil liberties, education policy, health care, campaign finance and national security in a post-September 11th world provide the lens through which the workings of contemporary American political institutions are examined. Taking the College Board examination is a requirement for course credit. ***Meets Government graduation requirement.**

Prerequisite(s): None
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

2436: Sociology of Institutions (C)

Sociology is the study of social forces. Social forces put pressure on all of us to think, act and feel in socially acceptable ways. This course will introduce students to the sociological perspective through an examination of basic sociological concepts and theories. The sociological perspective will be applied to the study of a wide range of social issues in contemporary America. Key social issues associated with the economy, politics, family, religion, education, and healthcare will be examined in detail. In addition to learning about contemporary American society through the lens of sociology, students will also learn how to conduct college level research and present their findings in both written and oral formats. Skills which are essential to success in college. This course may be taken for college credit through C.W. Post College. ***Meets Requirement for Economics.**

Prerequisite(s): None
Grade(s): 10, 11, 12
Credit: 0.5
Meets: 5 periods weekly; one semester

2446: Digital Citizenship & Democracy- Fake News, Filters, Tweets & Trolls

In a world saturated with media messages, digital environments, and social networking, concepts of historical and civic literacy must expand to include all forms of media. This course aims to help students become more thoughtful, educated, and active citizens in our democracy by becoming better consumers and users of news and social media. Students will engage in projects, activities, and case studies to build critical thinking, writing, and reading skills required in a media-rich and increasingly techno-centric world not only to

understand the world around them but to also look to the future and participate in their communities and shape the futures they want.***Meets Requirement for Participation in Government.**

Prerequisite(s): None
Grade(s): 10, 11, 12
Credit: 0.5
Meets: 5 periods weekly; one semester

Available for college credit through Stony Brook University

2451: Facing History & Ourselves

In the words of Albert Einstein, "the world is a dangerous place to live. Not because of the people who are evil; but because of the people who don't do anything about it." This course provides students the opportunity to examine the choices individuals and governments make which often lead to human rights violations and in extreme cases, genocide. The Holocaust provides the historic background for the course. The Nazi "final solution" is examined as well as the social and political milieu in which the Nazi Party came to power. The course examines the means by which the Nazis manipulated stereotypes, legalized discrimination and segregation to remove and eliminate those it deemed less than human. At its heart, this is a course about history AND human behavior. It requires students to look at themselves and the decisions ordinary people make that impact others and history. The related concepts of individual identity, conformity, obedience, mass psychology, bystander behavior, participation and resistance are incorporated throughout. An essential part of the class looks at the history of racism and discrimination in this country over the past century. Additional topics include the Eugenics Movement, the Armenian Genocide, The Rape of Nanking, the Cambodian and Rwandan Genocides and the moral responsibility of governments in the face of such tragedies. An underlying assumption of the course is that the preservation of human rights and the very survival of democracy, rest on individuals being willing to participate, even in the smallest ways. ***Meets Requirement for Participation in Government.**

Prerequisite(s): None
Grade(s): 11, 12
Credit: 0.5
Meets: 5 periods weekly

2481: Exploring Childhood I (with lab)

Students study child development and work with young children on a regular basis; thus, they develop a competence for working with young children and framework for understanding the forces that shape the development of a child. They also gain a sense of their own identity, a better understanding of their own childhood, and a better understanding of their families.

Prerequisite(s): None
Grade(s): 10, 11, 12
Credit: 1
Meets: 7.5 periods weekly

2491: Exploring Childhood II (with lab)

Students who have successfully completed Exploring Childhood I and who select this course as a senior will continue with their on-site experience working with young children. They may also fulfill their Participation

in Government requirement by researching, writing and presenting a paper on a public policy issue that affects childhood development. This must be done with the approval of the teacher.

Prerequisite(s): Exploring Childhood I or AP Psychology

Grades: 10, 11, 12

Credit: 1

Meets: 7.5 periods weekly

2517: Advanced Placement Research

AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a year-long research based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. Students explore their skill development, document their processes, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of approximately 4000–5000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense.

