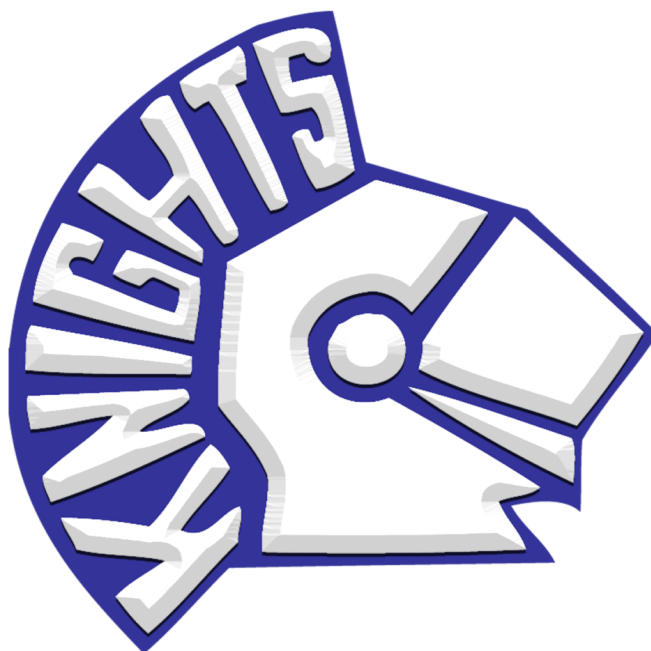


IRVINGTON HIGH SCHOOL

COURSE CATALOG

2025-2026



COURSE DESCRIPTIONS BY DEPARTMENT

APPLIED TECHNOLOGY

Computer Science

Grades: 9-12

Duration: Full Year

Credit Hours: 5

Prerequisites: None

Computers Science is an entry-level course that serves as the prerequisite course to a variety of technology based strands offered in the Applied Technology curriculum. This course will provide students with an in-depth treatment of technological skills that include networking, coding, the internet, digital information, computer hardware, application software, and cyber security. Students will finish the course with a solid understanding of 21 century technology principles and will assist students in planning a career and acquiring certification in the field of technology. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Computer Science 2

Grades: 9-12

Duration: Full Year

Credit Hours: 5

Prerequisites: Computer Science

Computers Science 2 is a course that serves as the companion course to Computer Science and will be the basis for all other technology based strands offered in the Applied Technology curriculum. This course will provide students with an in-depth treatment of technological skills that include networking, coding, the internet, digital information, computer hardware, application software, and cyber security. Students will finish the course with a solid understanding of 21 century technology principles and will assist students in planning a career and acquiring certification in the field of technology. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

AP Computer Science Principles

Grade: 10-12

Duration: Full Year

Prerequisites: Completed Computer Science

The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course. In this course, Students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop effective communication and collaboration skills by working individually and collaboratively to solve problems, and will discuss and write about the impacts these solutions could have on their community, society, and the world. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Introduction to Entrepreneurship

Grades: 12

Duration: Full Year

Credit Hours: 5.0

Prerequisites: An average of a “B” or better in Business Management 1 & 2.

EEE 370 is an official course from Syracuse University and provides students a solid understanding of the vital role played by entrepreneurs in the 21st-century global economy. During this course, students will assess, explore, critique, and celebrate entrepreneurship. Entrepreneurship is approached as a way of thinking and acting, as well as an attitude and a behavior. The emphasis is on entrepreneurship as a manageable process that can be applied in virtually any organizational setting. Moreover, the interest is in sustainable entrepreneurship, or entrepreneurship over the life cycle of a person’s entire career; in organizations as they evolve from start-up enterprises to sizable corporations; and in societies, as they move from undeveloped to post-industrial. However, the principal focus will be on the creation of new ventures, the ways that they come into being, and factors associated with their success. This is a course of many ideas and questions, and students will be encouraged to develop and defend their own set of conclusions regarding each of these issues. It is also a course that integrates a number of different disciplines, ranging from sociology and psychology to economics, finance, marketing, and human resource management. Further, it is a course that mixes theory with practice, and students will be challenged to apply principles, concepts, and frameworks to real-world situations. Instructional strategies may be modified based on the students’ Individual Education Plan (IEP) as per N.J.A.C.6A:14-4.6.

Microsoft Word

Grades: 9-12

Duration: Half Year Credit Hours: 2.5

Prerequisites: Computer Science

This course addresses the features of Microsoft Word. It will provide students with the basic concepts required to produce common business documents, such as: creating a document, managing files, using the Help function, editing a document, formatting text and using text enhancements, formatting paragraphs, using document layout features, proofing and printing a document, inserting graphic elements, and controlling page appearance. Students will be: using and creating templates and wizards; increase their knowledge of Microsoft Word by adding and formatting components, such as: modifying pictures; creating customized graphic elements. The final activity/assessment of the course will be the official Microsoft Office Specialist test for Microsoft Word 2019, upon passing students will be certified in Microsoft Office Word 2019. This certification is an industry recognized credential as well as recognized by the American Council on Education (ACE) member institutions, and students may apply and receive 1 college credit for this exam. Instructional strategies may be modified based on the students’ Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Microsoft PowerPoint

Grade: 9-12

Duration: Half Year

Credit Hours: 2.5

Prerequisites: Computer Science

This course addresses the features of Microsoft PowerPoint and prepares students for the official Microsoft Office Certification Exam. The following topics will be covered: managing and navigating the PowerPoint environment, creating slide presentations, formatting slides, entering and editing text, formatting text boxes, apply and manipulate graphics and images, adding and modifying WordArt and shapes, manipulating SmartArt, adding multimedia to slides, applying video effects, constructing and modifying tables and charts, apply and modify slide transitions and custom animation, use collaboration and review features, prepare presentations for delivery and use, use presentation deliver tools. The final activity/assessment of the course will be the official Microsoft Office Specialist test for Microsoft PowerPoint 2019, upon passing students will be certified in Microsoft Office PowerPoint 2019. This certification is an industry recognized credential as well as recognized by the American Council on Education (ACE) member institutions, and students may apply and receive 1 college credit for this exam. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Microsoft Excel**Grade: 9-12****Duration: Full Year****Credit Hours: 5.0****Prerequisites: Computer Science or have passed the 8th grade Literacy Test and Microsoft Word & Microsoft PowerPoint**

This course addresses the various features of Microsoft Excel. The following topics will be covered: navigating within Excel; resizing and formatting a spreadsheet; moving, copying, and editing cells; using borders and colors, applying styles and auto-format options; modifying, arranging, and comparing spreadsheets; applying page setup; using conditional formatting; creating charts and 24 graphs from spreadsheet data; work with graphic objects and diagrams within a spreadsheet; and printing spreadsheets; and creating and applying basic mathematical functions to spreadsheet data. The final activity/assessment of the course will be the official Microsoft Office Specialist test for Microsoft Excel 2019, upon passing students will be certified in Microsoft Office Excel 2019. This certification is an industry recognized credential as well as recognized by the American Council on Education (ACE) member institutions, and students may apply and receive 1 college credit for this exam. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Robotics**Grades 9-12****Duration: Full Year****Credit Hours: 5****Prerequisite: Computer Science**

The robotics course will offer students the opportunity to experience and explore how Robotics technology is applied to our modern industrial world. The course will include a study of CAM (Computer-Automated Manufacturing) applications. Through the use of various instructional materials, including hands-on model assemblies and simulation software, students will gain a clear understanding of

basic Robotics technology systems, applications, and modern implementation of Robotics in manufacturing and related careers. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Accounting I

Grades: 10

Duration: Full Year

Credit Hours: 5

Prerequisite: Computer Science

The Accounting I curriculum is aligned to the New Jersey Core Curriculum Content Standards for Technology Literacy and Mathematics. Accounting I is designed to build upon the students' mathematical skills by introducing them to workplace learning experiences. The daily classroom tasks focus on accounting concepts and computerized procedures. Workplace competencies are developed by problem solving activities that involve balance sheets, journals, and ledgers. Accounting I emphasizes career readiness skills such as numerical operations and understanding workplace text. By the conclusion of this course, students will be able to demonstrate mastery of basic accounting concepts and computerized procedures. Students will also demonstrate the analytical skills necessary to balance business journals and ledgers. The vision of the technology standards is to help students understand and be comfortable with the concepts and applications of technology, not only in order to function in today's complex society, but also to become informed and productive adults of tomorrow. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Accounting II

Grades: 11

Duration: Full Year Credit Hours: 5

Prerequisites: Computer Science or have passed the 8th grade Literacy Test and Accounting I

Accounting II is designed to build upon the knowledge and skills that students gained in Accounting I. Daily classroom tasks focus on balancing account and payroll ledgers via activities designed to stimulate reasoning and real life problem solving skills. These active learning experiences are designed to foster knowledge of career opportunities in accounting and aid students in selecting a career major in college. Accounting II emphasizes career readiness skills such as numerical operations and the understanding of workplace text. By the conclusion of this course, students will be able to demonstrate mastery in balancing account and payroll ledgers. The students will also be able to evaluate various career opportunities and critically examine the benefits and challenges of each profession. Scholars will work on a Dual Credit Capstone Project in collaboration with Grand Canyon University to obtain 4 transferable college credits. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.

Accounting III

Grades: 12

Duration: Full Year Credit Hours: 5

Prerequisites: Successful completion of Accounting II

This advanced course is designed to introduce high school students to the essentials of managing small business finances using the popular cloud-based accounting software, Quickbooks Online. Students will explore the software's primary features and learn how to set up a new company, manage customers and vendors, create invoices, process payments, and generate financial reports. Emphasis will be placed on understanding the importance of accurate record-keeping, financial analysis, and maintaining a healthy cash flow for small businesses. By the end of the course, students will be equipped with the practical knowledge and skills required to effectively use Quickbooks Online and pass the QuickBooks Online Certification exam. Obtaining a Quickbooks Online Certification offers numerous benefits, including enhanced credibility and expanded career opportunities. This certification not only validates expertise in managing financial tasks but also opens up a wider range of job prospects in various industries.

Business Law

Grades: 9-12

Duration: Full Year

Credit Hours: 5.0

Prerequisite: Computer Science

The Business Law Curriculum is aligned to the New Jersey Core Curriculum Content Standards for Language Arts Literacy and Social Studies. The course is designed to introduce students to the basic concepts of law in the United States. Students learn about the various forms of the law and analyze the ethics of law in group discussions and classroom presentations. Business Law affords students the opportunity to learn about various types of laws, contracts, and binding agreements via the reading and analysis of legal briefs and viewing and analysis of actual court case videos. Students engage in educational simulations presenting varied points of view on contemporary legal issues and learn to critically examine informational text. The study of historic court cases and proper laws assists students in developing critical thinking skills as applied to the interpretation of legal documents. Domestic law is also addressed and focuses on the integration of prior knowledge and ethical considerations. By the conclusion of the course, students will be able to interpret legal terminology as written in a variety of documents. Furthermore, students will be able to analyze contemporary legal issues. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Digital Publishing I

Grades: 9-12

Duration: Full Year

Credit Hours: 5

Prerequisite: Computer Science

This introductory course is designed to educate students in the basic process of: commercial design, desktop publishing, and web design. Students will have hands-on experiences in: project planning and preparation, font types, design techniques, information architecture, image editing and color management, compositing/proofing, and final output. Students will be given workplace experiences via a project-based approach inclusive of classroom modeling, demonstrations, hands-on instruction, small group, and independent work. By the conclusion of this course, students will have designed and produced a commercial ready corporate identity package, and a sales and marketing print campaign along with an

information website. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6

Digital Publishing II

Grades: 10-12

Duration: Full Year

Credit Hours: 5

Prerequisite: Computer Science or have passed the 8th grade Literacy Test and Digital Publishing I

This intermediate course is designed to educate students in the process of commercial design, desktop publishing, and web design. Students will have hands-on experiences in project and color management, compositing/proofing, and final output. Students will be given workplace experiences and best practice methodologies via a project-based approach inclusive of classroom modeling, demonstrations, hands-on instruction, small group, and independent work. By the conclusion of this course, students will have designed and produced a commercial ready corporate identity package, 26 and a sales and marketing print campaign along with a rich media website. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Career and Technical Education Programs

Career and Technical Education Programs Career and Technical Education prepares students to succeed as global citizens for career opportunities for the 21st Century and to support healthy economic growth within the state. Most Career and Technical Programs can result in college credit and Industry Vauald Credentials for the students if they complete the program and pass the end of program test. To complete a program series and be eligible for college credit, students must take at least three courses in the program sequence. Career and Technical Education prepares students to succeed as global citizens for career opportunities for the 21st Century and to support healthy economic growth within the state. All of the Career and Technical Programs result in college credit or an official Industry Certification for the students if they complete the program and pass the end of program test. To complete a program series and be eligible for college credit, students must take all three courses in the program sequence.

Business Management Administration 1

Grades: 11

Duration: Half Year

Credit Hours: 2.5

Prerequisite: Computer Science

This introductory course develops student understanding and skills in areas such as communication, economics, financial analysis, human resources management, information management, marketing, operations, professional development, and strategic management. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Business Management Administration 2

Grades: 12

Duration: Half Year

Credit Hours: 2.5

Prerequisite: Business Management Administration 1

This intermediate course develops student understanding and applies skills in areas such as economics, emotional intelligence, financial analysis, operations, professional development, and strategic management. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Cosmetology Program

Grade: 9-12

Duration: 4 years

Credit Hours: 40

Prerequisite: Student must have successfully completed their Freshman Year and labeled as a Sophomore to enter the Introduction to Cosmetology program

Students who qualify by taken exploration to cosmetology as a prerequisite may in their sophomore year take required general education courses and begin their cosmetology courses. Students will take Introduction to Cosmetology in their sophomore year; this is a one period a day course. During their

junior year, students will take Advanced Cosmetology I, which is a two period a day course. During their senior year, students will take Advanced Cosmetology II, which is a three period a day course. In order to remain eligible for the academy, students must maintain good attendance, a 2.5 GPA average, a satisfactory discipline record, subject to teacher recommendations, and coordinator's approval. Upon completion of the three level courses, students will become eligible to obtain their NJ State Board of Cosmetology and Hairstyling License. It is also recommended that students in this program take marketing, accounting and computer technology as their elective courses. This program is funded through the Perkins Secondary Federal Grant Program. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Exploration to Cosmetology Program

Grades: 9-12

Duration: Half Year

Credit Hours: 2.5

Prerequisite: None

This is an CTE Elective Course Exploration to Cosmetology, an overview of the field of cosmetology and the personal skills you will need to become successful. Students will learn the growth and advancement of the cosmetology industry. Students will analyze career paths within the field of cosmetology. Students will explore Life Skills and the leadership function required to become a successful cosmetologist. As well as demonstrate Professional Image preparation methods and techniques for the New Jersey State Board examination. Students will express the concept of Communicating for Success implementing the process of building client relationships based on trust and effective communication. The course consists of case studies, project-based assessments, hands-on practical tests, quizzes, and homework.

