

# Course Catalog 2023-2024 

## Course Descriptions

Art

Studio Art (1 unit)
Grades 9, 10, 11, 12
A yearlong introduction to the art processes, materials, techniques, and occupations available to artists today. This basic foundation course is a prerequisite for all other art courses. In addition to the general course work, students are also involved in numerous contests.

Advanced Art 1 (1/2 unit)
Grades 10, 11, 12
An advanced art course that provides an in-depth study of drawing and painting, along with various three-dimensional processes. Portfolio preparation is also covered as are contests and current art movements. The course will be monitored in the first 5 weeks for behavior and effort levels required and expected in an advanced art class.
Prerequisite: Studio Art
Advanced Art 2 (1/2 unit)
Grades 10, 11, 12
An advanced art course that provides an in-depth study of drawing and painting, along with various 3-dimensional processes. Portfolio preparation is also covered as are contests and current art movements. The course will be monitored in the first 5 weeks for behavior and effort levels required and expected in an advanced art class.
Prerequisite: Advanced Art I
Advanced 3 (1/2 unit)
Grades 10, 11, 12
Advanced 3 will focus on basic drawing and composition skills as it relates to printmaking and drawing. We will do some linocuts and ink printing. The course will be monitored in the first 5 weeks for behavior and effort levels required and expected in an advanced art class. Prerequisite: Studio Art

Advanced 4 (1/2 unit)
Grades 10, 11, 12
Advanced 4 is a course focused on 3 dimensional work. It will provide instruction on sculpture (wire, woodcarving) as well as some pottery work and knowledge of kiln firing. The course will be monitored in the first 5 weeks for behavior and effort levels required and expected in an advanced art class.
Prerequisite: Studio Art

## Business

Publishing (1unit)
Grades 11, 12
Publishing is an integrated business/graphics design course. The mission of the participants is to create, publish, and sell the annual yearbook. Students work through the processes of journalism, photography, design, layout, advertising, sales, and deadline management. Much hard work and dedication is accomplished as students strive to publish a memorable publication.

Students also create a multi-media presentation for a senior slideshow to be presented at graduation.
Computer Applications (1/2 unit)
Grades 9, 10, 11, 12
This course is designed to give students the skills needed to be successful in today's communication age. Students will become efficient with Microsoft Word, Publisher and PowerPoint. Students will be introduced to Microsoft Excel. Students will also learn how to type without looking at the keyboard. These skills will give students skills for their college career, their personal computer use, as well as their workplace environment.

## Distance Learning

SOC 144 - Introduction to Sociology (1/2 unit)

## Grade 12

3 credits at JCC
This course involves an introduction to the scientific study of human society and social behavior. Emphasis is on the topics of: the sociological perspective, including the social construction of reality; culture and society; socialization; group interaction; deviance; social stratification; basic social institutions and social change.

POL 121 - Introduction to American Government (1/2 unit) Grade 12
3 credits at JCC
This course is an introduction to the American political system, including the Constitutional framework; legislative, executive, and judicial functions; as well as the nature of American political parties, interest groups, public opinion, social movements, political economy, and the role each plays in contemporary American life. This course fulfills the following SUNY General Education learning outcome: Social Sciences.

## Driver Education

Driver Education (1/2 unit)
Grades 11, 12
Driver Education is a one semester course designed to teach and refine driving skills. Time is spent in the classroom making students aware of the "rules of the road" and other subject matter in order to make the driving process a safe and pleasurable experience. Practical driving skills are taught during the laboratory aspect of the course in which students learn vehicle control and various maneuvers.

The course focuses not only on the fundamental rules and regulations that govern all drivers, but also on driver attitudes, perceptions, and decision making. The students become aware that people are the greatest single cause of breakdowns in the highway system. The text, Drive Right, is supplemented by numerous audio-visual aids, displays, and simulations. The following is a list of the subject matter contained in the text:

The Highway System
Driving Systems
Pre-driving Checks and Procedure
Basic Vehicle Control
Space-Time Management
Lateral Maneuvers
Turns
Driving a Car with a Stick Shift
Perception
Decision Making
Administrative Laws
Traffic Laws
Signs, Signals, and Roadway Markings
General Information about Motorcycles
Distracted Driving