Prerequisite(s): AP Seminar
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

2521: Tournament Debate I

Students learn philosophy, rhetoric and study and practice debating strategies and techniques. Current events and controversial issues are analyzed and debated. Novice debaters will hone skills, such as critical listening, research and public speaking. We will discuss current events and the historical components necessary to participate in Lincoln-Douglas and Public Forum Debates. Students are encouraged to debate with students from other schools at the Long Island Forensic Association's competitions. Students also have the opportunity to participate in local and state debate competitions.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 0.5
Meets: 5 periods weekly

2531: Tournament Debate II

Students will prepare for intermediate competitions with an emphasis on philosophy and archetypal values of democracy and liberty. We will expand upon the skills and topics taught in the novice course. Students are encouraged to debate with students from other schools, at Long Island Forensic Association competitions. Students have the opportunity to participate in local and state debate competitions.

Prerequisite(s): None
Grade(s): 10, 11, 12
Credit: 0.5
Meets: 5 periods weekly

2541/2551: Advanced Debate I & II

These courses are available to students who have successfully completed Tournament Debate and have competed on the intermediate debate level. Students enrolled will be debating on the advanced level in school and at the Long Island Forensic League Competitions.

Prerequisite(s): Tournament Debate II
Grade(s): 10, 11, 12
Credit: 0.5
Meets: 5 periods weekly

2571: Introduction to Philosophy

This course will introduce philosophy as an essential human activity. It will focus on processes used by philosophers as they have examined fundamental questions like: What is reason? How can we know what is true? How do we know right from wrong? What are the relationships among self, mind and body? What is beautiful? What is the purpose of government? This course will include the study of major social thinkers of the Western world. Some Eastern works will also be addressed. In addition to traditional classroom activities, the seminar method will be used. Therefore, oral participation skills will be taught and class participation will be required. Challenging reading and written analysis will also be expected. By taking this course students should expect that their reading, reasoning and writing skills will improve.

Prerequisite(s): None
Grade(s): 10, 11, 12
Credit: 1.0
Meets: 5 periods weekly

2617: Advanced Placement Psychology

The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas. Students should expect nightly readings in our college-level text and occasional questions which are designed to promote thought and class discussions. There are regular supplemental readings and discussions from journals, magazines, current events, and even popular culture, and creative research projects on topics that are of interest to students. There are single- and multi-chapter tests and take home essays from previous College Board exams. Students are required to take the Advanced Placement Exam.

Prerequisite(s): None
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

2717: Advanced Placement Art History ***(not available for the 2024-25 school year)***

This course is designed to provide the same benefits as those provided by an introductory college course in art history. In the course, students will examine major forms of artistic expression from the ancient world to the present and from a variety of cultures. They will learn to observe and analyze works of art within their

historical context, to articulate what they see or experience, and to frame an understanding that relates how and why works of art communicate visual meaning.

Prerequisite(s): None
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

2811: Introduction to Research 9

Introduction to Research seeks to accomplish two objectives. One objective is to provide 9th graders with a sense of what it means to participate in the high school research program that begins in the 10th grade in either science or social science. The second objective is to teach 9th graders the basic skills in research and presentation, both written and oral, which are fundamental to academic success in high school, college and beyond. Those skills include: 1. How to evaluate the validity of websites. 2. How to utilize the High School Library's electronic databases. 3. How to build a bibliography. 4. How to write a science or social science research paper. 5. How to make an effective oral presentation. 6. How to use a spreadsheet program to create charts and graphs.

Prerequisite(s): None
Grade(s): 9
Credit: 0.5
Meets: 5 periods weekly

2821: Social Science Research 10

The major research project in SSR I is an entry into the Long Island History Day competition. Students are provided a theme about which to develop a project. Research is based on both primary & secondary source materials, with the best projects using a preponderance of primary source materials. Students can work individually or as part of a team. Students may present their work in the form of a formal research paper, an exhibit, a website, a documentary, or a performance. Winners are invited to participate in the NY State History Day competition in Cooperstown. Winners at the state level are invited to participate in the National History Day competition at the University of Maryland. This course also provides students with a broad-based introduction to doing research in the social sciences.