Introduction to Cosmetology

Grade: 10

Duration: Full Year

Credit Hours: 5

Prerequisite: Exploration to Cosmetology Program

The Introduction to Cosmetology Curriculum is aligned to the New Jersey Core Curriculum Content Standards for Language Arts, Technology and Comprehensive Health. This course is designed to introduce students to the basic concepts of Cosmetology. Students learn the history of Cosmetology, stress the importance of inward beauty and health as well as outward appearance, and describe the important process of building client relationships based on trust and effective communication. Other topics covered include: Hair Care, Skin Care, Nail Care, and Business Cosmetology. The vision of the Language Arts, Technology, and Comprehensive Health standards is focused on preparing students for their State Cosmetology Exam and licensure. By the conclusion of this course, students will be able to perform basic cosmetology procedures. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Cosmetology I

Grades: 11

Duration: Full Year

Credit Hours: 10

Prerequisites: Introduction to Cosmetology

The Cosmetology Curriculum I is aligned to the New Jersey Core Curriculum Content Standards for Language Arts, Technology, and Comprehensive Health. This course is designed to reinforce and master the basic concepts of Introduction to Cosmetology. Students learn the history of Cosmetology; stress the importance of inward beauty and health as well as outward appearance, and describe the important process of building client relationships based on trust and effective communication. Other topics covered include: Hair Care, Skin Care, Nail Care, and the Business of Cosmetology. After completing Introduction to Cosmetology (10th graders – 1 period – 5 credits – 175 hours) students will be able to perform basic cosmetology procedures. In their junior year, students who are career-oriented will continue the program with Cosmetology I (2 periods – 350 hours – 10 credits). In their senior year, students will complete the program in Cosmetology II (3 periods – 500 hours – 15 credits). After completing all three courses, students are eligible to take the State Cosmetology License Exam after completing a total of 1000 hours. The vision of the Language Arts, Technology, and Comprehensive Health standards is focused on preparing students for their State Cosmetology Exam and licensure. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Cosmetology II

Grade: 12 Duration: Full Year

Credit Hours: 15

Prerequisites: Introduction to Cosmetology and Cosmetology I

The Cosmetology II Curriculum is aligned to the New Jersey Core Curriculum Content Standards for Language Arts, Technology and Comprehensive Health. This course is designed to master the basic concepts of Cosmetology. Students learn the history of Cosmetology, stress the importance of inward beauty and health as well as outward appearance, and describe the important process of building client relationships based on trust and effective communication. Other topics covered include: Cosmetology Sciences, Hair Care, Skin Care, Nail Care, and The Business of Cosmetology. 28 The vision of the Language Arts, Technology, and Comprehensive Health standards is focused on preparing students for their State Cosmetology Exam and Licensure. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Culinary Arts Program

Grade: 9-12

Duration: 4 years

Credit Hours: 40

Prerequisite: None

Culinary Arts Program is aligned to the New Jersey Core Curriculum Content Standards for Career & Technical Education 21st Century Life and Careers, Language Arts, Technology, Career Readiness, Life Literacies, and Key Skills. Culinary Arts will teach students food preparation, restaurant management, and hospitality. This Culinary Pathway will highlight professional chefs and related cooking services in

restaurants and other commercial food establishments. Students will analyze recipes and menu planning, emphasizing industry trends. Furthermore, by supervising and training kitchen assistants, students will examine the management of food supplies and kitchen resources, the aesthetics of food presentation, and mastery of various cuisines and culinary techniques. Culinary scholars will enroll in Work-Based Youth Apprenticeship or Capstone Project/ Dual enrollment college credits from local or surrounding college / university. At the conclusion of this course students will take and pass the food handlers and Servsafe examination.

Introduction to Culinary Arts Program

Grade: 9-12

Duration: 4 years

Credit Hours: 30

Prerequisite: None

Introduction to Culinary Arts is aligned to the New Jersey Core Curriculum Content Standards for Career & Technical Education 21st Century Life and Careers, Language Arts, Technology, Career Readiness, Life Literacies, and Key Skills. This elective course highlights the importance of safety in the kitchen. Lessons will include identification of different types of knives, hand tools and equipment. The students will learn how to properly receive, handle and store food. Lastly chemicals used in a commercial kitchen will be reviewed.

Culinary Arts I

Grades: 10

Duration: Full Year

Credit Hours: 10

Prerequisite: Student must have successfully completed Introduction to Culinary Arts and labeled as a Sophomore to enter Culinary Arts I Program

Culinary Arts I is aligned to the New Jersey Core Curriculum Content Standards for Career & Technical Education 21st Century Life and Careers, Language Arts, Technology, Career Readiness, Life Literacies, and Key Skills. This course will evaluate the practice of personal food safety and sanitation . Lessons will include types of cleaners/sanitizers and their proper use, cleaning and sanitizing schedule, and procedures for equipment and facilities. The goal is for students to analyze procedures during the flow of food including, but not limited to: their actions, choice/storage of chemicals, time-temperature, hygiene, kitchen sanitation, and general safety.

Culinary Arts II

Grades: 11

Duration: Full Year

Credit Hours: 10

Prerequisite: Student must have successfully completed Culinary Arts I and labeled as a Junior to enter Culinary Arts II Program

Culinary Arts II is aligned to the New Jersey Core Curriculum Content Standards for Career & Technical Education 21st Century Life and Careers, Language Arts, Technology, Career Readiness, Life Literacies, and Key Skills. In this Course scholars will analyze various methods of cooking, practicing the art of food preparation. Students will be introduced to how to make stocks and sauces, one of the basic foundations in learning how to cook. The students will learn the purpose of a stock and a sauce and how they can enhance or complement a meal. Students must have an understanding of why we make stocks and sauces and what they are used for. Students will learn how to choose the right ingredients when preparing stocks and sauces

Culinary Arts Year 4 - Work-Based Youth Apprenticeship or Capstone Project/ Dual enrollment college credits

Grades: 12

Duration: Full Year

Credit Hours: 10

Prerequisite: Student must have successfully completed Culinary Arts II and labeled as a Senior to enter Culinary Arts Year 4 Work-Based Youth Apprenticeship/ Capstone Project/ Dual enrollment college credits

Work-based Youth Apprenticeship designed to build upon the knowledge of Culinary work-based learning partnership with local culinary based business and organizations. These active learning experiences are designed to foster knowledge of career opportunities in culinary arts and aid students in selecting a career major. emphasizes career readiness skills such as food safety and the understanding of workplace text. By the conclusion of this course, students will be able to demonstrate mastery in culinary arts and restaurant management. The students will also be able to evaluate various career opportunities and critically examine the benefits and challenges of each profession. Scholars will work on a Dual Credit Capstone Project in collaboration with local community College and University to obtain 4 transferable college credits. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.

ENGLISH AS A SECOND LANGUAGE (ESL)

The intent of the Irvington Public School District ESL program is to ensure that students receive a well-developed program that includes the integral components of language arts (e.g., listening, writing, grammar, spelling, composition.) ESL classes follow the English Language Arts (ELA) grade level curriculum, scaffolded by the students' English Language Proficiency Levels. The ESL program is designed to meet the needs of students whose dominant language is not English and whose proficiency in English is limited. Students are placed in courses, which correspond to their level of English language proficiency by grade level. The program promotes active communicative interaction among students that is crucial in our society. Authentic language is used during instruction, which is necessary when dealing with others (people) in American culture. Beyond academics, the program addresses the affective needs of students by offering learning opportunities in a non-threatening environment. A part of this focus is the understanding of cultural differences aimed at promoting a harmonious global community. With this in mind, a key focus of the program is the promotion of individual self- worth, abilities, and potential.

ESL/ELA – 9th Grade Courses:

Placement based on ACCESS or WIDA Initial Identification Exam

ESL/ELA – 9th Grade English – Level I

Grade: 9

Duration: Full Year – Every Day

Credit Hours: 5 (ELA Credits)

ESL/ELA – 9th Grade English – Level II

Grade: 9

Duration: Full Year - Every Day

Credit Hours: 5 (ELA Credits)

ESL/ELA – 9th Grade English – Level III/IV/V

Grade: 9

Duration: Full Year - Every Day

Credit Hours: 5 (ELA Credits)

The 9th grade ESL/ELA curriculum will be scaffold to accommodate ESL students’ academic, instructional and English proficiency levels.

Through the integrated NJ Student Learning Standards in the Literacy curriculum of Reading, Writing, Speaking and Listening, and Language, students in English 9 perform a thorough regiment of English Language Arts (ELA) related tasks. In turn, these tasks lead to achievement of individualized, class and school level benchmarks on local, state and national (NJSLA, PSAT) instruments of assessment in Language Arts. For 9th graders, this regimen includes beginning the construction of a multi-year portfolio demonstrating their best work in all four ELA standard areas. It also encompasses the review and advancement of grammatical concepts and skills already learned. This course provides an introduction to the level of analysis and critical thinking that will provide a foundation that will enable students to rise and be challenged in subsequent high school course work, across all content areas. The English 9 curriculum includes analysis of literary elements and the interpretation of numerous classic themes articulated across varied literary genres, within a broad collection of American, British, and international literary selections that provide a rich multicultural experience. Student tasks include but are not limited to the integration of reading, writing, and thinking processes in creating, interpreting, and responding to the following: varied text types, genres, open-ended questions, picture and multi-media prompts, analytical essays, themes, reports, articles, fiction and nonfiction; all of which are produced for a variety of purposes and audiences. Literary selections may include but are not restricted to Romeo and Juliet, The Miracle Worker, Animal Farm, and The Diary of Anne Frank. The core instructional materials for the course are provided through the Irvington Public Schools 6-12 ELA novel-based curriculum. Instructional strategies may be modified based on the students’ Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

ESL/ELA – 10th Grade Courses

Placement based on ACCESS or WIDA Initial Identification Exam

ESL/ELA – 10th Grade English Level I

Grade: 10

Duration: Full Year – Every Day

Credit Hours: 5 (ELA Credits)

ESL/ELA – 10th Grade English – Level II

Grade: 10

Duration: Full Year - Every Day

Credit Hours: 5 ELA Credits

ESL/ELA – 10th Grade English – Level III/IV/V

Grade: 10

Duration: Full Year - Every Day

Credit Hours: 5 ELA Credits

The 10th grade ESL/ELA curriculum will be scaffolded to accommodate ESL students’ academic, instructional and English proficiency levels.

This course will follow the structural model established in the English 10 program but will provide more challenging integrated experiences with more advanced aspects of literary exploration and selections (e.g. stories, poetry, essays, drama, non-fiction, etc.) As begun in grade 9, the achievement of established benchmarks in all four English Language Arts NJ Student Learning Standards on local, state and national assessments will be pursued through a variety of tasks that include but are not limited to the following: debating; discussing; interviewing; evaluating; creating written and oral presentations; solving problems using media; constructing and responding to multiple choice questions; essays related to literary concepts; persuasive essay topics; and essays in response to picture and multimedia prompts. Students will be asked to demonstrate comprehension of increasingly difficult text types that are intended for a variety of purposes and audiences. Technical analysis and enhancement of language and works produced by both established authors as well as by other students will be a regular component of the curriculum. Students will be expected to utilize all elements of both creative (Writing 3.2 and Speaking 3.3) and interpretive (Reading 3.1, Listening 3.4, and Viewing and Media Literacy 3.5) processes. Instruction is provided to support students’ success on upcoming local, state, and national assessments (NJSLA, PSAT, and SAT). Core literary selections of this course may include but are not restricted to Julius Caesar, Lost Horizon, The Pearl, To Kill A Mockingbird, Lord of the Flies, and of Mice and Men. The core instructional materials for the course are provided through the Irvington Public Schools 6-12 ELA novel-based curriculum. Instructional strategies may be modified based on the students’ Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

ESL/ELA – 11th Grade Courses

Placement based on ACCESS or WIDA Initial Identification Exam

ESL/ELA – 11th Grade English – Level I & II

Grade: 11

Duration: Full Year – Every Day

Credit Hours: 5 ELA Credits

ESL/ELA – 11th Grade English – Level III / Read 180

Grade: 11

Duration: Full Year - Every Day

Credit Hours: 5 ELA Credits

ESL/ELA – 11th Grade English – Level IV & V

Grade: 11

Duration: Full Year - Every Day

Credit Hours: 5 ELA Credits

The 11th grade ESL/ELA curriculum will be scaffolded to accommodate ESL students' academic, instructional and English proficiency levels.

This course follows the structure of English 9/10, calling for a student-produced portfolio of integrated NJ Student Learning State Standards in Literacy curriculum tasks that will prepare students for communicative success on local, state, and national assessments, and in the place of work or study beyond high school. A survey of American Literature will include an understanding and appreciation of literature that represents different historical periods in the growth of America, from colonial times to the present. Some exploration will lend itself to increased cross content connections and will demand varied forms of research and analysis that calls for comparison and contrast, persuasion, and the study of cause and effect.

Reinforcement of the current ELA NJ Student Learning Standards will be emphasized on a continua basis. In addition, skill enhancement will be provided via pictures and multimedia prompts. A variety of open ended questions will be given as regular assignments to ensure students' proficiency on such assessments as the NJGPA and SAT. Supplemental texts to support required skills on these assessments will be utilized as needed.

Students will also intensify their preparation for a battery of local, state, and national assessments (i.e. NJGPA, PSAT, and SAT). Readings for this course can include the following selections: The Scarlet Letter, The Great Gatsby, Farewell to Arms, Death of a Salesman, and Hamlet. The core instructional materials for the course are provided through the Irvington Public Schools 6-12 ELA novel-based curriculum. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

ESL/ELA – 12th Grade Courses

Placement based on ACCESS or WIDA Initial Identification Exam

ESL/ELA – 12th Grade English – Level I & II

Grade: 12

Duration: Full Year – Every Day

Credit Hours: 5 ELA Credits

ESL/ELA – 12th Grade English – Level III

Grade: 12

Duration: Full Year - Every Day

Credit Hours: 5 ELA Credits

ESL/ELA – 12th Grade English – Level IV & V

Grade: 12

Duration: Full Year - Every Day

Credit Hours: 5 ELA Credits

The 12th grade ESL/ELA curriculum will be scaffolded to accommodate ESL students' academic, instructional and English proficiency levels.

Following the course structure and format maintained in English 9, 10, and 11, students will again produce a portfolio of integrated Language Arts related tasks that demonstrate mastery in all four ELA NJ Student Learning Standards. The context of these tasks and activities is the study of literary selections of British Literature that demonstrate its history and development. Selections read and analyzed for this course include but are not restricted to Beowulf; The Canterbury Tales, Macbeth and Pygmalion. The core instructional materials for the course are provided through the Irvington Public Schools 6-12 ELA novel-based curriculum. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

JUNIOR RESERVE OFFICERS TRAINING CORPS (JROTC)

JROTC I

Grades: 9-12

Duration: Full Year

Credit Hours: 5

Prerequisite: None

The Junior Reserve Officers' Training Corps (JROTC) is designed to prepare students (cadets) to demonstrate an understanding of the freedoms stated in the Bill of Rights, to foster creativity by displaying an understanding of the seven communication skills, and to demonstrate an integration of knowledge of the leadership traits, principles, and styles of being an effective leader. By the conclusion of this course, students (cadets) will be able to demonstrate knowledge of good citizenship, effective communication skills, and display leadership potential. Irvington High School students are given the

option to elect to meet the Physical Education requirement for graduation through the JROTC program. Health requirements will either be met through integration in the JROTC curriculum, through Board approved outside providers, or through Health Education teachers at Irvington High School. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

JROTC II

Grades: 10-12

Duration: Full Year

Credit Hours: 5

Prerequisite: JROTC I

The Junior Reserve Officers' Training Corps (JROTC) is designed to stimulate reasoning in communication skills, problem solving of map reading assignments, and demonstrating an understanding of the traits, principles and styles of leadership. JROTC II is designed to also help students properly solve the tasks of a leadership position, provide real-life examples of situations using guest speakers and current events, supply topics that are in the news on drugs and drug abuse, perform satisfactorily at age group level in the President's Physical Fitness Program, and display an application of leadership. By the conclusion of this course, students (cadets) will be able to think logically, communicate effectively, maintain good health and appearance, implement knowledge of map reading skills, and display leadership potential as a member of a team. Irvington High School students are given the option to elect to meet the Physical Education requirement for graduation through the JROTC program. Health requirements will either be met through integration in the JROTC curriculum, through Board approved outside providers, or through Health Education teachers at Irvington High School. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

JROTC III

Grades: 11-12

Duration: Full Year

Credit Hours: 5

Prerequisite: JROTC I and JROTC II

The Junior Reserve Officers Training Corps (JROTC) is designed to enable students (cadets) to demonstrate proficiency in communication skills and display critical thinking in leadership decisions and responsibilities. The program also supports the community by providing a variety of learning tasks such as first aid, map reading, and the duties and responsibilities of American citizenship. It also offers technology awareness and hands-on training programs through leadership labs to develop workplace competency. By the conclusion of this course, students (cadets) will be able to demonstrate leadership proficiency to establish a sound communication claim through knowledge of required subjects and

perform in a competent manner in their leadership roles. Irvington High School students are given the option to elect to meet the Physical Education requirement for graduation through the JROTC program. Health requirements will either be met through integration in the JROTC curriculum, through Board approved outside providers, or through Health Education teachers at Irvington High School. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

JROTC IV

Grade 12

Duration: Full Year

Credit Hours: 5

Prerequisite: JROTC I, JROTC II, and JROTC III

The Junior Reserve Officers' Training Corps (JROTC) is designed to clearly establish necessary communication lines for this final preparation phase for real life such as: participating in leadership positions involving problem solving tasks to maintain unit standards, ensuring the development of evaluative decision making skills, reviewing of American Military History, exploring career opportunities that require school based learning, structuring organization for the exercise of command responsibilities and staff procedures. By the conclusion of this course students will be able to:

- *Have a command of necessary communication skills*
- *Use problem-solving skills in their decisions*
- *Evaluate and make career decisions*

Irvington High School students are given the option to elect to meet the Physical Education requirement for graduation through the JROTC program. Health requirements will either be met through integration in the JROTC curriculum, through Board approved outside providers, or through Health Education teachers at Irvington High School. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