Visibility\& Other Hwy Conditions<br>Vehicle Performance<br>Vehicle Maintenance<br>Vehicle Performance and Decision Making<br>Selecting, Operating, \& Insuring/Car<br>Small and Large Special Vehicles<br>Pedestrians and Animals<br>Evasive Actions<br>Skid Control<br>Vehicle Failure<br>Drugs and Alcohol<br>Physical and Mental Impairments<br>Traction<br>Riding a Motorcycle in Traffic

Driving is a real life skill. Since the average person will drive 624,000 miles in his life, there is an obvious risk of mishap. It is the purpose of this course to broaden students' awareness of the highway system in order to reduce the chances of an accident. If students are taught the proper techniques and attitudes at an early age, hopefully they will sustain these throughout their driving careers.

Course completion will lessen insurance rates for young drivers, as well as grant students the MV285 certificate which allows them senior driving privileges at the age of 17. Pupils must be 16 by September $15^{\text {th }}$ of the fall semester or February $2^{\text {nd }}$ for the spring semester. The arrest and conviction of any student for any traffic violation can cause disqualification from the course. Seniors will have preference and then juniors and sophomores for this course. The MV-285 certificate will not be issued if the driving time requirement is not met, even though the student passed the final examination for school credit.

## English

English 9 (1 unit)
Grade 9
This course is designed to provide students with activities and experiences which will help to prepare them for the ELA Examination which is given in eleventh grade. Throughout the course, students will be assessed based on the Grade 9 Learning Standards for reading literary and informational texts, writing, speaking and listening, and language. Students will complete various formats of assessments including multiple choice, short answer text dependent questions, QuickWrites, essays, projects, and presentations with the goal of achieving proficiency or mastery of the Standards that are being addressed.

## English 10 (1 unit)

Grade 10
This course specifically addresses three essential components: literature study, informational texts, and writing. Within those components, grammar, spelling and vocabulary are also addressed. The tenth grade curriculum (modules) has been structured to prepare these students for their ELA Regents Assessment that they will be taking in eleventh grade. Our writing is focused on Text Analysis, writing from multiple sources, and short responses.

English 11 (1 unit)
Grade 11
The eleventh year of English is the final preparation for the ELA Regents in June. All students are required to pass the Regents in order to graduate. Therefore, the focus in English 11 is on the three main components of the Regents: reading comprehension, argumentative writing based on sources, and expository writing based on text analysis. Development in these key areas also promotes college and career readiness.

English 12 (1 unit)
Grade 12
This course is designed to provide students with experience in reading critically, thinking logically, writing precisely, and working cooperatively and independently. The long-term goal is to refine the reading, writing, and communicating skills essential for success in college and careers. Literature study will include poetry, plays, novels, essays, and short stories. The job and college skills unit focuses on application essays, interviews, and resumes. Composition, vocabulary, and language work will accompany and reinforce the reading. Students will practice writing for different purposes and in a variety of formats, including autobiography, précis, application essays, analytical essays, and a research paper. Speaking and listening skills, teamwork, and problem-solving will also be emphasized throughout the year to ready students for life beyond General Brown.

Public Speaking ( $1 / 2$ unit)
Grade 12
Public Speaking is a half year course elective designed to offer students the opportunity to learn the basics of public speaking such as delivery, tone and voice.

ENG 101 - English ( $1 / 2$ unit)
Grade 12
3 credits for JCC
This course is intended for students who demonstrate skill in the process of developing essays. ENG 101 students will employ strategies and techniques for successful academic essay and research writing. Students will use a variety of research methods and document sources using MLA style. Students complete diverse, predominantly non-fiction reading and writing assignments designed to enhance their ability to write $4-5$ complex essays for varied purposes, directed to academic audiences. Writing a research paper that defends an arguable assertion is required for students to complete the course.

Pre-requisite: $90 \%$ or higher on the ELA Examination and $85 \%$ or higher for an overall average in English 11.

ENG 102 - English ( $1 / 2$ unit)
Grade 12
3 credits for JCC
English 102 students will employ strategies and techniques for reading, analyzing, interpreting, and evaluating fiction, poetry, and drama. Readings will include literature of merit by male and female authors from diverse time periods, thematic areas, and cultural perspectives. Students will complete a variety of writing assignments designed to develop skills in literary analysis and will write formal, literature based essays on the three genres. This course is designed for students who have already demonstrated college-level skills in essay writing and provides a foundation for upper-level literature courses.