Prerequisite(s): None
Grade(s): 10
Credit: 1
Meets: 5 periods weekly

2831: Social Science Research 11

Students begin the process of developing a project in one of the social sciences (psychology, sociology, economics, etc.) or history for entry into several possible research competitions. The process begins with the writing of a formal review of the literature related to the student's area of interest and continues with the development of a research proposal. Students will develop a hypothesis and design a test of that hypothesis. Students will learn advanced techniques of data analysis utilizing the Statistical Package for the Social Sciences (SPSS). At the conclusion of the course students are ready to begin the process of data collection.

Prerequisite(s): Social Science Research 10, Science Research 10 or AP Seminar
Grade(s): 11
Credit: 1
Meets: 5 periods weekly

2841: Social Science Research 12

Students continue their research by collecting and analyzing data. The project concludes with the writing of a formal research report for entry into competition or for publication. Students will also develop an oral presentation about their project. The semester may also include analysis of the Jericho High School General Social Survey as well as other in-house research projects.

Prerequisite(s): Social Science Research 11
Grade(s): 12
Credit: 0.5
Meets: 5 periods weekly during fall semester

Technology

4911: Design & Drawing for Production

Design and Drawing for Production encourages visual problem-solving using a common graphic language to describe forms in the human-made environment. Students are provided with opportunities to analyze, creatively design, and critically evaluate to develop problem solving and decision-making skills. Students will also be able to acquire skills in technical drawing, Computer Aided Drawing, and design and modeling techniques. Students will then use these modeling techniques and the use of contemporary tools to solve various problems. Design and Drawing for Production is an approved course to meet the one unit of art/music requirement for graduation for all students.

Prerequisite(s): None
Grade(s): 9, 10, 11
Credit: 1
Meets: 5 periods weekly

4916: Introduction to Engineering Design (IED) (C) - *Project Lead the Way 1*

Introduction to Engineering Design This is an engineering foundation course that teaches problem-solving skills using a design development process. Models of product solutions are created, analyzed and communicated using the sophisticated solid modeling computer software program Autodesk Inventor. This course is the first part of a Project Lead the Way sequence in the high school. Project Lead the Way is a nationwide multi-year program which, when combined with traditional secondary school mathematics and science courses, introduces students to the scope, rigor and discipline of engineering prior to entering college. This course may be taken for college credit through the Rochester Institute of Technology.

Prerequisite(s): None
Grade(s): 9, 10, 11
Credit: 1
Meets: 5 periods weekly

4926: Civil Engineering / Architecture (C) (CEA) - *Project Lead the Way 1 or 2*

This is the second course in the Jericho High School Project Lead the Way sequence. It emphasizes the interrelationship and dependence of both civil engineering and architecture on each other. This is accomplished through a comprehensive study of the roles of civil engineers and architects in: project and site planning, building design, documentation and presentation. Students will also be involved in the production of long and short term projects utilizing sophisticated computer software such as Autodesk Revit. This course may be taken for college credit through the Rochester Institute of Technology.

Prerequisite(s): Introduction to Engineering Design; Knowledge of basic Algebra, Geometry and Trigonometry is strongly recommended.
Grade(s): 10, 11
Credit: 1
Meets: 5 periods weekly

4936: Computer Integrated Manufacturing (C) (CIM) - *Project Lead the Way 2 or 3*

The major focus of this course is to enable the students to answer such questions as: How are things made? What processes go into creating products? How do assembly lines work? How has automation changed manufacturing? As they discover the answers to these questions, they will learn about the history of

manufacturing and experience manufacturing processes, robotics, and automation. The course therefore utilizes computer modeling, Computer Numeric Control (CNC) equipment, Computer Aided Manufacturing (CAM) software, and flexible manufacturing systems. Students who successfully complete Computer Integrated Manufacturing may earn college credit through the Rochester Institute of Technology.

Prerequisite(s): Introduction to Engineering Design (IED) is required. Knowledge of algebra and geometry are also recommended.
Grade(s): 10, 11
Credit: 1
Meets: 5 periods weekly

4946: Principles of Engineering (C) (POE)- *Project Lead the Way 4*

This is a college-level survey course in which students explore the practical applications of engineering technology. It will enable them to study and experience a variety of technology systems and manufacturing processes while developing skills that use math-science-technology applications to solve engineering problems. Individuals who enroll in this course will utilize several highly sophisticated computer software programs including AutoDesk Inventor Professional. Principles of Engineering is the third course in the Jericho High School Project Lead the Way sequence. This course may be taken for college credit through the Rochester Institute of Technology.