ENGLISH LANGUAGE ARTS

English 9

Duration: Full Year

Credit Hours: 5

Prerequisite: Grade 8 English

Through the integrated New Jersey Student Learning Standards (NJSLS) in the Literacy curriculum of Reading, Writing, Speaking and Listening, and Language, students in English 9 perform a thorough regimen of English Language Arts (ELA) related tasks. In turn, these tasks lead to achievement of individualized, class and school level benchmarks on local, state and national (PARCC, PSAT) instruments of assessment in Language Arts. For 9th graders, this regimen includes beginning the construction of a multi-year portfolio demonstrating their best work in all four ELA standard areas. It also encompasses the review and advancement of grammatical concepts and skills already learned. This

course provides an introduction to the level of analysis and critical thinking that will provide a foundation that will enable students to rise and be challenged in subsequent high school course work, across all content areas. The English 9 regimen includes analysis of literary elements and the interpretation of numerous classic themes articulated across varied literary genres, within a broad panoply of American, British, and international literary selections that provide a rich multicultural experience. Student tasks include but are not limited to the integration of reading, writing, and thinking processes in creating, interpreting, and responding to the following: varied text types, genres, open-ended questions, picture and multimedia prompts, analytical essays, themes, reports, articles, fiction and nonfiction; all of which are produced for a variety of purposes and audiences. Literary selections may include but are not restricted to Romeo and Juliet, The Miracle Worker, Animal Farm, and The Diary of Anne Frank. The core instructional materials for the course is Houghton Mifflin Harcourt's Collections ©2015. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

English 10

Duration: Full Year

Credit Hours: 5

Prerequisite: Passed English 9

This course will follow the structural model established in the English 9 program but will provide more challenging integrated experiences with more advanced aspects of literary exploration and selections (e.g. stories, poetry, essays, drama, non-fiction, etc.) As begun in grade 9, the achievement of established benchmarks in all New Jersey Student Learning Standards (NJSLS) for ELA on local, state and national assessments will be pursued through a variety of tasks that include but are not limited to the following: debating; discussing; interviewing; evaluating; creating written and oral presentations; solving problems using media; constructing and responding to multiple choice questions; essays related to literary concepts; persuasive essay topics; and essays in response to picture and multimedia prompts. Students will be asked to demonstrate comprehension of increasingly difficult text types that are intended for a variety of purposes and audiences. Technical analysis and enhancement of language and works produced by both established authors as well as by other students will be a regular component of the curriculum. Students will be expected to utilize all elements of both creative (Writing 3.2 and Speaking 3.3) and interpretive (Reading 3.1, Listening 3.4, and Viewing and Media Literacy 3.5) processes. Instruction is provided to support students' success on upcoming local, state, and national assessments (PARCC, PSAT, and SAT). Core literary selections of this course may include but are not restricted to Julius Caesar, Lost Horizon, The Pearl, To Kill A Mockingbird, Lord of the Flies, and of Mice and Men. The core instructional materials for the course is Houghton Mifflin Harcourt's Collections ©2015. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

English 11

Duration: Full Year

Credit Hours: 5

Prerequisite: Passed English 10

This course follows the structure of English 9/10, calling for a student-produced portfolio of integrated New Jersey Student Learning Standards (NJSLS) in Literacy curriculum tasks that will prepare students for communicative success on local, state, and national assessments, and in the place of work or study beyond high school. A survey of American Literature will include an understanding and appreciation of literature that represents different historical periods in the growth of America, from colonial times to the present. Some exploration will lend itself to increased cross content connections and will demand varied forms of research and analysis that calls for comparison and contrast, persuasion, and the study of cause and effect. Reinforcement of the current ELA New Jersey Student Learning Standards (NJSLS) will be emphasized on a continual basis. In addition, skill enhancement will be provided via pictures and multimedia prompts. A variety of open ended questions will be given as regular assignments to ensure students' proficiency on such assessments as the HSPA. Supplemental texts to support required skills on these assessments will be utilized as needed. Students will also intensify their preparation for a battery of local, state, and national assessments (i.e. PARCC, PSAT, and SAT). Readings for this course can include the following selections: The Scarlet Letter, The Great Gatsby, Farewell to Arms, Death of a Salesman, and Hamlet. The core instructional materials for the course is Houghton Mifflin Harcourt's Collections ©2015. Additional readings and works should ensure multi-cultural inclusion, such as selections by Langston Hughes, Richard Wright (Native Son), and others. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

English 12

Duration: Full Year

Credit Hours: 5

Prerequisite: Passed English 11

Following the course structure and format maintained in English 9, 10, and 11, students will again produce a portfolio of integrated Language Arts related tasks that demonstrate mastery in all New Jersey Student Learning Standards (NJSLS) for ELA. The context of these tasks and activities is the study of literary selections of British Literature that demonstrate its history and development. Selections read and analyzed for this course include but are not restricted to Beowulf; The Canterbury Tales, Macbeth and Pygmalion. The core instructional materials for the course is Houghton Mifflin Harcourt's Collections ©2015. A brief overview of literature covered includes, but is not limited to, the following: Wuthering Heights, Their Eyes Were Watching God, Great Expectations, Amistad, Black Boy, The Elements of Style, and How to Prepare for the Advanced Placement Examination. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Honors English

Grades: 9-12

Duration: Full Year

Credit Hours: 5

Prerequisite: Must receive a B or above in previous English course

All students taking these courses will study the same curriculum as that designated in English 9, 10, 11, and 12. However, greater intensity and depth of analysis will be expected in studying the course selections; additional selections read will be characterized by greater difficulty and density of text; and

required assignments can be of a greater number and more stringent specifications. Students in honors courses will be expected to produce high quality work in a more rigorous and punctual manner. In addition to reading selections indicated in other core English courses, this group might read any number of challenging selections which might include Immigrant Voices: 24 Narratives on Becoming an American, The Sport of the Gods, Why We Can't Wait, and other international selections. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Advanced Placement (AP) English Literature and Composition

Grade: 12

Duration: Full Year

Credit Hours: 5

Prerequisite: ELA 11 or ELA Honors with a B or above

The Advanced Placement English Literature and Composition course is designed to represent college-level English studies. Instruction is focused on (1) acquiring critical and analytical reading skills necessary for comprehending college required literature, (2) acquiring a thorough understanding of the symbolism and meaning of literary elements and figurative language used in poetry and prose, (3) acquiring specialized, critical, analytical, and precise writing skills that are fundamental to writing tasks on the college level, (4) and acquiring specific analytical test-taking skills essential to dealing successfully with the questions on the A.P. English examination. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

African American Literature

Grades: 9-12

Duration: Semester (1/2 year)

Credit Hours: 2.5

Prerequisite: None

The objective of the African American Literature course is to introduce as well as enlighten students to the rich array of literary selections which span from the ancient African literary tradition to the contemporary African American experience. In addition to emphasizing close readings of the texts, the course will situate the literary works within their historical and cultural contexts. An understanding of literary terminology, writing, grammar, diction, and style aligned with the English Language Arts Common Core State Standards will be integrated into the course so that students will have read, comprehended, and critically analyzed a variety of materials and literary selections from this genre. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

American Ethnic Literature

Grades: 9-12

Duration: Semester (1/2 year)

Credit Hours: 2.5

Prerequisite: None

This course introduces a comprehensive view of American Ethnic Literature. All participants will have the opportunity to gain a better understanding and appreciation of culture, cultural values, and varying cultural perspectives/ Literary work written by authors of a variety of races, ethnicities, backgrounds, classes, and cultural perspectives include, but are not limited to, Caribbean, African, Native American, Latino, Middle Eastern/Southwestern Asian, and Asian American. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Creative Writing

Grades: 9-12

Duration: Semester (1/2 year)

Credit Hours: 2.5

Prerequisite: None

This course affords students with an opportunity to develop their literary talents. Students will analyze various forms of prose and poetry, gain experience with writing creatively in multiple genres, participate in online collaborative writing and sharing, and work through the entire writing process through intensive writing activities, group discussions, peer reviews, and revising and editing sessions. By the end of the course, students will publish a writing portfolio containing polished pieces that exemplify their hard work and creativity. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Expository Writing

Grades: 9-12

Duration: Semester (1/2 year)

Credit Hours: 2.5

Prerequisite: None

This course is designed to aid students in producing organized, well-developed, unified, and coherent expository prose. Emphasis is placed on the writing process and includes research analysis, topic selection, thesis support and development, editing and revision. Students will also be encouraged to make connections among multiple literary sources and utilize textual evidence throughout their piece. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

SAT and Test Prep

Grades: 10-12

Credit Hours: 2.5

Duration: Half Year

Prerequisite(s): None

SAT® Tutorials are built specifically for the Redesigned SAT (2016) with consideration of SAT's test specifications to provide students a more successful and less stressful preparation effort for key areas of the SAT exam.

SAT Math, Writing and Language, and Reading Tutorials offer targeted instruction, practice, and review. Students engage with the content in an interactive, feedback-rich environment as they progress through SAT test aligned modules. Students practice skills essential to the test they're preparing for and build the depth of knowledge, confidence, and higher order skills required to demonstrate mastery when put to the test.

In each module, the Learn It and Try It make complex ideas accessible to students through focused content, guided analysis, and practice with personalized feedback so students are empowered to increase their Exam Readiness. The Review offers an engaging and high impact video summary of key concepts and important to grasp connections. The Test It assesses students' mastery of the module's concepts, providing granular performance data to students and teachers, linking a student's performance to SAT content dimension descriptions. To help students focus on the content most relevant to them, unit-level pretests and posttests can quickly identify where students are ready for test day and where they still need to review and practice.

MATHEMATICS

Philosophy:

The conviction of the Mathematics Department is that one learns mathematics best through understanding, modeling, and reasoning. The students must be actively involved in the learning of mathematical concepts using quality problems that have real-life applications to stimulate their critical thinking skills. It is the belief of this department that an environment that allows students' active participation is essential and it remains important that students be significantly challenged every day. Students are encouraged to coordinate, collaborate, and communicate with their peers in every math classroom.

Algebra I

Grade: 9

Duration: Full Year

Credit hours: 5

Prerequisite: Grade 8 Mathematics (Credit is awarded to students who successfully complete Algebra I in 8th grade)

This course is designed to provide students with a rigorous outline that consists of the skills necessary to succeed in and to progress in the advanced study of mathematics. Algebra I places an emphasis on conceptual understanding of major, additional, and supporting standards. The course introduces students to variables, algebraic expressions, equations, functions, variation, graphical representations, and practical word problems. The course offers students the opportunity to develop their abilities to: explore and solve problems, think critically, work cooperatively with others, and communicate mathematical ideas clearly and fluently. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A:14-4.6

Algebra I Honors

Grade: 9

Duration: Full Year

Credit hours: 5

Prerequisite: Grade 8 Mathematics with a B average or above.

Algebra I Honors is offered to incoming freshmen that have demonstrated strong mathematical ability of the New Jersey Student Learning Standards (NJSLS). The goals and standards addressed are the same for both levels of Algebra I; however, the depth at which they are explored will vary based on the level of the course. In fact, the course offers students the opportunity to pursue algebraic concepts in greater depth and at a faster rate, using problem solving, technology, and manipulatives. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A:14-4.6

Discrete Mathematics

Grade: 9

Duration: Full Year

Credit hours: 5

Prerequisite: Student must be currently enrolled or have already taken Algebra 1 and/or 2

This course is designed for Algebra students who may undertake higher level mathematics courses in college. It will develop students' ability to reason deductively, communicate mathematical ideas fluently and make connections that will strengthen their foundation for mathematics. Students will be introduced to the following topics: Set theory, set operations, logic, graph analysis of functions, number theories, matrices, introduction to probability and statistics and possibly sequence and series. Students will make connections with several fundamental theories related in systems, engineering, design of radar and sonar

systems, traffic modeling, computer science, actuary, business, economics, general problem solving, critical thinking and more.

Geometry

Grades: 9-10

Duration: Full Year

Credit Hours: 5

Prerequisite: Algebra I

Geometry enables the student to develop a spatial sense and the skills necessary for clear and precise thinking by supplying a mathematical model to examine ideas concerning the physical world in a logical manner. Simple deductive proofs concerning the basic geometric elements are extended to include more complex relationships between geometric components. The students will also learn how to analyze patterns and geometric properties and solve mathematical and real world problems using geometric models. The study of Euclidean geometry will assist in preparing the student for further study in mathematics, science, and a variety of other fields. By the end of this course, students will be able to use inductive and deductive reasoning to solve problems and to present reasonable explanations of and justifications for their solutions. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Geometry Honors

Grades: 9-10

Duration: Full Year

Credit Hours: 5

Prerequisites: Algebra I with a B average or above.

Geometry Honors is available for students who are capable of moving at a rapid pace. This course covers all basic geometry and trigonometry topics plus additional topics such as vectors and trigonometric functions, in order to prepare students for advanced placement work. The student expands his/her ability to explore and solve problems mathematically, think critically, work cooperatively with others, and communicate mathematical ideas clearly. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14- 4.6.

Algebra II

Grades: 10 & 11

Duration: Full Year

Credit Hours: 5

Prerequisites: Algebra I and Geometry

Students enrolled in the Algebra II course will continue to apply and extend those skills learned in Algebra I and Geometry. Included in the curriculum are activities involving linear and quadratic equations, factoring, real and imaginary numbers, exponential and logarithmic functions, as well as analytic geometry and graphing. The students need to understand how quantities are related to one another and how algebra can be used to concisely express and analyze those relationships. The students will develop, explain, use and analyze procedures for operations on algebraic expressions. Instructional

strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6

Algebra II Honors

Grades: 10 or 11

Duration: Full Year

Credit Hours: 5

Prerequisites: Algebra I or Honors Algebra I and Geometry or Honors Geometry with a B average or above.

Algebra II Honors will continue to apply and extend the skills developed in Algebra I Honors and Geometry Honors. Linear and quadratic equations, factoring, real and imaginary numbers, exponential and logarithmic functions, analytical geometry and graphing are explored in greater depth. Students are challenged to increase their reasoning ability to solve more abstract problems and understand the foundational concepts of higher-level mathematics. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6

Pre-Calculus

Grades: 11 & 12

Duration: Full Year

Credit Hours: 5

Prerequisites: Algebra I or Honors Algebra I, Geometry or Honors Geometry, and Algebra II or Honors Algebra II

Pre-Calculus is designed for those students who have successfully completed Algebra I, Geometry, and Algebra II. Emphasis is placed on advanced concepts of Algebra, Trigonometry, Analytic Geometry, Functions, and a study of differential and integral calculus and polynomial functions. This course will provide challenging ideas and real-life problem-solving activities that stimulate reasoning and creativity. The students will further develop evaluative and intuitive decision-making skills. Group projects, class discussions, debates, journal writing, and media center research will be incorporated into the curriculum. Graphing calculators will be used extensively. By the end of this course, students will be able to use linear, quadratic, trigonometric, and exponential models to explain growth and change in the natural world. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6

Pre-Calculus Honors

Grades: 11 & 12

Duration: Full Year

Credit Hours: 5

Prerequisites: Algebra I or Honors Algebra I, Geometry or Honors Geometry, and Algebra II or Honors Algebra II with a B average or above.

Pre-Calculus Honors is designed for accelerated math students who have successfully completed honors courses in Algebra I, Geometry, and Algebra II. It is an in-depth study of the integration of Algebra, Trigonometry, Geometry, Functions, and study of differential and integral calculus of polynomial

functions. It is designed to challenge students who have demonstrated ability in applying abstract mathematical concepts. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6

Statistics

Grades: 11-12

Duration: Full Year

Credit Hours: 5

Prerequisites: Algebra II or Honors Algebra II, Pre-Calculus or Honors Pre-Calculus

This introductory statistics course is an elective that focuses on applied statistical techniques. The topics covered will include techniques and rules of probability, descriptive and inferential statistics, as well as how these concepts are used to describe, interpret models, predict events, make decisions, evaluate decisions, and justify conclusions. The course culminates with a 4-week extensive project utilizing concepts covered throughout the year. This course is excellent for students interested in business, social science, and mathematics. TI 83-84 graphing calculators will be used throughout the course. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6

Advanced Placement (AP) Statistics

Grades: 11-12

Duration: Full Year

Credit Hours: 5

Prerequisites: Algebra II or Honors Algebra II, Pre-Calculus or Honors Pre-Calculus, or Statistics with a B average or above.