Successful completion of these courses satisfies a SUNY General Education learning outcome or outcomes. Some work that students do in these courses (tests, essays, projects) may be retained by Jefferson Community College in order to demonstrate to SUNY overall levels of student achievement in General Education.

Pre-requisite: English 101
Digital Literacy and Citizenship ( $1 / 2$ unit)
Grades 9, 10, 11, 12
Teens today are using the immense power of digital media to explore, connect, create, and learn in ways never before imagined. With this power, students have extraordinary opportunities, and yet face potential pitfalls, too - cyber bullying, digital cheating, and safety and security concerns. These issues underscore the need for students to learn digital literacy and citizenship skills. Curricular topics to be explored are privacy and security, digital footprint and reputation, self-image and identity, creative credit and copyright, relationships and communication, information literacy, cyber bullying, and internet safety.

Contemporary Literature I ( $1 / 2$ unit)
Grades 10, 11, 12
Students will read contemporary literature and paired informational texts from various genres. The majority of the course will be taught in a student-led discussion format, allowing students to discuss current events and ideas as they are introduced in the readings. A reading blog will be incorporated in which students answer discussion questions and respond to others' responses, meeting current reading and writing standards. The readings will focus on a study of character motivations, the impacts of labels in society, bullying, school shootings, society's perception of beauty, and eating disorders.

## Contemporary Literature II ( $1 / 2$ unit)

Grades 10, 11, 12
Students will read contemporary literature and paired informational texts from various genres. The majority of the course will be taught in a student-led discussion format, allowing students to discuss current events and ideas as they are introduced in the readings. A reading blog will be incorporated in which students answer discussion questions and respond to others' responses, meeting current reading and writing standards. The readings will focus on a study of teenage relationships, sexuality, mental health, and consent.

The Horror Genre ( $1 / 2$ unit)
Grades 11, 12
The course will involve the study of Gothic horror literature with its elements of fear, gloom, violence, and death and its evolution to modern horror literature. Short stories will be the primary focus, along with plays and novels. As a major component of the course, we will examine film adaptations of horror literature. Edgar Allan Poe and Stephen King will be among the featured writers. This is a half year course. Discussion will be a key part of the analysis in this course.

Book vs Movie ( $1 / 2$ unit) Grades 11, 12
In this course students will read three to four novels published between 1990 and 2020 and watch the accompanying film adaptations. The students will then have to do an analysis of the differences between the two, why the producers/directors/screenwriters made the decisions to make those changes, how making those changes made the movie more appealing to those who had never read the novel, how the changes would anger those who are devoted to the original novel, and how the changes reflect in societal norms of the time. Assessments in this course will be done in writing and presentation form, working both individually and with a group.

## Foreign Languages (World Languages)

Knowledge of a world language fosters greater awareness of cultural diversity among the peoples of the world. Students who have world language skills can appreciate more readily other peoples’ values and ways of life. Knowledge of a world language serves two other important purposes: 1) it permits informal communication and 2) it facilitates the exchange of ideas and information in such areas as commerce, diplomacy, science, technology, law, and the arts. In an increasingly interdependent world, world language study must be a vital part of the core of common learning and an essential requirement for a good basic education.

## Spanish

Spanish culture and language is evident in many aspects of American life: food, dance, geography, architecture, and history. The study of Spanish will not only assist when traveling to Latin America and Europe but will also assist when traveling to major Spanish speaking areas in the United States.

Spanish 1 (1 unit)
Grades 9, 10, 11, 12
This course continues to meet the requirements of Checkpoint A of the New York State Syllabus. Students will learn about the Spanish language and culture in a more in-depth manner. Listening, speaking, reading, writing and culture activities will be used in instruction. Proficiency in Spanish is the goal.

Spanish 2 (1 unit)
Grades 10, 11, 12
Spanish II builds on the foundation of Spanish I using more complex structures of basic Spanish and expands the cultural themes already set forth. Beginning units provide a thorough review of the introductory structure and vocabulary; then new material is presented, with continual opportunities for written and oral practice of new expressions and structures. For any given grammar point, activities begin with guided practice and progressively call for more self-expression.