Prerequisite(s): Introduction to Engineering Design; Knowledge of Algebra, Trigonometry and basic Statistics is strongly suggested.
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

4951: Robotics

Robots are being used today in private industry, scientific research, and the military to perform tasks that, for various reasons, are not advantageous for humans to perform. The objective of this course is to use a hands-on approach to introduce the basic concepts in robotics, focusing on mobile robots and illustrations of current state of the art research and applications. Course information will be tied to lab experiments; students will work in teams to build and test increasingly more complex VEX-based mobile robots. In this course, basic concepts will be discussed, including coordinate transformations, sensors, path planning, kinematics, feedback and feed-forward control; stressing the importance of integrating sensors, effectors and control. The second half of the course will focus on applying the knowledge from the initial lectures to the key approaches of mobile robot control (reactive, behavior-based, and hybrid). The culmination of this course will be spent in applying the learned material to design and build a robot for a final competition. This is not a PLTW course offering.

Prerequisite(s): Introduction to Engineering Design (IED), and Computer Integrated Manufacturing (CIM) or Introduction to Computer Science
Grade(s): 10, 11, 12
Credit: 1
Meets: Full year, every day

4961: Introduction to Film and Video Production I

Lights, Camera, Action! This course will provide students with a foundational tool kit in the basics of video capture and editing. Students will develop skills in photography, cinematography, and will learn to edit video

and audio with Final Cut Pro (an industry standard software). Additional topics covered include newscast, green screen, lighting, camera angles, and special effects. *Prerequisite(s): None*

Grade(s): 9, 10, 11, 12
Credit: 0.5
Meets: Everyday for 1 period for 1 semester

4971: Introduction to Film and Video Production II

Do you like movies, stories, and using your imagination? Then Let's Make A Video! Videos are one of the most exciting ways to share information in the 21st century. Learn how to produce and share videos through a variety of genres including animation, documentary, experimental, narrative, interview, and newscast. You are bound only by your own imagination.

Prerequisite(s): Introduction to Film and Video Production I
Grade(s): 9, 10, 11, 12
Credit: 0.5
Meets: Everyday for 1 period for 1 semester

4981: Film and Video Production III

Are you a filmmaker? Then this class is for you. Film and Video Production III will provide emerging filmmakers an opportunity to foster their creative, technical and communications skills. Students will study film and its power to influence social change through the development of creative narrative and documentary style projects. Class work will focus on submission to a variety of student film competitions including the Speak Truth to Power competition associated with the Tribeca Film Festival.

Prerequisite(s): Introduction to Video I, II or Instructor Approval
Grade(s): 10, 11, 12
Credit: 1
Meets: Full Year, Every Day

4991: Film and Video Production IV

Film and Video Production IV will provide emerging filmmakers additional opportunities to foster their creative, technical and communication skills in writing, directing, audio control, lighting and video editing. In this course students will continue to build their body of work in the effort to curate an advanced video portfolio for college submission. This course may be taken for college credit through SUNY Oswego.

Prerequisite(s): Film and Video Production III
Grade(s): 11, 12
Credit: 1
Meets: Full Year, Every Day

4992: Senior Video Production V

Film and Video Production IV will provide emerging filmmakers additional opportunities to foster their creative, technical and communication skills in writing, directing, audio control, lighting and video editing. In this course students will continue to build their body of work in the effort to curate an advanced video portfolio for college submission. This course may be taken for college credit through SUNY Oswego.

Prerequisite(s): Film and Video Production IV
Grade(s): 12
Credit: 1
Meets: Full Year, Every Day

World Language

5111: Spanish I

Students begin to develop proficiency in listening and speaking the Spanish language. They learn pronunciation and engage in simple conversations. Structures are learned and gradually, with the use of authentic materials, the students develop basic reading and writing skills. They begin to explore the culture and civilization of the Spanish-speaking world.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

5120: Spanish II Novice - High

A continuing course for students to strengthen their novice-level background in Spanish. Students work on developing pronunciation and vocabulary, while engaging in simple conversations. More grammatical structures are learned to enhance students' speaking and writing skills. Authentic materials are used to develop students' reading and listening skills.