This course is an introduction to probability and statistics engineered to offer techniques and applications that are useful in business, economics, psychology, engineering, social and biological sciences. Students who have completed Algebra 2 and who wish to pursue advanced mathematics with practical applications will be acquainted with the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The course will be divided into four broad conceptual themes: 1) exploring data, 2) sampling and experimentation, 3) anticipating patterns, and 4) statistical inference. Students who successfully complete this class and take the AP examination may potentially earn 3 to 4 college credits. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6

Calculus

Grade: 12

Duration: Full Year

Credit Hours: 5

Prerequisite: Pre-Calculus or Honors Pre-Calculus

This course is designed for students electing to take calculus without the advanced placement designation. Concepts covered include limits and continuity, derivatives with applications, and

integration with applications. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6

Advanced Placement (AP) Calculus AB

Grade: 12

Duration: Full Year

Credit Hours: 5

Prerequisite: Pre-Calculus or Honors Pre-Calculus with a B average or above.

AP Calculus AB is designed only for the most able students in mathematics who have successfully completed Algebra I, Geometry, Algebra II and Pre-Calculus. The course prepares students for the College Board Calculus AB Advanced Placement Exam. Topics include limits, derivatives of polynomial, trigonometric, exponential and logarithmic functions, and indefinite and definite integrals. Intellectual exploration, creative thinking, and an open exchange of ideas will be encouraged. All students in this class are required to take the AP exam for college credits. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6

Elective: Mathematics for Everyday Living (MEL):

Grade: 12

Prerequisite: This course is offered as a 4th year math course.

Description: The course provides students with an introduction to the basic knowledge necessary to make financially responsible decisions that are integral to everyday living. Students who successfully complete the Mathematics for Everyday Living course will be able to solve and understand practical and functional mathematics problems. The topics in this course include: Financial Planning, Banking, Savings and Investments, Insurance and Consumer Protection, Careers, and Decision Making Process.

PHYSICAL EDUCATION AND HEALTH

Physical Education and Health Grade 9

Duration: Full Year

Credit Hours: 5

Prerequisites: 8th grade Physical Education and Health

Physical Education 9 is required by the state of New Jersey for high school graduation. The students will receive 5 credits for three marking periods of physical education combined with 1 marking period of 9th grade health. During the three marking periods, the course will deal with the development of the skills and concepts of competition and sportsmanship. Higher-level concepts of game play and strategies will be introduced to students. This will be accomplished through the development of fundamental physical skills, knowledge of rules, teamwork, sportsmanship and fitness. Basic motor skills enhancement will play a major role in the course. Areas such as spatial awareness, locomotor skills, non-loco motor skills, hand eye coordination and foot eye coordination will be developed through student activity stressing large muscle group participation. Activities will include aerobics, badminton, basketball, fitness, floor hockey,

power walking, Project Adventure activities, soccer, softball, speedball, table tennis, team handball, track and field, volleyball, and weight training. Assessment areas will include student participation, physical skills, and written tests. Through written tests, language arts and mathematics will be integrated into this course. Instructional strategies may be modified based on the student's Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Health Education 9

Health Education 9 is required by the state of New Jersey for high school graduation. Based on one marking period, the course will focus on human sexuality and family living. The human sexuality portion of the course will include an in depth study of the topics of sexual anatomy, the reproduction process, pregnancy, and prenatal care. Also studied will be abstinence, birth control, ending a pregnancy, HIV/AIDS, and sexually transmitted diseases. Character development and responsibility are common threads which will be emphasized through all aspects of this course. The family living portion of the class will include dating, marriage, parenthood, family values, and social, moral and emotional implications that can occur over choices made regarding sexual behavior as a teenager. As per new State legislation, Cardiopulmonary Resuscitation (CPR) instruction will also be taking place in Grade 9 Health. All students will be able to identify proper resources that provide information, assistance, and care in addressing sexual and reproductive health issues. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Physical Education and Health Grade 10

Duration: Full Year

Credit Hours: 5

Prerequisite: 9th Grade Physical Education and Health

Physical education 10 is required by the state of New Jersey for high school graduation. The students will receive 5 credits for 3 marking periods of physical education combined with 1 marking period of 10th-grade health. During the three marking periods, the course will deal with the development of body control activities. Perceptual motor activities, coordination, balance, and flexibility will be taught in this course. Knowledge of rules, teamwork, sportsmanship and fitness will be incorporated into all student activities. Students will analyze and apply the movement concepts of biomechanics, physiology and kinesiology. Comprehensive instruction will take place in the following physical activities: aerobics, badminton, basketball, fitness, floor hockey, power walking, Project Adventure activities, soccer, softball, speedball, table tennis, team handball, track and field, volleyball, and weight training. Aerobic capacity and levels of fitness will be developed in each student along with the understanding of the benefits that can be derived from leading a healthy active lifestyle. Assessment areas will include student participation, physical skills, and written testing. Through written testing, language arts and mathematics will be integrated into this course. Physical Education 10 is offered as a four day a week option to accommodate students taking a complementary science lab. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Health Education 10

Health Education 10 is required by the state of New Jersey for high school graduation. Based on one marking period, the course will present essential and current information on drugs, alcohol, and tobacco abuse. The negative consequences of each will be stressed. All students will learn the physical, mental, emotional, and social effects that the use of alcohol, tobacco, and other drugs can create. Peer pressure, problem solving, critical thinking, and decision-making strategies will be stressed throughout this course. All students will be able to identify proper resources for providing information, assistance, and care in addressing dependency, addiction, and treatment options. A unit on Death & Dying and Fitness & Nutrition will also be taught during this course. Students will learn about the benefits of a healthy diet and how to create a meal plan. As per new State legislation, Cardiopulmonary Resuscitation (CPR) instruction will also be taking place in Grade 10 Health. Students will learn coping skills necessary to deal with issues concerning death and dying. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

PE Strength and Conditioning/Health 10

Credit Hours: 5

Prerequisites: Grade 9 Physical Education and Health

Physical Education 9-12 is required by the state of New Jersey for high school graduation. The students will receive 5 credits for three marking periods of physical education combined with 1 marking period of 9-12 health. Physical education unit program will include resistance training, cardiovascular conditioning, flexibility methods, group exercise, and plyometric/dynamic training. During the three marking periods, the course will deal with the development of the skills and concepts of training and etiquette. Higher-level concepts of training regiments will be introduced to students. This will be accomplished through the development of fundamental physical skills, knowledge of training methods, and fitness principles. Basic motor skills enhancement will play a major role in the course. Assessment areas will include student participation, physical skills/improvements, and quizzes. Through quizzes, language arts and mathematics will be integrated into this course. Instructional strategies may be modified based on the students Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Health Education 10 is required by the state of New Jersey for high school graduation. Based on one marking period, the course will focus on nutrition, anatomy, physiology, and motor learning. The nutrition portion of the course will include macronutrients, micronutrients, nutrient classifications, caloric intake, and dieting. The anatomy portion of the class will include identifying different muscles, bones, and connective tissues, and how these structures work together for movement and strength improvement. The physiology portion of the class will include identifying different systems in the body, such as endocrine, cardiac, nervous, and how these systems work together for adaptations to exercise and training. The motor learning portion of the class will include identifying automatic responses the body develops through repeated attempts of a skill over time. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Physical Education, Drivers Education, and Health 11

Duration: Full Year

Credit Hours: 5

Prerequisite: 10th Grade Physical Education and Health

Physical Education 11 is required by the state of New Jersey for high school graduation. The students will receive 5 credits for 3 marking periods of physical education combined with 1 marking period of 11th grade health (driver's education). During the three marking periods, this course will deal with the physical, social and emotional development of students' attitudes through participation in team, individual and dual sports. Floor skills including rhythmic and mimetic activities will be utilized by students to stimulate both fine motor and gross motor skill movement. The history of sports and the benefits of healthy competition will be introduced to the students. Activities will include: aerobics, badminton, basketball, fitness, floor hockey, power walking, Project Adventure activities, soccer, softball, speedball, table tennis, team handball, track and field, volleyball, and weight training. Participation in activities for a lifetime will be stressed. Aerobics capacity and levels of fitness will be developed in each student along with the understanding of the benefits that can be derived from leading a healthy and active lifestyle. Through written tests, language arts and mathematics will be integrated into this course. Physical Education 11 is offered as a four day a week option to accommodate students taking a complementary science lab. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Drivers Education

Based on one marking period, this course will provide students with the proper knowledge on becoming a licensed, safe driver on the roads and highways. Areas stressed in the course will include: the impact of emotions on driving and the problems associated with alcohol, and drugs. Students will be taught the implied consent law and the GDL (graduated driver's license) rules. Other topics will include the physical skills of driving, motor vehicle laws, map reading and responsible vehicle ownership. The course will be based on the premise that driving is a privilege, and NOT a right. The course will culminate with the students preparing for and taking the state written drivers' examination test. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Physical Education and Health 12

Duration: Full Year

Credit Hours: 5

Prerequisite: 11th Grade Physical Education, Driver Education, and Health

Physical Education 12 is required by the state of New Jersey for high school graduation. The students will receive 5 credits of physical education combined with 1 marking period of 12th grade health. During the three marking periods, this course provides activities that develop physical coordination, stamina, fitness, and agility. The students while competing in various activities will demonstrate positive social behavior. These activities will include: aerobics, badminton, basketball, fitness, floor hockey, power walking, Project Adventure activities, soccer, softball, speedball, table tennis, team handball, track and field, volleyball, and weight training. Preparing the student to be a productive member in society is a course objective. Models of fair play, sportsmanship and teamwork will be stressed. Aerobic capacity and levels

of fitness will be developed in each student, along with the understanding of the benefits that can be derived from leading a healthy, active lifestyle. Participation in activity for a lifetime will be stressed. Assessment areas will include student participation, physical skills, and written tests. Through written tests, language arts and mathematics will be integrated into this course. Physical Education 12 is offered as a four day a week option to accommodate students taking a complementary science lab. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14- 4.6.

Health Education 12

Health Education 12 is required by the state of New Jersey for high school graduation. Based on one marking period, this course deals with in-depth subject matter on relationships, social and emotional health, consumer health, and public health. Regarding relationships, the following areas will be addressed and discussed: decision-making, conflict resolution, family values, and social, moral, and emotional implications that can occur over choices made regarding sexual behavior. The topics of social and emotional health will address such areas as recognizing mental problems, caring for the mentally disabled, and suicide prevention. Students will attain a knowledge base for consumer and public health issues. As per new State legislation, Cardiopulmonary Resuscitation (CPR) instruction will also be taking place in Grade 12 Health. All students will be able to identify the proper resources for providing information, assistance, and care in addressing these topics. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6

PE Strength and Conditioning/Health 12

Credit Hours: 5

Prerequisites: Grade 11 Physical Education and Health 11 and Teacher Signature

Physical Education 9-12 is required by the state of New Jersey for high school graduation. The students will receive 5 credits for three marking periods of physical education combined with 1 marking period of 9-12 health. Physical education unit program will include planning, creating, and monitoring a fitness plan that includes resistance training, cardiovascular conditioning, flexibility methods, group exercise, and plyometric/dynamic training. During the three marking periods, the course will deal with the development of the skills and concepts of training and etiquette. Higher-level concepts of training regiments will be reintroduced to students. This will be accomplished through the development of fundamental physical skills, knowledge of training methods, and fitness principles. Motor skill enhancement through submaximal and maximal exercises will play a major role in the course. Assessment areas will include student participation, physical skills/improvements, and quizzes. Through quizzes, language arts and mathematics will be integrated into this course. Instructional strategies may be modified based on the students Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Health Education 12 is required by the state of New Jersey for high school graduation. Based on one marking period, the course will focus on nutrition, anatomy, physiology, and motor learning. The nutrition portion of the course will include the cellular impact macronutrients, micronutrients, nutrient classifications, caloric intake, and dieting have on performance, cell

growth, and recovery. The anatomy portion of the class will include identifying differing muscles, bones, and connective tissues, and how these structures work together for movement and strength improvement with connections to sleep, nutrition, recovery time, and exertion. The physiology portion of the class will include identifying different systems in the body, such as endocrine, cardiac, nervous, and how these systems work together for adaptations to exercise and training in different environments such as inclement weather, elevation, and using apparatus. The motor learning portion of the class will include identifying automatic responses the body develops through repeated attempts of a skill over time in a variety of different environments and while using apparatus. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Unified Physical Education/Health 12

Credit Hours: 5

Prerequisites: Grade 11 Physical Education and Health 11 and Teacher Signature

Based on four marking periods, this course is designed to provide physical education for selected students to aid classified scholars in the least restrictive environment. Classified students are assigned by Special Services in compliance with the Individual Education Plan (IEP) requirements. Students enrolled in this course will aid scholars enrolled in Adapted PE 9-12 with their motor skills, social skills, and understanding of tasks. Emphasis is placed on individual skill development. Concepts such as spatial awareness, fine and gross motor skills, rhythm, and hand-eye coordination will be stressed. Aerobic capacity and levels of fitness will be developed in each student along with a basic understanding of the benefits that can be derived from leading a healthy, active lifestyle. Activities that can be participated in for a lifetime will be introduced to all students. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Health Education 12 is required by the state of New Jersey for high school graduation. Based on one marking period, the course will focus on social-emotional health, college choices, vocational opportunities, finances, healthy relationships, family dynamics, workplace etiquette, and contributing member of one's community. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Adaptive Physical Education

Grades: 9-12

Duration: Full Year

Credit Hours: 5

Prerequisites: None

Based on four marking periods, this course is designed to provide physical education for selected students in the least restrictive environment. Students are assigned by Special Services in compliance with the Individual Education Plan (IEP) requirements. Emphasis is placed on individual skill development. Concepts such as spatial awareness, fine and gross motor skills, rhythm, and hand-eye coordination will be stressed. Aerobic capacity and levels of fitness will be developed in each student along with a basic

understanding of the benefits that can be derived from leading a healthy, active lifestyle. Activities that can be participated in for a lifetime will be introduced to all students. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

JUNIOR RESERVE OFFICERS TRAINING CORPS (JROTC)

JROTC I

Grades: 9-12

Duration: Full Year

Credit Hours: 5

Prerequisite: None

The Junior Reserve Officers' Training Corps (JROTC) is designed to prepare students (cadets) to demonstrate an understanding of the freedoms stated in the Bill of Rights, to foster creativity by displaying an understanding of the seven communication skills, and to demonstrate an integration of knowledge of the leadership traits, principles, and styles of being an effective leader. By the conclusion of this course, students (cadets) will be able to demonstrate knowledge of good citizenship, effective communication skills, and display leadership potential. Irvington High School students are given the option to elect to meet the Physical Education requirement for graduation through the JROTC program. Health requirements will either be met through integration in the JROTC curriculum, through Board approved outside providers, or through Health Education teachers at Irvington High School. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

JROTC II

Grades: 10-12

Duration: Full Year

Credit Hours: 5

Prerequisite: JROTC I

The Junior Reserve Officers' Training Corps (JROTC) is designed to stimulate reasoning in communication skills, problem solving of map reading assignments, and demonstrating an understanding of the traits, principles and styles of leadership. JROTC II is designed to also help students properly solve the tasks of a leadership position, provide real-life examples of situations using guest speakers and current events, supply topics that are in the news on drugs and drug abuse, perform satisfactorily at age group level in the President's Physical Fitness Program, and display an application of leadership. By the conclusion of this course, students (cadets) will be able to think logically, communicate effectively, maintain good health and appearance, implement knowledge of map reading skills, and display leadership potential as a member of a team. Irvington High School students are given the option to elect to meet the Physical Education requirement for graduation through the JROTC program. Health requirements will either be met through integration in the JROTC curriculum, through Board approved outside providers, or through Health Education teachers at Irvington High School. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

JROTC III

Grades: 11-12

Duration: Full Year

Credit Hours: 5

Prerequisite: JROTC I and JROTC II

The Junior Reserve Officers Training Corps (JROTC) is designed to enable students (cadets) to demonstrate proficiency in communication skills and display critical thinking in leadership decisions and responsibilities. The program also supports the community by providing a variety of learning tasks such as first aid, map reading, and the duties and responsibilities of American citizenship. It also offers technology awareness and hands-on training programs through leadership labs to develop workplace competency. By the conclusion of this course, students (cadets) will be able to demonstrate leadership proficiency to establish a sound communication claim through knowledge of required subjects and perform in a competent manner in their leadership roles. Irvington High School students are given the option to elect to meet the Physical Education requirement for graduation through the JROTC program. Health requirements will either be met through integration in the JROTC curriculum, through Board approved outside providers, or through Health Education teachers at Irvington High School. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

JROTC IV

Grade 12

Duration: Full Year

Credit Hours: 5

Prerequisite: JROTC I, JROTC II, and JROTC III

The Junior Reserve Officers' Training Corps (JROTC) is designed to clearly establish necessary communication lines for this final preparation phase for real life such as: participating in leadership positions involving problem solving tasks to maintain unit standards, ensuring the development of evaluative decision making skills, reviewing of American Military History, exploring career opportunities that require school based learning, structuring organization for the exercise of command responsibilities and staff procedures. By the conclusion of this course students will be able to:

- *Have a command of necessary communication skills*
- *Use problem-solving skills in their decisions*
- *Evaluate and make career decisions*

Irvington High School students are given the option to elect to meet the Physical Education requirement for graduation through the JROTC program. Health requirements will either be met through integration in the JROTC curriculum, through Board approved outside providers, or through Health Education teachers at Irvington High School. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

SCIENCE

Integrated Science

Grade: 9

Duration: Full Year

Credit Hours: 5

Prerequisite(s): None

Integrated Science is an inquiry and laboratory-based course that encompasses the multiple branches of science including biology, chemistry, physics, and the Earth sciences. Based on real-world scenarios, this course is designed to transition students to high school level coursework using relevant, engaging problems as the basis for learning. This course provides a foundation for other high school sciences by developing the skills necessary for lab work, engaging in problem-based learning, building necessary

skills in science literacy to construct explanations, and using mathematics for analyzing and interpreting data. This lab-based course may be used in part to meet NJ graduation requirements in science. Instructional strategies may be modified based on the student's Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Earth Systems and Space Science

Grade: 10-12

Duration: Full Year

Credit Hours: 5

Prerequisite(s): None

Earth Systems and Space Science is designed to explore Earth's natural systems and surface processes, natural resources, and change over time. Additionally, an introduction to Astronomy explores the origins of the universe and solar system, the Sun-Earth-Moon system, lives of stars, and the electromagnetic spectrum. Technology, coupled with critical thinking, laboratory experiences and problem solving activities will enable students to gain a better understanding of the relationship between the fundamental laws of nature with respect to Earth and its place in the solar system. This lab-based course may be used in part to meet NJ graduation requirements in science. Instructional strategies may be modified based on the student's Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Honors Earth Systems and Space Science

Grade 9-12

Duration: Full Year

Credit Hours: 5

Prerequisite(s): B or above average in their previous science course

This course addresses the same topics as the general Earth Systems and Space Science course but with more rigor and at an accelerated pace. Students in this course will be assigned an independent reading of *Hidden Figures* by Margot Lee Shetterly and will complete a unit on alternative energy and design. A supplemental field trip during the year provides an experiential learning experience that provides relevance for students to course concepts, an opportunity for real-world application, and reveals possible avenues for future study and careers in this field. This lab-based course may be used in part to meet NJ graduation requirements in science. Instructional strategies may be modified based on the student's Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Physics

Grade: 12 (Grade 11 at STEAM)

Duration: Full Year

Credit Hours: 5

Prerequisite(s): None

Physics provides a detailed study of matter, energy, space, time and the relationship between them. Connections are also developed between the analysis of motion and graphical analysis, collision problems and the solving of systems of equations. Students will be involved in problem-solving activities on an individual, small group and large group basis. Through this process the ability to read and understand problems, break them down into their component parts and then create and present solutions will be

developed. Laboratory sessions provide an opportunity for the application and discovery of physics principles. Students use mathematics and technology extensively in developing their understanding of the topic. Topics include the study of motion and forces, gravitation, energy, momentum, waves, electricity, magnetism, and light. This lab-based course may be used in part to meet NJ graduation requirements in science. Instructional strategies may be modified based on the student's Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Honors Physics

Grade 9-12

Duration: Full Year

Credit Hours: 5

Prerequisite(s): B average or above in their previous science course, Algebra 1

This course addresses the same topics as the general Physics course but with more rigor and at an accelerated pace. Independent reading and projects may be assigned. Students in the Honors course are expected to write lab reports and design investigations to solve problems. Students in this course will be assigned an independent reading of *Storm in a Teacup* by Helen Czerski. A supplemental field trip during the year provides an experiential learning experience that provides relevance for students to course concepts, an opportunity for real-world application, and reveals possible avenues for future study and careers in this field. Students recommended for this course are expected to be proficient in mathematics. This course is recommended for students considering taking Advanced Placement Physics '1'. This lab-based course may be used in part to meet NJ graduation requirements in science. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

AP Physics '1'

Grades: 10-12

Duration: Full Year

Credit Hours: 5

Prerequisite(s): Algebra I and Physics with a B average or above

The AP Physics 1 course is comparable to an introductory physics college level course and prepares students for taking the national AP Physics '1' exam. The course includes topics in both classical and modern physics. Topics include: Newtonian mechanics, mechanical waves and sound, electrostatics, DC circuits, simple harmonic motion, impulse, momentum, work and energy. Students in this course will be assigned an independent reading of *In Search of Schrödinger's Cat* by John Gribbin. A supplemental field trip during the year provides an experiential learning experience that provides relevance for students to course concepts, an opportunity for real-world application, and reveals possible avenues for future study and careers in this field. A thorough knowledge of algebra and basic trigonometry are necessary for success in this course. Laboratory sessions are comparable to those found in introductory physics college level laboratories. The AP exam is administered in late spring. Colleges and universities may use AP test results to award college credit for an introductory physics course. This course description has been adapted from the course description available at <http://apcentral.collegeboard.com>. This lab-based course may be used in part to meet NJ graduation requirements in science. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Biology**Grade: 10-12****Duration: Full Year****Credit Hours: 5****Prerequisite(s): none**

Biology is a mandatory course for meeting current graduation requirements. Through the study of biology, students will acquire a clear understanding and competency of key biological concepts and ideas, develop an awareness of the relevance of biology as an integral part of their everyday lives, foster a growing appreciation of biology, and develop proficiency in critical thinking and problem-solving. Topics of study include the molecular and cellular basis of life, cell structures and processes, ecology, reproduction and development, genetics, evolution, human influence on the climate, and the diversity of living organisms. This lab-based course may be used in part to meet NJ graduation requirements in science. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Honors Biology**Grade: 9-12****Duration: Full Year****Credit Hours: 5****Prerequisite(s): B average or above in their previous science course**

Biology is a mandatory course for meeting current graduation requirements. This course addresses the same topics as the general Biology course but with more rigor and at an accelerated pace. Students in the Honors course are expected to write lab reports and design investigations to solve problems. Students in this course will be assigned an independent reading of *The Serengeti Rules* by Sean B. Carroll. A supplemental field trip during the year provides an experiential learning experience that provides relevance for students to course concepts, an opportunity for real-world application, and reveals possible avenues for future study and careers in this field. This course is recommended for students considering pursuit of Advanced Placement Biology or Environmental Science. This lab-based course may be used in part to meet NJ graduation requirements in science. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

AP Biology**Grade 10-12****Credit Hours: 5****Duration: Full Year****Prerequisite(s): B average or above in Biology; Chemistry as pre- or corequisite**

The AP Biology course is an introductory college-level 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. Students in this course will be assigned an independent reading of *The Immortal Life of Henrietta Lacks* by Rebecca Skloot. A supplemental field trip during the year provides an experiential learning experience that provides relevance for students to course concepts, an opportunity for real-world

application, and reveals possible avenues for future study and careers in this field. The AP exam is administered in late spring. Colleges and universities may use AP test results to award college credit for an introductory biology course. This course description has been adapted from the course description available at <http://apcentral.collegeboard.com>. This lab-based course may be used in part to meet NJ graduation requirements in science. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Chemistry

Grades 12 (Grade 10 at STEAM)

Duration: Full Year

Credit Hours: 5

Prerequisite(s): None

Chemistry provides a detailed study of matter, its properties, the changes it undergoes, and the principles which govern these changes. Topics of study include: the periodic table of the elements, structure and properties of matter, energy, bonding and reactions, thermochemistry, and reaction rates. Laboratory sessions reinforce the qualitative and quantitative aspects of chemistry, affording students opportunities to develop analytical skills, use critical thinking skills, and learn problem-solving techniques. Students will be able to explain the relationship between the chemical and physical properties of elements and their placement on the periodic table. This lab-based course may be used in part to meet NJ graduation requirements in science. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Honors Chemistry

Grade 10-12

Duration: Full Year

Credit Hours: 5

Prerequisite(s): B average or above in their previous science course

This course addresses the same topics as the general Chemistry course but with more rigor and at an accelerated pace. Independent reading and projects may be assigned. Students in the Honors course are expected to write lab reports and design investigations to solve problems. Students in this course will be assigned an independent reading of *The Disappearing Spoon* by Sam Kean. A supplemental field trip during the year provides an experiential learning experience that provides relevance for students to course concepts, an opportunity for real-world application, and reveals possible avenues for future study and careers in this field. This course is recommended for students considering pursuit of Advanced Placement science courses. This lab-based course may be used in part to meet NJ graduation requirements in science. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

AP Chemistry

Grades 11-12

Duration: Full Year

Credit Hours: 5

Prerequisite(s): B average or above in Chemistry

The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore content such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. Students in this course will be assigned an independent reading of *Toxic Truth: A Scientist, A Doctor, and the Battle over Lead* by Lydia Denworth. A supplemental field trip during the year provides an experiential learning experience that provides relevance for students to course concepts, an opportunity for real-world application, and reveals possible avenues for future study and careers in this field. The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. The AP exam is administered in late spring. Colleges and universities may use AP test results to award college credit for an introductory chemistry course. This course description has been adapted from the course description available at <http://apcentral.collegeboard.com>. This lab-based course may be used in part to meet NJ graduation requirements in science. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Physical Science

Grades 10-11

Duration: Full Year

Credit Hours: 5

Prerequisite(s): None

This multidisciplinary course combines chemistry and physics to offer students an alternative to a full year of chemistry or physics into one course. Students will learn fundamental concepts from chemistry and physics based on the New Jersey State Learning Standards - Science. Topics include: forces and motion, electricity, chemical reactions, periodicity and properties of matter, and gases. This lab-based course may be used in part to meet NJ graduation requirements in science. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Forensic Science

Grades 12

Duration: Full Year

Credit Hours: 5

Prerequisite(s): C average or above in Biology and Chemistry/Physical Science

This multidisciplinary course uses biology, chemistry and physics in understanding forensic science investigations. The course exposes students to the various laboratory skills, techniques and methods commonly used during forensic investigations of crime scenes. It is designed around students solving crime scene scenarios through the use of several skills including, but not limited to, trace evidence analysis, including hair, sand, soil, and fiber comparison, fingerprint analysis, insect evidence, footprint and dental impressions, ballistics, serology, and blood spatter analysis. Students in this course will be assigned an independent reading of *Dead Men Do Tell Tales: The Strange and Fascinating Cases of a Forensic Anthropologist* by Michael Browning and William R. Maples. This lab-based course may be used in part to meet NJ graduation requirements in science. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Environmental Science

Grade: 10-12

Duration: Full Year

Credit Hours: 5

Prerequisite(s): none

Environmental Science is an interdisciplinary science that focuses on the complex and evolving relationship between humans and the environment. This integrated, inquiry-based curriculum consists of a series of cases relating to biocomplexity and climate change—designed around cases in urban, suburban/agricultural, tropical and polar systems, in which students address land use and resource use challenges increasingly confronted by society. Students gather evidence and marshal arguments in support of possible solutions. Content of this course was published by TERC, accessible at <https://www.terc.edu/>. This lab-based course may be used in part to meet NJ graduation requirements in science. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

AP Environmental Science

Grades 11-12

Duration: Full Year

Credit Hours: 5

Prerequisite(s): C average or above in Biology, Chemistry, and Algebra I

The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships within the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography. Students in this course will be assigned an independent reading of *Silent Spring* by Rachel Carson. A supplemental field trip during the year provides an experiential learning experience that provides relevance for students to course concepts, an opportunity for real-world application, and reveals possible avenues for future study and careers in this field. The AP exam is administered in late spring. Colleges and Universities may use AP test results to award college credit for an introductory science course. This course description has been adapted from the course description available at <http://apcentral.collegeboard.com>. This lab-based course may be used in part to meet NJ graduation requirements in science. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Climatology and Meteorology

Grades 10-12

Duration: Half year (one semester)

Credit Hours: 2.5

Prerequisite(s): None, although Earth Systems & Space Science is recommended as a prior or co-curricular course

Climatology and Meteorology is a course divided along these two lines of inquiry related to Earth systems. In meteorology, the focus is on the study of global patterns of wind and weather, weather basics, formation and distribution of severe weather events, surface circulation of oceans, and factors influencing deep-ocean circulation. In climatology, students examine fossil pollen, ice cores, deep-sea sediments, glacial sediments, and tree rings as evidence of climate change. Students also examine how Earth's orbital variations, plate tectonics, ocean current, and carbon-dioxide concentrations affect global climate. Students use local and global weather data, historical records, and models to make forecasts, websites, and write articles. Students taking this course would also have interest in data analysis, multimedia production, and technology. This elective course is not eligible to meet graduation requirements in science. Instructional strategies may be modified based on the student's Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Engineering I

Grades 10-12

Duration: Half year (one semester)

Credit Hours: 2.5

Prerequisite(s): None

Engineering I introduces students to the world of technology and engineering by using the engineering design process to engage students in a creative design project and using systems thinking to plan and propose a green building using computer-aided design (CAD). Students taking this course would also have interest in technology and design. This elective course is not eligible to meet graduation requirements in science. Instructional strategies may be modified based on the student's Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Engineering II

Grades: 10-12

Duration: Half year (one semester)

Credit Hours: 2.5

Prerequisite(s): Engineering I

Engineering II builds on the skills and concepts from Engineering I. Engineering II introduces the concept of reverse engineering and engages students using a "maker" approach while learning about vehicle design, light, and sound. Students taking this course would also have interest in technology and design. This elective course is not eligible to meet graduation requirements in science. Instructional strategies may be modified based on the student's Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Biomedical Science Pathway (STEAM ACADEMY ONLY)

Principles of Biomedical Science

Grade: 9

Duration: Full year

Credit Hours: 5

Prerequisite(s): None

Principles of Biomedical Science serves to provide foundational knowledge and skills in fields such as biology, anatomy & physiology, genetics, microbiology, and epidemiology as well as engage students in

how this content can be applied to realworld situations, cases, and problems. Through both individual and collaborative team activities, projects, and problems, students will tackle real-world challenges faced by biomedical professionals in the field. They will work with the same tools and equipment used in hospitals and labs as they engage in relevant hands-on work. Students will develop skill in technical documentation to represent and communicate experimental findings and solutions to problems. In addition, students will explore how connections to other disciplines such as computer science and engineering shape the future of medicine and practice collaboration techniques that will help them connect with professionals across any field. Instructional strategies may be modified based on the student's Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Human Body Systems

Grade: 10

Duration: Full year

Credit Hours: 5

Prerequisite(s): Principles of Biomedical Science

The Human Body Systems (HBS) course provides foundational knowledge and skills in anatomy and physiology, clinical medicine, and laboratory research. The course engages students in how this content can be applied to real-world situations, cases, and problems. The HBS course includes interviews, challenges, and testimonials from biomedical professionals in a variety of settings—clinical, research, and public health. Through both individual and collaborative team activities, projects, and problems, students tackle real-world challenges that biomedical professionals face in the field. Students work with the same tools and equipment used in hospitals and labs as they engage in relevant hands-on work. They explore BioDigital™ 3D interactive models, simulations, and assessments to visualize human anatomy and physiology. Students develop skill in technical documentation to represent and communicate experimental findings and solutions to problems, as well as skill in ethical reasoning and clinical empathy. Instructional strategies may be modified based on the student's Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Medical Interventions

Grade: 11

Duration: Full year

Credit Hours: 5

Prerequisite(s): Human Body Systems

Medical Interventions (MI) allows students to investigate the variety of interventions involved in the prevention, diagnosis, and treatment of disease as they follow the lives of a fictitious family. A “How-To” manual for maintaining overall health and homeostasis in the body, the course will explore how to prevent and fight infection, how to screen and evaluate the code in our DNA, how to prevent, diagnose, and treat cancer, and how to prevail when the organs of the body begin to fail. Through these scenarios students will be exposed to the wide range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. Each family case scenario will introduce multiple types of interventions, reinforce concepts learned in the previous two courses, and present new content. Interventions may range from simple diagnostic tests to treatment

of complex diseases and disorders. These interventions will be showcased across the generations of the family and will provide a look at the past, present, and future of biomedical science. Lifestyle choices and preventive measures are emphasized throughout the course as well as the important role that scientific thinking and engineering design play in the development of interventions of the future. Instructional strategies may be modified based on the student's Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Engineering Pathway (STEAM ACADEMY ONLY)