Prerequisite(s): Spanish 1; Previous enrollments in Middle School Spanish
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

5121: Spanish II

The students continue to develop their proficiency in the four basic skills of listening, speaking, reading, and writing. They expand their vocabulary, improve their pronunciation, and learn more complex grammatical structures in order to communicate in a variety of real-life situations. The students further develop their knowledge of the culture and civilization of the Spanish-speaking world.

Prerequisite(s): Successful completion of Spanish I
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

5130: Spanish III Intermediate

A continuing course for students to strengthen their Spanish language skills. Students work on developing pronunciation and vocabulary, while engaging in more complex conversations. Additional grammatical structures are learned to enhance students' speaking and writing skills. The use of authentic materials develops students' reading and listening skills in preparation for a Checkpoint B assessment.

Prerequisite(s): Successful completion of Spanish Novice-High or Spanish II
Grade(s): 10, 11, 12
Credit: 1
Meets: 5 periods weekly

5131: Spanish III

The students continue to develop the four basic language proficiencies in a communicative setting. Emphasis continues to be on the acquisition of an extensive active vocabulary that will enable them to communicate in a wide variety of real-life situations. The objective of the course is to fulfill all the requirements for Checkpoint B as outlined in the New York State Syllabus for Foreign Language. Extensive preparation is made for the Checkpoint B exam in Spanish that is administered at the end of the course.

Prerequisite(s): Successful completion of Spanish II
Grade(s): 10, 11, 12
Credit: 1
Meets: 5 periods weekly

5146: Spanish IV (C)

The students read and analyze selections from various Spanish authors which provide a basis for extensive oral communication. They discuss a variety of contemporary topics gathered from authentic materials, including video tapes, magazines and newspapers. The students expand their active vocabulary and review grammatical structures. This course may be taken for college credit through Adelphi University.

Prerequisite(s): Successful completion of Spanish III, and Checkpoint B exam or its equivalent
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

5151: Spanish Language and Culture

The students will continue to develop their skills in the four language skills, emphasizing oral communication, reading for language in context, writing on a variety of topics, and listening in authentic situations. The topics, functions, situations, and proficiencies are based on the New York State Syllabus. Grammar is presented and reviewed in context. The students expand their understanding and awareness of Spanish culture through a variety of authentic documents and realia.

Prerequisite(s): Successful completion of Spanish III
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

5156: Advanced Spanish Conversation (C)

The students master topical vocabularies, grammar, idioms, and practical expressions on an advanced level. Newspapers, magazines, television and films are used to stimulate discussion. This course stresses aural comprehension and oral proficiency. Only Spanish is used in the classroom. This course may be taken for college credit through Adelphi University.

Prerequisite(s): Successful completion of Spanish IV or Spanish Language & Culture
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

5167: Advanced Placement Spanish Language (C)

This course of study will prepare students to take the rigorous AP exam. The students read selections from famous Spanish authors. They discuss the social and historical settings of the selections, and examine and compare different styles of writing. The students research cultural and literary topics and make presentations of their reports. Emphasis is placed on intensive study of grammar and the acquisition of an expanded literary vocabulary. Audio-visual materials are used for cultural enrichment. Intensive preparation is made for the required Advanced Placement examination. This course may be taken for college credit through St. John's University.

Prerequisite(s): Successful completion of Spanish IV or Spanish Language & Culture
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

5211: Chinese Language and Culture I

As the Chinese language is getting more important, don't miss the opportunity to get yourself prepared for the future. This course is intended to build students' basic daily communicative skills in Mandarin Chinese including conversation, reading and writing. Pinyin, a Romanization of Chinese, will be taught as a tool for understanding the dialogs. In addition, drills on sounds and tones, vocabulary, and sentence patterns in meaningful contexts will be used in order for the students to communicate appropriately and accurately in authentic contexts. Language instruction emphasizes cooperative learning, games and performances. Students will explore Chinese culture through films, projects and field trips.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

5221: Chinese Language and Culture II

In this course, students will gain confidence in using Chinese for daily-life activities in a target language environment. Students will expand from their base in first year Chinese (or its equivalent) to continue to develop their four skills of understanding, speaking, reading and writing in Modern Chinese. New topics will be introduced in this course with increasing sophistication in terms of usage and style. Language instruction emphasizes practical interpersonal communicative activities and presentations. Discussions on authentic cultural contexts will be conducted through films and field trips.

Prerequisite(s): Successful completion of Chinese I
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

5231: Chinese Language and Culture III

In this course, students will continue to develop their four skills of understanding, speaking, reading and writing in Mandarin Chinese as well as gain a deeper understanding of Chinese culture. Language instruction will continue to expand student's active vocabulary and practical interpersonal activities. They will further

their communicative skills for use in and out of the classroom. Emphasis is given to increasing complex usages and styles. Students discuss Chinese culture and civilization through use of films, field trips and authentic realia.

Prerequisite(s): Successful completion of Chinese II
Grade(s): 10, 11, 12
Credit: 1
Meets: 5 periods weekly

5246: Chinese Language and Culture IV (C)

This course develops advanced level skills in oral and written expression, and introduces modern literary Chinese through texts such as newspaper articles, short stories, and essays. Elaborate discussions on the reading materials will be conducted regularly to develop students' skills of abstract reasoning, narration and description. There will be a weekly writing assignment based on materials covered in class. This course may be taken for college credit through Adelphi University.

Prerequisite(s): Successful completion of Level III, and Checkpoint B exam or its equivalent
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

5256: Chinese Language and Culture V (C)

This course of study is designed to further enhance the skills that the students have already acquired through their study of Chinese. In this course students read and analyze selections of literature, organized thematically. The literature is integrated with film studies, selections of Chinese music, art, festivals and other cultural highlights. They develop vocabulary and expressions based on the topics and practice them in class discussions. Use of Chromebooks, both for research and projects, is an essential part of this course. Students review previously learned sentences and grammatical structures. In addition, new grammatical topics are presented and practiced. This course may be taken for college credit through Adelphi University.

Prerequisite(s): Successful completion of Level IV
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

5267: Advanced Placement Chinese (C)

This course is designed to develop advanced skills in listening, speaking, reading, and writing in Chinese. The course is taught almost exclusively in Chinese. The students are brought to a language lab weekly to record and practice speaking activities. All students receive authentic realia to read and discuss on a weekly basis from the Internet, magazines, and newspapers which allow for the development of reading skills using authentic texts. Students are involved in interdisciplinary activities such as art, music, and social studies projects that enhance their learning and understanding of Chinese culture. In addition, the use of a variety of textbooks, audio and video recordings, CD-ROMs, literature, and other resources are incorporated to develop reading and listening skills. This course may be taken for credit through St. John's University.

Prerequisite(s): Successful Completion of Chinese IV or Chinese V
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

5311: French I

Students develop proficiency in listening and speaking the French language. They learn proper pronunciation and engage in simple conversations. There is extensive emphasis on vocabulary acquisition. Grammatical structures are learned and gradually, with the use of authentic materials, students develop basic reading and writing skills. Focus is also on the culture and contributions of France.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

5321: French II

The students continue to develop their proficiency in the four basic skills of listening, speaking, reading, and writing. They expand their vocabulary, improve their pronunciation, and learn more complex grammatical structures in order to communicate in a variety of real-life-situations. The students further develop their knowledge of French culture and civilization.

Prerequisite(s): Successful completion of French I
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

5331: French III

The students continue to develop the four basic language proficiencies in a communicative setting. Emphasis continues to be on the acquisition of an extensive active vocabulary that will enable them to communicate in a wide variety of real-life-situations. The objective of the course is to fulfill all the requirements for Checkpoint B as outlined in the New York State Syllabus for Foreign Language. Extensive preparation is made for the Checkpoint B exam in French that is administered at the end of the course.