Introduction to Engineering Design

Grade: 9

Duration: Full year

Credit Hours: 5

Prerequisite(s): None

In Introduction to Engineering Design (IED), students explore engineering tools and apply a common approach to the solution of engineering problems, an engineering design process. Through both individual and collaborative team activities, projects, and problems, students apply systems thinking and consider various aspects of engineering design including material selection, human-centered design, manufacturability, assemblability and sustainability. Students develop skills in technical representation and documentation especially through 3D computer modeling using a Computer Aided Design (CAD) application. As part of the design process, students produce precise 3D-printed engineering prototypes using an additive manufacturing process. Student-developed testing protocols drive decision-making and iterative design improvements. To inform design and problem solutions addressed in IED, students apply computational methods to inform design by developing algorithms, performing statistical analyses, and developing mathematical models. Students build competency in professional engineering practices including project management, peer review, and environmental impact analysis as part of a collaborative design team. Ethical issues related to professional practice and product development are also presented. Instructional strategies may be modified based on the student's Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Principles of Engineering (POE)

Grade: 10

Duration: Full Year

Credit Hours: 5

Prerequisite(s): Introduction to Engineering and Design

In Principles of Engineering, students explore a broad range of engineering disciplines, careers, and design and solve real-world engineering problems. This course introduces students to engineering concepts that are applicable to a variety of engineering disciplines and empowers them to develop technical skills through the use of engineering tools such as 3-D modeling software, hands-on prototyping equipment, programming software, and robotics hardware to bring their solutions to life. Students apply the engineering design process to solve real-world problems across a breadth of engineering fields such as mechanical, robotics, infrastructure, environmental sustainability, and product design and development. Using an activity-, project-, problem-based (APB) instructional approach, students advance from

completing structured activities to solving open-ended projects and problems that provide opportunities to develop planning and technical documentation skills, as well as in-demand, transportable skills such as problem solving, critical thinking, collaboration, communication, and ethical reasoning. The last is particularly important as the course encourages students to consider the impacts of engineering decisions. Through individual and collaborative team activities, projects, and problems, students create solutions to problems as they practice common engineering design and development protocols, such as experimental design, testing, project management, and peer review. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Engineering Design

Grade: 10

Duration: Full Year

Credit Hours: 5

Prerequisite(s): Introduction to Engineering and Design

The Engineering Design course introduces students to engineering concepts that are applicable to a variety of engineering disciplines and empowers them to develop technical skills through the use of engineering tools such as 3-D modeling software, hands-on prototyping equipment, programming software, and robotics hardware to bring their solutions to life. Students apply the engineering design process to solve real-world problems across a breadth of engineering fields such as mechanical, robotics, infrastructure, environmental sustainability, and product design and development. This course challenges students to work in teams to solve complex design problems. Students research, design, develop, and communicate design solutions. Teams use engineering software to prepare and evaluate designs and make extensive use of 3D printing to prepare models for presentation to authentic audiences. The goal of the course is the application of the tools to address unique problems allowing the students to rapidly create and analyze proposed solutions. Siemens' software and hardware are tools frequently used by industry and understanding how these tools are used in problem solving is critical. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

SOCIAL STUDIES

Modern World History

Grade: 9

Credit Hours: 5

Duration: Full Year

Prerequisite(s): None

This course introduces students to the history of the modern world. Students will examine how the political, economic, and social changes of the last five centuries have affected people across the world. Prominent themes include growth and dynamics of empires, colonization and decolonization, technology and the development of a global economy, nationalism and revolutionary movements, the interplay of political, cultural, and religious values, and modern imperialism and its influence on global societies, economies, and political systems. The emphasis of this course is for students to understand the impact a person or event has had on history. Students should be able to apply lessons from the past to their

personal lives and to the modern world of today. In addition to studying historical ideas, students learn various ways of thinking, reading, and writing skills such as applying the historical inquiry method, determining the point of view and bias in primary and secondary sources, and understanding the political spectrum. Knowledge and application of the research process is emphasized through writing assignments, research papers, and oral presentations. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6

Modern World History Honors

Grade: 9

Credit Hours: 5

Duration: Full Year

Prerequisite(s): Grade B or higher in 8th grade Social Studies

This course introduces students to the history of the modern world. Students will examine how the political, economic, and social changes of the last five centuries have affected people across the world. Prominent themes include growth and dynamics of empires, colonization and decolonization, technology and the development of a global economy, nationalism and revolutionary movements, the interplay of political, cultural, and religious values, and modern imperialism and its influence on global societies, economies, and political systems. The emphasis of this course is for students to understand the impact a person or event has had on history. Students should be able to apply lessons from the past to their personal lives and to the modern world of today. In addition to studying historical ideas, students learn various ways of thinking, reading, and writing skills such as applying the historical inquiry method, determining the point of view and bias in primary and secondary sources, and understanding the political spectrum. Knowledge and application of the research process is emphasized through writing assignments, research papers, and oral presentations. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6

Advancement Placement (AP) Modern World History

Grade: 9

Credit Hours: 5

Duration: Full Year

Prerequisite(s): Grade B+ or higher in 8th grade Social Studies

This course introduces students to the history of the modern world. Students will examine how the political, economic, and social changes of the last five centuries have affected people across the world. Prominent themes include growth and dynamics of empires, colonization and decolonization, technology and the development of a global economy, nationalism and revolutionary movements, the interplay of political, cultural, and religious values, and modern imperialism and its influence on global societies, economies, and political systems. The emphasis of this course is for students to understand the impact a person or event has had on history. Students should be able to apply lessons from the past to their personal lives and to the modern world of today. In addition to studying historical ideas, students learn

various ways of thinking, reading, and writing skills such as applying the historical inquiry method, determining the point of view and bias in primary and secondary sources, and understanding the political spectrum. Knowledge and application of the research process is emphasized through writing assignments, research papers, and oral presentations. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6

United States History I

Grade: 10-11

Credit Hours: 5

Duration: Full Year

Prerequisite (s): Modern World History or Modern World History Honors or AP Modern World History with a B average or above.

This course spans the historical background and development of American society extending from Colonial times to the emergence of the United States as a world leader. Unit themes are dealt with critically which include the Colonial Period, American Revolution, the Growth of Democracy, Nationalism, The Westward Movement, Slavery and Politics, the Civil War and Reconstruction, Pre-Twentieth Century Foreign Affairs, and the Emergence of Modern America. Students will become proficient in understanding graphs and charts, and writing critical essays. By the conclusion of this course, students will be able to critically assess the progress of the United States and evaluate the technological changes that made it a world power. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

United States History I Honors

Grades: 10-11

Credit Hours: 5

Duration: Full Year

Prerequisite(s): Modern World History, Modern World History Honors or AP Modern World History or Modern World History Honors with a B average or above.

This course spans the historical background and development of American society extending from Colonial times to the emergence of the United States as a world leader. Unit themes are dealt with critically which include the Colonial Period, American Revolution, the Growth of Democracy, Nationalism, The Westward Movement, Slavery and Politics, the Civil War and Reconstruction, Pre-Twentieth Century Foreign Affairs, and the Emergence of Modern America. Students will interpret graphs, charts, and write essays to emphasize details that support the main ideas, analyzing concepts, and solving problems. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

United States History II

Grades: 11-12

Credit Hours: 5

Duration: Full Year

Prerequisite(s): Modern World History and U.S. History I

This course emphasizes the economic, political and social development of the United States during the twentieth century. Unit themes include World War I, Post-war Domestic Period-1920's, and American Foreign Policy between the Two World Wars, the Stock Market Crash/Depression, the New Deal, World War II, and recent developments since World War II both domestically and internationally. Students will evaluate policies and programs related to the use of resources locally and globally, and perform tasks such as debating issues, writing critical essays, and responding to open-ended questions. At the conclusion of this course, students will be able to locate, access, organize, and apply information in order to evaluate all aspects of the development of this country during this century. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6

United States History II Honors

Grades: 11-12

Credit Hours: 5

Duration: Full Year

Prerequisite(s): Modern World History, Modern World History Honors, AP Modern World History and U.S. History I or U.S. History I Honors with a B average or above.

This course emphasizes the economic, political, and social development of the United States during the twentieth century. Unit themes include World War I, Post-War Domestic Period- 1920s, and American Foreign Policy between the Two World Wars, the Stock Market Crash/Depression, the New Deal, World War II, and recent developments since World War II both domestically and internationally. Students will evaluate policies and programs related to the use of resources locally and globally, and perform tasks such as peer teaching, writing essays, and responding to open-ended questions. By the conclusion of this course, students will be able to comprehend persuasive/argumentative text, differentiate facts from opinions, and identify details that support the main idea of a text or passage. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6

Advanced Placement (AP) United States History

Grades: 12

Credit Hours: 5

Duration: Full Year

Prerequisite(s):

Modern World History, Modern World History Honors, or AP Modern World History Honors,

U.S. History I or U.S. History I Honors,

U.S. History II or U.S. History II Honors, Must have a B average or above in previous History Course

The A.P. United States History course is designed to give excellent students a broad understanding of events, people, and issues as they relate to the economic, political and social development of the United States from colonial times to the present. An emphasis is placed on the development of analytical skills and factual knowledge, which is necessary to deal critically with the problems and events in US History.

The rigorous course of study is to prepare students for intermediate and advanced college courses. To achieve the goals of the A.P. US History course, students will learn to assess historical artifacts, such as primary sources and supplement readings in order to understand their relevance, eligibility, and significance to a given interpretive problem. The A.P. students will be given the opportunity to exhibit their level of achievement when they take the A.P. exam in U.S. History. The test will measure their ability to identify main ideas, understand historical context and utilize primary sources in the creation of a historiography based on a developed thesis expressed in a persuasive essay. Students that excel on the test will be rewarded with academic recognition and college credits in the subject area of U.S. History. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6

African American History

Grades: 11-12

Credit Hours: 5

Duration: Full Year Elective

Prerequisite (s): US History I (Honors) and US History II (Honors)

This course spans the historical, social, and cultural developments of African Americans from their African origin and heritage to the present. Emphasis is placed on the thoughts, feelings, and ideals of African Americans as expressed in their literature, folklore, and speeches. Students will be provided with a balanced treatment of materials, which truly reflect the African American experience. Students will perform tasks such as peer and group teaching, and class presentations. By the conclusion of this course, students will be able to evaluate the actions of individuals and groups in order to counteract incidents of prejudice, discrimination, expulsion, genocide, and slavery. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Psychology

Grades: 11-12

Grade Hours: 5

Duration: Full Year Elective

Prerequisite(s): None

This elective course emphasizes the study of behavior. Unit themes include the study of psychology, the brain and behavior, the senses, conditioning and learning, memory, language development, intelligence, emotions, personality, human development, stress, psychological disorders, therapeutic interventions, and social psychotherapy. Students will become proficient in understanding graphs and charts. Students will also perform tasks such as debating issues, writing critical essays, and responding to open-ended questions. At the conclusion of this course, students will be able to: explain the development of psychology, discuss the contributions of the founders of modern psychology, recognize common problems faced by students, and examine the principles of learning and apply them to life situations. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14- 4.6.

Advanced Placement (AP) Psychology

Grades: 11-12

Credit Hours: 5

Duration: Full Year

Prerequisite(s): B average or above in Psychology

The AP Program offers a course and exam in psychology to qualified students who wish to complete studies in secondary school equivalent to an introductory college course in psychology. The rigorous course of study prepares students for intermediate and advanced college courses. The purpose of the AP Psychology course is to introduce students to the systematic and scientific study of behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. The A.P. students will be given the opportunity to exhibit their level of achievement when they take the A.P. exam. Students that excel on the test will be rewarded with academic recognition and college credits in the subject area of Psychology. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6

Introduction to Sociology

Grades: 11-12

Duration: Half Year

Credit Hours: 2.5 Elective

Prerequisite(s): None

Sociology is an elective course that studies human society and social behavior. It will teach students to look at life in a scientific, systematic way. The course will deal with the social atmosphere that helps to make us who we are and how we behave. Major theoretical perspectives and concepts will be presented, including sociological imagination, culture, deviance, inequality, social change, and social structure. Students will also explore the influence of social class and group dynamics on social institutions, such as churches, family, healthcare, education, government, economy, and environment. The key component of this course is for students to study and learn more about themselves and about the society that influences their behavior. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Social Issues

Grades: 11-12

Duration: Half Year

Credit Hours: 2.5 Elective

Prerequisite(s): None

This elective, Social Issues, will focus on the study of nature, scope, causes, effects, alternatives and solutions to some of the major problems in society, such as poverty, crime, health, population, the environment, economics, politics, technology, bias, equity and cultural patterns. Students are encouraged to examine these issues and reach independent conclusions. Using various media sources, class discussions will focus on protecting or enhancing the quality of life as globalization moves forward. All social issues of the United States will be critiqued and analyzed from a global perspective. Instructional strategies may be modified based on students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Financial Literacy (Required for Graduation)**Grades: 11-12****Duration: Half Year****Credit Hours: 2.5 Elective****Prerequisite(s): Must be in 11th or 12th grade, as course is a graduation requirement**

This required course will familiarize students with various real world skills that are important for their success as contributing citizens in a competitive, rapidly changing, global world. Units are designed to offer authentic learning experiences to help students become smart and informed consumers capable of independently managing their own personal finances. Topics such as credit and debit, budget planning, saving and investing, as well as personal financial decisions will be covered. Instructional strategies may be modified based on students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Advanced Placement (AP) African American Studies**Grades: 11-12****Duration: Full Year****Credit Hours: 5****Prerequisite(s): B+ or higher in Social Studies courses.**

This course offers an interdisciplinary introduction to important historical, social, cultural, political, economic, and humanity issues concerning people of African descent in the United States. Participants will examine the cultural and historical experiences of African Americans from the early African Kingdoms to the current Black Lives Matter Movement; and beyond. This course will promote critical thinking, discussion, and vital writing, research, and communication skills about the intersectionality of race, gender economics, politics, education, and the humanities that shape individual and group dynamics, American identity, and culture. Overall, this course will provide students with a comprehensive and enriching academic experience that promises to be challenging, stimulating, and transformational by bringing Black History to life.

VISUAL AND PERFORMING ARTS

MUSIC COURSE OFFERINGS FOLLOWING OLD MUSIC STANDARDS	NEW HIGH SCHOOL COURSE OFFERINGS FOLLOWING NEW TIERED MUSIC STANDARDS -NEW JERSEY STATE LEARNING STANDARDS (NJSLS 2020)		
Course Title	New Course Title	Rationale	Prerequisite
Instrumental I: Wind	Beginning Brass & Winds	Combine Brass and Wind Class, as skills are similar.	None. Any Student make take course to learn a wind instrument.
Instrumental I: Brass	Freshman Band	Students matriculating from 8th grade know more than beginners, but still lack higher ordered skills of advanced band classes.	Matriculate from 8th Grade band class into Freshman Band. (Incoming Freshman may test into Concert Band if advanced musician)
Instrumental I: Percussion	Percussion I	Tiered Level course for largest demand class.	None. Any Student make take course to learn drums.
Instrumental Music II	Percussion II	Tiered Level course for largest demand class.	Percussion I
Band/Concert	Concert Band	A second Tier Band for Intermediate Level Students.	Prior completion of Beginning Brass & Winds or Percussion courses or Freshman Band for 10th - 11th - 12th Grade.
Band/Concert	HONORS Concert Band	Top Tier Band for Irvington's BEST Musicians. Honors level credit is earned towards graduation.	11th - 12th Grade students whom have completed Concert Band with a B or higher. Audition with Director and Music Faculty.
Piano I	Piano I	Tiered Level course.	None. Any Student make take course to learn piano.
Piano II	Piano II	Second Tier course for Intermediate/Advanced Students.	Piano I OR test into Piano II
Exploring Music	Digital Music Composition	21st century music composition and music production course.	N/A
Chorus	Chorus	Open to all 9-12 students.	N/A
Chorus	HONORS Choir	Top Tier Choir for Irvington's BEST Musicians. Honors level credit is earned towards graduation.	For 10th - 12th Grade students whom have completed Chorus with a B or higher. Audition with Director and Music Faculty.
Music Theatre	Music Theatre	Top Tier Performing Arts class that perform school musicals or school play performances.	For 10th - 12th Grade students whom have completed Chorus with a B or higher. Audition with Director and Music Faculty.
Music Theatre	Music Theatre II	Top Tier performing arts class that perform school musicals or school play performances.	For 11th - 12th Grade students whom have completed Chorus with a B or higher. Audition with Director and Music Faculty.

Music Department

Beginning and advanced students have the opportunity to perform in instrumental and choral groups as well as solo performances. The music talented program is a continuation of the middle school magnet program and is offered in grades 9-12. Music courses are designed to enhance students' abilities beyond high school.

Visual Arts Department

Courses introduce students to the foundations of visual arts at the high school level. The art talented program is a continuation of the middle school art talented program. Advanced courses are offered that enhance students' abilities for career placement beyond high school. Students entering grade 9 after September 2004 must obtain a total of 5 credits in the visual/performing arts.