Prerequisite(s): Successful completion of French II
Grade(s): 10, 11, 12
Credit: 1
Meets: 5 periods weekly

5346: French IV (C)

The students continue to develop communicative competence as they read and discuss selections of well-known literary works. Film study adds a new component to learning about history as well as contemporary culture. Students discuss a variety of contemporary topics gathered from authentic materials including Internet sites, newspapers, magazines. They expand their vocabulary, learn advanced grammatical structures and improve their writing skills. This course may be taken for college credit through Adelphi University.

Prerequisite(s): Successful completion of French III, and Checkpoint B exam or its equivalent
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

5356: French V (C)

The students continue to improve communicative competence as they read literary selections from the French-speaking world and study the historical and social settings of these selections. Film study continues to be an integral part of the course work. The students expand their active vocabulary and learn advanced grammatical structures as they improve their conversation and writing skills. This course may be taken for college credit through Adelphi University.

Prerequisite(s): Successful completion of French IV
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

5367: Advanced Placement French (C)

This course of study will prepare students to take the rigorous AP exam. The students in this course will work to reach a high skill level in listening and reading as well as a high level of self-expression in speaking and writing. Emphasis is placed on intensive grammar study and the acquisition of an expanded literary vocabulary. Extensive preparation is required. Literary selections from the French speaking world and the study of significant films are part of the curriculum. All students take the Advanced Placement Exam at the conclusion of the course. This course may be taken for college credit through St. John's University.

Prerequisite(s): Successful completion of French IV
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

5411: Italian Level I

Students begin to develop proficiency in listening and speaking the Italian language. They learn proper pronunciation and engage in simple conversations. There is extensive emphasis on vocabulary acquisition. Simple grammatical structures are learned and gradually, with the use of authentic materials, students develop basic reading and writing skills. They begin to explore Italy's culture and its contributions to our civilization.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

5421: Italian Level II

The students continue to develop their proficiency in the four basic skills of listening, speaking, reading, and writing. They expand their vocabulary, improve their pronunciation, and learn more complex grammatical structures in order to communicate in a variety of real-life situations. The students further develop their knowledge of Italian culture and civilization.

Prerequisite(s): Successful completion of Italian I
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

5431: Italian Level III

The students continue to develop the four basic language proficiencies in a communicative setting. Emphasis continues to be on the acquisition of an extensive active vocabulary that will enable them to communicate in a wide variety of real-life situations. The objective of the course is to fulfill all the requirements for Checkpoint B as outlined in the New York State Syllabus for Foreign Language. Extensive preparation is made for the Checkpoint B exam in Italian that is administered at the end of the course.

Prerequisite(s): Successful completion of Italian II
Grade(s): 10, 11, 12
Credit: 1
Meets: 5 periods weekly

5446: Italian Level IV (C)

This course of study will further develop the skills of listening, speaking, reading, and writing, with special emphasis on the development of conversational competence. Through the use of short stories, poetry selections, television and films the students will broaden their knowledge and appreciation of Italian culture. They develop a more enhanced vocabulary through their study of literature and film. The students learn more advanced grammatical structures as they improve their speaking and writing skills. This course may be taken for college credit through Adelphi University.

Prerequisite(s): Successful completion of Italian III, and Checkpoint B exam or its equivalent
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

5456: Italian Level V (C)

This course of study is designed to further enhance the skills which the students have already acquired. In this course students read and analyze selections of literature, organized thematically. The literature is integrated with film studies, selections of Italian music and television broadcasts in order to broaden the students' knowledge and love for Italian culture. They develop vocabulary and expressions based on the topics and practice them in class discussions. Use of the computer lab, both for research and projects, is an essential part of this course. Students review previously learned grammatical structures. In addition, new grammatical topics are presented and practiced. This course may be taken for college credit through Adelphi University.

Prerequisite(s): Successful completion of Italian IV
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

5467: Advanced Placement Italian (C)

This course of study will prepare students to take the rigorous AP exam in Italian Language and Culture. The students will read selections from famous Italian literature, discuss the social and historical settings of the selections, and examine and compare different styles of writing. The students will research cultural and historical themes as well as current events and make presentations of their reports. Emphasis is placed on intensive study of grammar and the acquisition of an expanded literary vocabulary. Audio-visual materials are

used for cultural enrichment. Weekly work in the computer lab is required. Intensive preparation is made for the required Advanced Placement examination. This course may be taken for college credit through St. John's University.

Prerequisite(s): Successful completion of Italian IV
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

5511: Latin Level I

The students begin their study of the fundamental structures of classical Latin through extensive readings in the language. Emphasis is on the acquisition of a large active and passive vocabulary. Through intensive study of word derivation and word building, the students expand their English vocabulary and their understanding of the English language. They begin to explore the historical and cultural contributions of the Greco-Roman civilization to our Western civilization.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

5521: Latin Level II

The students broaden their knowledge of the structure of Classical Latin through reading original and adapted passages from selected Roman authors. The students increase their proficiency in English through word study, word derivation, vocabulary expansion, and the study of Latin phrases and abbreviations in English. They deepen and expand their knowledge of Greco-Roman culture and its effect on and presence in Western culture.

Prerequisite(s): Successful completion of Latin I
Grade(s): 10, 11, 12
Credit: 1
Meets: 5 periods weekly

5531: Latin Level III

The students continue to broaden and deepen their understanding and appreciation for the Greco-Roman language and culture. They read selections from Roman authors. Emphasis is given to the expansion of the student's proficiency in English through extensive derivation from Latin vocabulary. The objective of the course is to fulfill all the requirements for checkpoint B as outlined in the New York State Syllabus for Foreign Language. Extensive preparation is made for the Checkpoint B exam that is administered at the end of the course.

Prerequisite(s): Successful completion of Latin II
Grade(s): 11, 12
Credit: 1
Meets: 5 periods weekly

5546: Latin Level IV

The students read excerpts from famous Latin authors. They learn basic concepts of the Roman art of rhetoric, the development of the Indo-European family of languages, and the development of English vocabulary from Latin and Greek roots. Emphasis is placed on the historic development of Rome and its influence in the modern world.

Prerequisite(s): Successful completion of Latin III
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

5556: Advanced Latin Literature (C)

This course, the highest level of Latin offered at Jericho, will challenge students by offering opportunities to read and analyze the Latin writings of important authors of prose (Caesar, Cicero, Pliny, and Vulgate) and poetry (Catullus, Horace, Martial, Ovid and Virgil.) Acquisition of more advanced Latin vocabulary is essential. Students will further develop critical thinking and analytical skills through reflections on themes and essential questions from famous quotations, making connections to content in other curricula. Site field trips and competitions will enhance their appreciation of the classical world. This course may be taken for college credit through St. John's University.

Prerequisite(s): Successful completion of the Checkpoint B Exam in Latin or its equivalent
Grade(s): 12
Credit: 1
Meets: 5 periods weekly

5611: American Sign Language I

Challenge yourself with an exciting opportunity to learn American Sign Language. This course will provide instruction in the practical use of American Sign Language in addition to information on deaf culture. Students will learn to communicate with the deaf and hearing impaired. Classroom activities are interactive and meaningful. Themes for the course include: family, schools, hobbies, travel, etc. Students will experience presentations by members of the deaf community, assemblies, field trips, and other activities. It will be language-focused and based on the New York State Syllabus for American Sign Language.

Prerequisite(s): None
Grade(s): 9, 10, 11, 12
Credit: 1
Meets: 5 periods weekly

Exceptional Opportunities

4681: Building Outstanding Leaders for Tomorrow (BOLT)

BOLT is an elective opportunity for Jericho High School juniors and seniors interested in developing a strong sense of personal accountability, character development and interpersonal skills for all aspects of their lives. Topics include conflict resolution, public speaking, interview skills, time management, maintaining consistent accountability, persevering through inevitable and unforeseen challenges, fostering self-reflective and adaptive capabilities and challenging one's limits. Leadership is investigated through a variety of active learning experiences designed specifically to promote positive changes in our students. Students will study various models of leadership in efforts to define their own leadership style and apply such knowledge to personal ideas and initiatives. BOLT meets on Monday's from 7:30 am – 8:55am.

Prerequisite(s): open to Juniors and Seniors only
Grade(s): 11, 12
Credit: .5
Meets: 1x /week - Monday 7:30 am – 8:55am