Arts I

Grades: 9-12

Credit Hours: 5

Duration: Full Year (No Prerequisites Needed)

This introductory art course teaches the basics of two-dimensional design. This course includes projects in: drawing and painting. Students will have the opportunity to experiment in various media, such as pastels, ink, crayons, charcoal, and tempera paint. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Crafts I

Grades: 9-12

Credit Hours 5

Duration: Full Year (No Prerequisites Needed)

This introductory crafts course is designed to teach activities that involve the creative design and construction of objects for practical or decorative use, as well as the creative use of materials in many ways, such as weaving and paper mache'. The final assignment will consist of the completion of one major project of the student's choice, guided by the art instructor. Community school projects, such as the annual library art show, are encouraged. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Crafts II

Grades: 10-12

Credit Hours: 5

Duration: Full Year

Prerequisite(s): Craft I and Teacher Recommendation in February

This course will use many of the materials used in Crafts I, but will apply their use in a more advanced way. Students will create a 3D project that will have a utilitarian as well as an artistic use. Some of the projects and materials include bookmaking, weaving, pillows, multicultural 3-D reliefs, puppets, leather, mylar, feathers, beads, trimmings, tiles, bamboo, plastics, paint, glass, stain, varnishes, dolls, pottery, sculpture, jewelry, painting on cloth, architecture, clay, wood, and fabric. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Arts II

Grades: 10-12

Credit Hours: 5

Duration: Full Year

Prerequisite(s): Art I and Teacher Recommendation in February

This more advanced course for high school art focuses on commercial and industrial design for the consumer. This class teaches watercolor painting, airbrushing, and 3D Designs. The final assignment will consist of the completion of one major project of the student's choice, guided by the art instructor. Community school projects, such as the annual library art show, are encouraged. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Fashion Design

Grades 11-12 (Elective)

Credit Hours: 5

Duration: Full Year

Prerequisite(s): Arts I, II; Crafts I; or Teacher Recommendation in February

Course Description:

This course provides a fundamental working knowledge of the varied aspects of fashion design and prepares students for future studies in more specialized topics within the subject area. Students will increase their awareness of the overall environment and function of the fashion industry as well as observe its contributions to society. This course also covers the basics of sewing, textiles, human anatomy, clothing design, and fashion illustration. Students will create a portfolio that will aid them in pursuing fashion as a career objective. Field trips are taken to clothing exhibitions at museums, galleries, and stores. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Cartoon and Animation (One Section)

Grades: 10-12

Credit Hours: 5

Duration: Full Year

Prerequisite(s): Art I, Crafts I

Students learn to draw for cartooning and animation by developing skills through quick gestural action analysis as well as traditional figure drawing techniques; creation of character interaction, backgrounds, layouts, story lines, staging, and theatrics is emphasized.

In addition, the understanding of continuity in storytelling and character development is emphasized through the correlation of color, lighting, media, music, and cultural influences. Students will keep a sketchbook/journal, and add images using computer drawings using animation software. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Photography 11-12**Grades: 11-12****Credit Hours: 5****Duration: Full Year****Prerequisite(s): Arts I, II; Crafts I; or Teacher Recommendation in February**

This course emphasizes refining technical skills and producing artistic projects through the use of the camera. Computer-driven digital cameras are used and studied in this course. Activities include the study of the history of photography, the physical makeup of the camera, lighting, choosing subject matter, film, and computer-aided image alteration for the digital camera. Other activities in the sketchbook will be maintained. Class trips are taken to expose students to sculpture in the environment. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

Artistically Talented Visual Arts**Grades: 9-10; 11-12****Credit Hours: 5****Duration: Full Year****Prerequisite(s): Art Magnet -Teacher Recommendation and Portfolio Review / GPA 2.8 or Higher**
Elective

This course can be taught individually 9th and 10th or 11th and 12th, separately or combined levels, depending on the visual arts teacher's availability and capacity of students signing up for the class. The more serious art student should be considered for this course. Students will learn advanced drawing composition, shading, and the various coloring methods. Weekly sketching homework assignments are given, and sketchbooks are encouraged. Drawing, painting, sculpture, crafts, commercial art, computers, and photography are among the subjects taught. Math and language arts are incorporated into lessons. College and career choices are explored through various art schools in the area. Portfolio requirements are begun and developed individually to prepare students. This course includes field trips and rigorous art projects geared toward college and career-ready portfolios. Instructional strategies may be modified based on the students' Individual Education Plan (IEP), as per N.J.A.C.6A: 14-4.6.

Desktop Publishing Computer Aided Visual Arts (Not Being Offered in 2025-2026)**Grades: 10-12 (Elective)****Credit Hours: 5****Duration: Full Year**

Prerequisite(s): Art I and One Year Computers logos, letterheads, resumes, a page for publication, and color-correct photos. Among the various projects produced in this course, students will create brochures and original art, among numerous other projects. Additionally, they will learn how Macintosh computers operate and how to create, organize, and save files. Upon completing college-ready portfolios, students will have an understanding of the graphic arts requirements and available careers. Instructional strategies may be modified based on the students' Individual Education Plan (IEP), as per N.J.A.C.6A: 14-4.6.

Exploring Music (Not Being Offered in 2025-2026)**Grades: 6-8 (Moved to the Middle School Level as per NJSL New Standards)****Grades: 9-12 (Elective)****Credit Hours: 5****Duration: Full Year****Prerequisite(s): None, For Vocal I Students**

The Exploring Music 9–12 course is designed to help students develop an appreciation of music. A prerequisite to this course is not required. Students enrolled will examine the Western world styles of great musical works and composers. Students will also explore the historical development, musical style, and societal influence in relationship with the humanities. This music appreciation course is designed to develop listening and critical thinking skills, with an emphasis on the introduction of the styles and literature of cultural influences. Many types of music will be explored throughout the entire school year. Students will be taught methods of making educated decisions on how to embrace a myriad of musical selections and perhaps acquire a love of the arts. Students are not required to perform in a formal concert performance. Students will demonstrate understanding and application of expressive qualities in a varied repertoire of music through prepared and improvised performances. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Beginner Brass & Winds (Former Instrumental Music I)**Grades: 9-12 (Elective)****Credit Hours: 5****Duration: Full Year****Prerequisite(s): None, Percussion Maximum 12; Winds Maximum 20**

Students who elect to take this class must be a member or will consider membership of the marching and concert band. Beginner Brass & Winds (former Instrumental Music I) is considered to be a beginner's class for students who desire to play a band instrument for the first time in high school. Although this is a beginner's level course, students who have not played since 4th and 5th grade and have not played since then will need this experience. Students who take this course will learn instruments of the band such as flute, clarinet, saxophone, trumpet, trombone, tuba and percussion. One instrument must be chosen upon entering the first day of the course in September. Students will learn using a method book #1, and will learn key notations, key signatures, and proper techniques of playing and music theory appropriate to the NJ core curriculum content standards for visual and performing arts and other subjects. It is expected that students will perform in a large ensemble and join the concert and marching band. Students who will not join concert and marching band should not choose to take this course. All music subjects taught in this class should result in playing in a large or small group. The biggest test of an instrumentalist is his or her ability to play with other musicians. Band instruments are not solo instruments without accompaniment. Commitment to playing in a large group must be made. Students who play band instruments in either I or II class must commit to play in the marching band, concert band and are eligible to join the jazz band upon the decision of the instructor. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Freshman Band (Formally) Instrumental Music II - 1 Section Only**Grades: 10-12 (Elective)****Credit Hours: 5****Duration: Full Year****Prerequisite(s): (Former Instrumental Music I, II & Beginner Brass & Winds Audition, Approval by Instructor/Band Director)**

Students who elect to take this class must be a member or will consider membership of the marching and concert band. This course is a continuance of Instrumental Music I. A student entering Instrumental Music II should have either Instrumental Music I as a prerequisite or previous band instrument experience. Students will learn using a method book #2 and will learn notation, key signatures, and proper techniques of playing and music theory appropriate to the NJ core curriculum content standards for visual and performing arts and other subjects. It is expected that students will perform in a large ensemble and join the concert and marching band. Students who will not join the concert and marching band should not choose to take this course. All music subjects taught in this class should result in playing in a large or small group. The biggest test of an instrumentalist is his or her ability to play with other musicians. Band instruments are not solo instruments without accompaniment. A commitment to playing in a large group must be made. Students who play band instruments in either I or II class must commit to playing in the marching band, concert band and are eligible to join the jazz band upon the decision of the instructor. Players who complete Instrumental Music I will be eligible to sign into Instrumental Music II. Students will be assessed by performance participation and written exams at certain intervals during the school year. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

HONORS Concert Band/Marching Band – 1 Section Only

Grades: 9-12 (Elective)

Credit Hours: 5

Duration: Full Year

Prerequisite(s): (Former Instrumental Music I, II & Beginner Brass & Winds, Concert Band, Audition, Music Experience, Approval by Instructor/Band Director)

This class is the culminating class of all students who study a band instrument prior to and during high school. Students who elect to take this class must be a member of the marching and concert bands. (This is the policy of the Irvington High School Music Department). Students who enroll in this class must have previous experience playing a band instrument and they must commit themselves to playing in the marching band during football season and then the concert band after the last football game in November. During the spring, instrumentalists must participate in parades including the Memorial Day Parade. Though this course is primarily a performing organization, written tests, midterms, and final exams will be given in music theory and music history. Students will analyze aurally and/or by reading the elements of music (including form) of musical works, relating them to style, mood, and context, and describing how the analysis provides models for personal growth as a composer, performer, and/or listener. Students will continue to develop, justify, and defend interpretations of varied works, demonstrating an understanding of the composer's intent by citing the use of elements of music (including form), compositional techniques, and the style/genre and context of each work. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Chorus - 3 Sections

Grades: 9-12 (Elective)

Credit Hours: 5

Duration: Full Year

Prerequisite(s): None

This introductory music course offers instruction in the basic techniques of choral singing. Students will develop excellent unison singing skills and will gain some experience singing in parts. Students will develop their musical ear through listening exercises and will learn and develop some of the music reading skills required for choral singing. Students will discuss their aesthetic awareness of music, the historical periods of music along with contributing composers and artists, analyze band and orchestral instruments, and compare and contrast the above. Students will be required to take written exams of the content taught in this class as well as participate in live performances. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

HONORS Chorus - 1 Section**Grades: 9-12 (Elective)****Credit Hours: 5****Duration: Full Year****Prerequisite(s): None**

This is an intensive music course which offers instruction in the advanced techniques of choral singing. Students will continue to refine and develop excellent unison singing skills and will gain additional experience singing in parts. Students will continue to develop their musical ear through listening exercises and will learn and excel with some of the music reading skills required for choral singing. Students will continue to extend their discussion regarding their aesthetic awareness of music, the historical periods of music along with contributing composers and artists, analyze band and orchestral instruments, and compare and contrast the above. Students will be required to take written exams of the content taught in this class as well as participate in several live performances. Student achievement at this level is indisputably rigorous and substantially expands students' knowledge, skills, and understandings beyond the expectations articulated for accomplished achievement. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Piano Class I (3 Sections)**Grades: 9-12 (Elective)****Credit Hours: 5****Duration: Full Year****Prerequisite(s): None/ or Music Teacher Recommendation**

This Course is for students who desire to learn the art of music making through piano. The class is very limited in size due to the limited availability of equipment and location of the classroom. Students will be learning the basics of music theory through performance. This class focuses on beginning to intermediate piano literature. Assessment for this course will be based on piano performances and recitals. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6 (recommended change).

Piano Class II**Grades: 9-12 (Elective)****Credit Hours: 5****Duration: Full Year****Prerequisite(s): B+ or Higher Average from Piano I, By Approval of Instructor/Music Teacher by February**

This course is for students who either have taken Piano I, or have studied Piano independently (i.e. private lessons). This class focuses on Intermediate to Advanced piano literature. Assessment for this course will be based on piano performances and recitals. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6 (recommended change).

Music Theatre (Two Sections)**Grades: 9-12 (Elective)****Credit Hours: 5****Duration: Full Year****Prerequisite(s): MUST be nominated by a Previous Teacher in Middle School or the High School Teacher by February.**

The course is an extension to the music program taught in the middle school, beginning in 5th grade and ending in the 8th grade. Students in middle school sing, dance, and participate in theatrical and musical activities. A higher level of music theory and music history is included in this advanced course. Assessment for this course is performance based as well as written exams on music theory and history. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Dance I - Ballet / Modern (New) 2025-2026**Grades: 9-10****Credit Hours: 2.5****Duration: Half Year****Prerequisite(s): None****Pairing: Dance I -Ballet is Paired with Dance I- Hip-Hop Half-Year Course**

This is an introductory study of ballet technique with a focus on the exploration and understanding of body alignment. This Dance Appreciation I Half-Year class will allow students to experience classical and contemporary ballet technique, choreography, and history through floor, center, and barre work as well as movement analysis. Students in the Half-Year Dance I Ballet will experience two cycles of theory and performance instruction. also be given experience in the process of creating original choreography. Written and movement based assessments will be given to gauge the students intellectual and physical progress and interest in continuing with the program. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Dance I - Jazz / Hip Hop (New) 2025-2026**Grades: 9-10****Credit Hours: 2.5****Duration: Half Year****Prerequisite(s): None****Pairing: Dance I - Hip-Hop Half-Year course is paired with Dance- I Ballet Dance I**

This is an introductory study of Jazz technique with focus on the exploration and understanding of body alignment. This Dance Appreciation I Half-Year class will allow students to experience classical and contemporary Jazz technique, choreography and history through floor and center work as well as movement analysis. Students in Dance I Jazz will also be given experience in the process of creating original choreography. Written and movement based assessments will be given to gauge the students intellectual and physical progress and interest in continuing with the program. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Dance I - Ballet**Grades: 9-12****Credit Hours: 5****Duration: Full Year****Prerequisite(s): None**

This is an introductory study of Ballet technique with a focus on the exploration and understanding of body alignment. Students will experience classical and contemporary Ballet technique, choreography, and history through floor, center, and barre work, as well as movement analysis. Students in Dance I Ballet will also be given experience in the process of creating original choreography. Written and movement based assessments will be given to gauge the students' intellectual and physical progress. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Dance I - Jazz**Grades: 9-12****Credit Hours: 5****Duration: Full Year****Prerequisite(s): None**

This is an introductory study of Jazz technique with focus on the exploration and understanding of body alignment. Students will experience classical and contemporary Jazz technique, choreography and history through floor and center work as well as movement analysis. Students in Dance I Jazz will also be given experience in the process of creating original choreography. Written and movement based assessments will be given to gauge the students' intellectual and physical progress. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6.

Dance I - Modern**Grades: 9-12****Credit Hours: 5****Duration: Full Year****Prerequisite(s): None**

This is an introductory study of Modern dance technique with focus on the exploration and understanding of body alignment. Students will experience classical and contemporary Modern technique, choreography and history through floor and center work as well as movement analysis. Students in Dance I Modern will also be given experience in the process of creating original choreography. Written and movement based assessments will be given to gauge the students' intellectual and physical progress. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6

Dance I Hip Hop**Grades: 9-12****Credit Hours: 5****Duration: Full Year****Prerequisite(s): None**

This is an introductory study of Hip Hop technique with focus on the exploration and understanding of body alignment. Students will experience classical and contemporary Hip Hop technique, choreography and history through floor and center work as well as movement analysis. Students in Dance I Hip Hop will also be given experience in the process of creating original choreography. Written and movement based assessments will be given to gauge the students' intellectual and physical progress. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6

Dance II - Ballet & Modern**Grades: 9-12****Credit Hours: 5****Duration: Full Year****Prerequisite(s): Dance I Ballet or Dance I Modern and Teacher's recommendation by February**

This is an advanced performance ensemble that will give students with experience in a variety of dance styles with focus in Modern and Ballet technique. Dance II Ballet & Modern concentrates on anatomical based dance training with a strong focus on Ballet and Modern technical skill. Students will continue to build technical skills in Ballet and Modern, Choreography and Dance History through floor, center and barre work as well as movement analysis. Students will also be given experience in the process of creating original choreography. Written and movement based assessments will be given to gauge the students' intellectual and physical progress. Other dance styles such as Hip-Hop, Latin and Multi-Cultural dance may be included. Students will perform planned and improvised movement sequences with increasing complexity in the use of time/rhythm by accurately transferring rhythmic patterns from the auditory to the kinesthetic and responding immediately to tempo changes. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6

Dance II - Jazz & Hip Hop**Grades: 9-12****Credit Hours: 5****Duration: Full Year****Prerequisite(s): Dance I Jazz or Dance I Hip Hop Modern and Teacher's recommendation by February.**

This is an advanced performance ensemble that will give students with experience in a variety of dance styles with focus in Jazz & Hip Hop technique. Dance II Jazz & Hip Hop concentrates on anatomical based dance training with a strong focus on Jazz & Hip Hop technical skill. Students will continue to build technical skills in Ballet and Modern, Choreography and Dance History through floor, center, and barre work as well as movement analysis. Students will also be given experience in the process of creating original choreography. Written and movement based assessments will be given to gauge the students intellectual and physical progress. Other dance styles, such as Ballet, Modern, Latin, and Multi-Cultural dance, may be included. Students will refine the artistic intent of a dance by manipulating choreographic devices, dance structure, and artistic criteria (e.g., production elements, music/sound, props, costumes). Students will continue to evaluate self-reflection and feedback from others, apply it when warranted, document choices made in the revision process and justify how the refinements support artistic intent. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6

Yearbook**Grades: 12****Credit Hours: 5****Duration: Full Year At least one computer related course / Art I**

This is a writing and publishing class in which the Yearbook (English Language Arts) and digital Publishing is taught. Students work with text, graphics, and photography, to create their yearbook. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6

Percussion I**Grades 9-12****Credit Hours: 5****Duration: Full Year****Prerequisite: None****Elective**

Percussion I is for percussionists who do not have prior band experience and are interested in developing their ability in the percussive arts. This class is designed to promote and develop musical performance on various percussion instruments. This course of study is designed to acquaint students with the history of each major instrument found in the percussion family, their acoustical properties and methods of sound production, and the idiosyncrasies of percussion music notation. Students will receive practical experience in playing instruments of the percussion family, including but not limited to snare drum, drum set, tympani, marimba, and percussion instruments from other cultures. The class is open for beginning music students with emphasis is placed on the fundamentals of comprehensive percussion performance (snare drum, timpani, marching percussion, and drum set), including tonal concepts, technical skills, rehearsal skills, aural skills, and rudimentary music theory their pedagogy and performance practices. There is no auditioning for the director who will be placed in this course. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6

Percussion II**Grades 10-12****Credit Hours: 5****Duration: Full Year****Prerequisite: Percussion I, Instrumental Music I / Beginning Brass & Winds, or Previous Instrumental Music Experience****Elective**

Percussion II is for percussionists who have had previous band experience and are interested in further developing their ability in the percussive arts. Emphasis is placed on the building on the foundations of the fundamentals of comprehensive percussion performance (snare drum, timpani, marching percussion, and drum set), including tonal concepts, technical skills, rehearsal skills, aural skills, and rudimentary music theory. Students will participate in several formal concerts. Students will perform in various school/community performances, and sectional rehearsals. Attendance at these functions when scheduled outside of school hours is a course requirement. Students will have the opportunity to participate in a variety of co-curricular music ensembles and activities. Students from Percussion I /Transfer students not auditioning for the director will be placed in this course. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6

Digital Musical Composition (One Section)**Grades 10-12****Credit Hours: 5****Duration: Full Year****Prerequisite: Percussion I, Instrumental Music I/Beginning Brass & Winds, or Previous Instrumental Music Experience****Elective:**

This course introduces students to making music with digital audio workstations, applications, synthesizers, samplers, and other software tools. Students create compositions exploring approaches from popular genres such as hip hop and electronic dance music as well as noise, ambient, experimental, and avant-garde. Students will create electronic-based music compositions using tools such as sequencing software, synthesizers, controllers and virtual instruments, drawing from a wealth of historical and modern electronic compositions, traditions and innovations. Students with prior music experience and transfer students after auditioning for the director will be placed in this course. Students will intentionally and consistently refine and elaborate elements and components to form impactful expressions in media artworks, directed at specific purposes, audiences, and contexts. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6

WORLD LANGUAGES

Spanish I Grades: 9-12

Credit Hours: 5

Duration: Full Year

Prerequisite(s): None

Spanish: I introduce the students to the fundamentals of Spanish grammar via speaking, reading, listening, and writing tasks. Students learn to express themselves using the vocabulary of everyday situations in the present tense. Creativity is fostered when original dialogue tasks are given to students. By the conclusion of this course, students will be able to communicate and interact in a limited range of task-oriented and social situations. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6

Spanish II Grades: 9-12

Credit Hours: 5

Duration: Full Year

Prerequisite(s): Spanish I or Middle School Spanish II/III with a Grade of C or Higher, or Based on Placement Proficiency Exam

Spanish II begins with a thorough review of Spanish I grammar. This cumulative knowledge is used to introduce new grammatical forms including the subjunctive tense. Students will have the opportunity to compare, contrast, and evaluate this important tense vis-à-vis English. Dialogues that students create from new vocabulary learned will foster creativity and stimulate critical thinking. By the conclusion of this course, students will be able to integrate the cumulative knowledge of Spanish I and apply it to the oral and grammatical cultural tasks learned in Spanish Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6

Spanish II Honors

Grades: 9-12

Credit Hours: 5

Duration: Full Year

Prerequisite(s): Spanish I or Middle School Spanish II/III with a Grade of A or Higher, or Based on Placement Proficiency Exam

Spanish II Honors is an intensive language course for highly motivated students. Students who satisfactorily complete Spanish II-Honors and pass the final cumulative year-end proficiency/content exam will be permitted to enroll directly into Spanish III Honors. Spanish II Honor course follows the same curriculum structure of Spanish II, but the course is conducted entirely in Spanish, with an emphasis on communicative skills and culture. Additional course requirements will include review/readings of articles and novels in Spanish, as well as research-based projects.

Spanish III Honors

Grades: 10-12

Credit Hours: 5

Duration: Full Year

Prerequisite(s): Spanish II, II-H with a B or higher or Based on Placement Proficiency Exam

Spanish III Honors is an intensive language course for highly motivated students. Students who satisfactorily complete Spanish III-Honors and pass the final cumulative year-end proficiency/content exam will be permitted to enroll directly into Spanish V Honors. Spanish III Honors course follows the same curriculum structure of Spanish III, but the course is conducted entirely in Spanish, with an emphasis on communicative skills and culture. Additional course requirements will include review/readings of articles and novels in Spanish, as well as research based projects.

Spanish IV Honors

Grade: 11-12

Credit Hours: 5 Duration: Full Year

Prerequisite(s): Spanish III Honors or Spanish III with a Grade of B or Higher, or Based on Placement Proficiency Exam

This course fine tunes the students' reading, writing, and oral competency. Students will read an advanced variety of Spanish history, culture and nineteenth (19th) and twentieth (20th) century literature. Independent study is required to advance creativity, critical thinking, and analytical skills. Comparisons and evaluations are made vis-à-vis our own culture. By the conclusion of this course, students will be able to analyze the inter-relationships between the language and the culture of Spanish people, as evidenced in their literary works and communications, as well as in their political, economic, and religious structures. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6

Spanish AP

Grade: 11-12

Credit Hours: 5

Duration: Full Year

Prerequisite(s): Spanish IV, IV-H with a Grade of B or Higher, or Based on Placement Proficiency Exam

AP Spanish Course Overview - Language, Culture and Literature The Language and Culture course components emphasize communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The course is taught exclusively in Spanish. The course engages students in an exploration of culture in both contemporary and historical contexts, developing students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions). The Literature course component uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, and essays) from around the world. Students develop proficiencies across the full range of communication modes, thereby

honing their critical reading and analytical writing skills. Literature is examined within the context of its time and place, as students reflect on the many voices and cultures present in the required readings. The proficiencies acquired through the study of languages and literatures endow language learners with cognitive, analytical, and communication skills that carry over into other areas of their academic studies.

French I

Grades: 9-12

Credit Hours: 5

Duration: Full Year

Prerequisite(s): None

French I introduce the students to the fundamentals of French grammar with emphasis on communication skills. This course gives the students a practical and workable vocabulary that enables them to communicate and interact in a limited range of task-oriented and social situations. To a limited degree, students will be able to analyze certain social situations and reach conclusions about those situations. By the conclusion of this course, students will be able to evaluate vocabulary, phrases, syntax (vis-à-vis English), and speak French to a limited and focused degree. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6

French II

Grades 9-12

Credit Hours: 5

Duration: Full Year

Prerequisite(s): French I or Middle School French II/III with a Grade of C or Higher, or Based on Placement Proficiency Exam

This course includes a thorough review of French I with particular attention to regular and irregular verbs. New material is introduced that emphasizes the identification of common and distinct features, such as grammatical structures among languages. Students will practice grammatical constructions via free conversation on a variety of real life topics. Written summaries of cultural topics will allow for critical thinking skills and will stimulate usage of new vocabulary and grammar. By the conclusion of this course, students will be able to integrate the cumulative knowledge from French I and apply it to the oral, grammatical, and cultural tasks learned in French II. Instructional strategies may be modified based on the students' Individual Education Plan (IEP) as per N.J.A.C.6A: 14-4.6

French II Honors Grades: 9-12

Credit Hours: 5

Duration: Full Year

Prerequisite(s): French I or Middle School French II/III with a Grade of A or Higher, or Based on Placement Proficiency Exam

French II Honors is an intensive language course for highly motivated students. Students who satisfactorily complete French II-Honors and pass the final cumulative year-end proficiency/content exam will be permitted to enroll directly into French III Honors. French II Honors course follows the same curriculum structure of French II, but the course is conducted entirely in French, with emphasis on

communicative skills and culture. Additional course requirements will include review/reading of articles and novels in French, as well as research-based projects.

French III Honors

Grades: 10-12

Credit Hours: 5

Duration: Full Year

Prerequisite(s): French II, II-H with a Grade of B or Higher, or Based on Placement Proficiency Exam

French III Honors is an intensive language course for highly motivated students. Students who satisfactorily complete French III Honors and pass the final cumulative year-end proficiency/content exam will be permitted to enroll directly into French III Honors. French III Honors course follows the same curriculum structure of French III, but the course is conducted entirely in French, with emphasis on communicative skills and culture. Additional course requirements will include review/reading of articles and novels in French, as well as research-based projects.

French IV Honors

Grade: 11-12

Credit Hours: 5

Duration: Full Year

Prerequisite(s): French III Honors or French III with a grade of B or Higher, or Based on Placement Proficiency Exam

This course fine tunes the students' reading, writing, and oral competency. Students will read an advanced variety of French history, culture and nineteenth (19th) and twentieth (20th) century literature. Independent study is required to advance creativity, critical thinking, and analytical skills. Comparisons and evaluations are made vis-à-vis our own culture. By the conclusion of this course, students will be able to analyze the inter-relationships between the language and the culture of Spanish people, as evidenced in their literary works and communications, as well as in their political, economic, and religious structures. Instructional strategies may be modified based on the students' Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6

French AP

Grade: 11-12

Credit Hours: 5

Duration: Full Year

Prerequisite(s): French IV, IV-H with a Grade of B or Higher, or Based on Placement Proficiency Exam

AP French Course Overview - Language, Culture and Literature

The Language and Culture course components emphasize communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The course is taught exclusively in French. The course engages students in an exploration of

culture in both contemporary and historical contexts, developing students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions).

CREDIT BY EXAMINATION – AVANT STAMP 4S IN SPANISH AND FRENCH

The Avant STAMP (Standards-based Measurement of Proficiency) 4S determines language proficiency in 4 domains (Reading, Writing, Listening and Speaking,) for grades 9-12. Avant STAMP 4S is web-based and computer-adaptive, with real-world questions on topics selected to be level-appropriate based on research into topics taught at each grade/proficiency level. The questions engage learners to demonstrate their own actual proficiency level without any pre-set upper limits.

Duration of exam (average): Reading: 35-40 minutes; Writing: 20-25 minutes; Listening: 35-40 minutes; Speaking: 20-25 minutes. Test components: Reading: approximately 30 multiple choice questions; Writing: 3 prompts; Listening: approximately 30 multiple choice questions; and Speaking: 3 prompts

Based on overall scores, students can receive 5 or 10 credits to comply with high school graduation requirements. After completing the exam, students will be placed in a Level III or AP World Language class.

Spanish I – Credit by Avant STAMP Assessment

Grades: 9-12

Credit Hours: 5

Duration: Credit by Examination

Prerequisite(s): WL Teacher Recommendation - Middle or High School

Students will receive a grade of “Pass” for the class in lieu of a letter grade.

Spanish II – Credit by Avant STAMP Assessment

Grades: 9-12

Credit Hours: 5

Duration: Credit by Examination

Prerequisite(s): WL Teacher Recommendation - Middle or High School Teachers

Students will receive a “Pass” grade for the class in lieu of a letter grade.

French I – Credit by Avant STAMP Assessment

Grades: 9-12

Credit Hours: 5

Duration: Credit by Examination

Prerequisite(s): WL Teacher Recommendation - Middle or High School

Students will receive a grade of “Pass” for the class in lieu of a letter grade.

French II – Credit by Avant STAMP Assessment

Grades: 9-12

Credit Hours: 5

Duration: Credit by Examination

Prerequisite(s): WL Teacher Recommendation - Middle or High School Teachers

Students will receive a grade of “Pass” for the class in lieu of a letter grade.

STUDENT ATHLETE STUDY TABLE AND CHARACTER DEVELOPMENT PROGRAM

The Athletic Department Tutoring Class is a component of the Board of Education approved Athletes Eligibility Policy. Applicants for high school athletic teams must meet specific academic criteria in order to be certified as “athletically eligible”. One of those criteria is a 2.0 GPA calculated on a semester basis. A student applying for athletic eligibility that has less than a 2.0 GPA may enter the Probationary Program. Under this program a student is granted probationary status for one semester. This student may compete on a high school athletic team while under probation. However, their academic progress is monitored and the student must attend the Athletic Tutoring Class on a mandatory basis. The design of the class is to give the student the opportunity to prepare for his/her school day by remaining after school the day before and, under the supervision of academic teachers, complete assignments and/or study for the day’s academic courses. After one semester, the student must attain and maintain a 2.0 GPA in order to continue in athletics. Instructional strategies may be modified based on the student's Individual Education Program (IEP) as per N.J.A.C.6A: 14-4.6.

CAREER RESOURCE CENTER

Irvington High School offers a Career Resource Center located in the west wing to provide students with the ability to research college and career opportunities, submit college and financial aid applications, and prepare scholarship and college essays. The center is equipped with computers and research materials and is staffed by a school counselor each lunch period. Each student should be expected to be invited to the Career Resource Center 1-2 times each school year.

Life Endeavours

CBI is a program for students 18-21 with disabilities who need to acquire functional work/life skills outside the classroom environment. Through cooperation with the CBI coordinator and the student's employer, students attend classes for part of the day and then are excused to go to their Community Based assignments for a designated number of hours per week. Students receive credit for both classroom time and time spent on the job. Emphasis is on graduation and becoming productive citizens through instruction and application of employment ability, occupational, and academic skills. Program instruction, work experience, and service learning projects are designed to change students’ habits and attitudes and develop the motivation to succeed. All academic courses are designed to assist the students’ progress towards IEP transition goals. Students must complete all graduation requirements and be recommended by the Child Study Team to enter the Community Based Instruction (CBI) Program.

Career Transition Skills

Grade: 11 & 12

Duration: Full Year

Credit Hours: 5

Prerequisite: Recommendation by CST Team

An essential component of the Transitions curriculum is self-awareness and self-advocacy skills relevant to post-secondary goals. Students are provided with the necessary combination of academic experiences in school (instruction/research/self-assessment and life skills) and in exploring opportunities in the community (Job Shadowing, Structured Learning Experience and Community Based Instruction) related to post-secondary placement. The course is designed to help students develop:

- The necessary skills of self-advocacy.
- Knowledge of laws related to post-high school assistance.
- Use of technology for research as well as for educational process organization.
- Test-taking/study skills useful for the HSPA, SAT/ACT as well as post-secondary testing.
- Exploring components of their IEP.

Students enrolled in the Transition course complete extensive interests and ability inventories and match the outcome of these to possible career choices to pursue. Their career options are researched in depth and the student presents his/her particular career matches to the class. Once possible career choices are determined, students are encouraged to job shadow one day per career. Job Shadowing, Structured Learning Experiences and Community Based Instruction helps students identify possible areas of interest and possible areas to pursue in a post-secondary educational setting. Students develop a personal portfolio of career matches and materials for later use in their pursuit of a post-secondary educational setting. Materials to assist the student in achieving success in a post-secondary educational setting are also included in this portfolio.

Suggested Order of Instructional Sequence:

1. Portfolio development
2. Self-awareness
3. Self-advocacy
4. Relevant laws and regulations
5. Assistive technology
6. Planning/preparation for Post-Secondary Educational Placement