## Spanish 3 (1 unit)

Grades 11, 12
Spanish III is the Comprehensive Regents course, which completes the foreign language sequence. The year is focused on preparing the student for the comprehensive state exam. The first two years of material are thoroughly reviewed in order to recapture the grammatical structures studied. The student will enhance speaking, listening, reading, and writing skills through constant practice and communication in Spanish. The student will be able to communicate ideas in Spanish at this level. A better understanding of Hispanic culture and history is achieved through the use of videos, and reading passages.

## Fall Semester:

SPA 112 - Elementary Conversational Spanish 2 ( $1 / 2$ unit)
Grade 12
3 credits at JCC
This course is designed to meet the various conversational needs of the particular group of students enrolled in the class. Thus, the course content may be adapted to meet conversational needs for law enforcement, human services, travel, medicine or business on an elementary level. Emphasis is placed on speaking and comprehension skills, while developing the ability to converse in Spanish in a variety of realistic situations that the student may encounter. Native speakers should not take this course. This course is open to students who have completed no more than three years of high school Spanish (not including SPA 122).

Prerequisite: Three years of Spanish with at least a 90 course average in Spanish III and no more than three years of high school Spanish.

## Spring Semester:

SPA 122 - Elementary Spanish 2 ( $1 / 2$ unit)
Grade 12
3 credits at JCC
This humanities course constitutes an introduction to Spanish language and Hispanic cultures. It begins with a review of present and preterit tenses. The student will continue to develop the four basic skills of listening comprehension, speaking, and reading and writing with an emphasis on spoken communication.

This course is not open to native speakers or to students with four years or more of high school Spanish. This course satisfies a SUNY General Education learning outcome. Some work that students do in this course (tests, papers, projects) may be retained by Jefferson Community College in order to demonstrate to SUNY overall levels of student achievement for General Education.

Pre-Requisite: Three years of Spanish with at least a 90 course average in Spanish III.

## French I (1 unit)

Grades 9, 10, 11, 12
The French I course will initiate study in fulfillment of the requirements of Checkpoint A of the New York State Syllabus in listening, speaking, reading, writing, and culture. Students will gain a basic mastery of verb structure, grammar, idiomatic expressions, vocabulary and culture through textbook lessons and exercises and video-chapter review. The modern spoken language will be practiced through pronunciation drills, dialogues and tapes. A project on some aspect of French culture and an oral presentation in the target language will be required.

French II (1 unit)
Grades 10, 11, 12
French II builds on the foundation of French I using more complex structures of basic French and expands the cultural themes already set forth. Beginning units provide a thorough review of the introductory structure and vocabulary; then new material is presented, with continual opportunities for written and oral practice of new expressions and structures. For any given grammar point, activities begin with guided practice and progressively call for more self-expression.

French 3 (1 unit)
Grades 11, 12
French III is the Comprehensive Regents course, which completes the foreign language sequence. The year is focused on preparing the student for the comprehensive state exam. The first two years of material are thoroughly reviewed in order to recapture the grammatical structures studied. The student will enhance speaking, listening, reading, and writing skills through constant practice and communication in French. The student will be able to communicate ideas in French at this level. A better understanding of Hispanic culture and history is achieved through the use of videos, and reading passages.

## Health

Health (1/2 unit)
Grades 10, 11, 12
The high school health course is designed to address immediate and long-range health and safety concerns. It gives students information for improving their health throughout their lives by providing accurate and current information to make responsible decisions. These courses also help students to develop a sense of responsibility for their own health needs as individuals and as members of their families and communities. Students have the opportunity to work on various projects as individuals and in groups. Several community resources provide guest speakers for the students to enhance the classroom learning.

Health concentrates on nutrition, weight management, family life education including parenting skills, lifestyle diseases, HIV and AIDS, suicide prevention, mental health disorders, alcohol, tobacco, and other drugs.

## Family and Consumer Sciences

Food and Nutrition (1/2 unit)
Grades 9, 10, 11, 12
Throughout this course many foods will be prepared. Laboratory experiences should reinforce the need to reduce fats, salts, and sugars in the diet. The student will be able to describe the role of food in growth, maintenance, and functioning of the body, explain the factors that must be considered in making a plan for weight loss, maintenance or gain, and perform the basic skills and techniques of food preparation.

Food Preparation (1/2 unit) Grades 9, 10, 11, 12
This course will focus on menu plans and meal service. The emphasis will be on preparing and serving a variety of foods.

International Foods (1/2 unit)
Grades 9, 10, 11, 12
This course will focus on helping the student gain a greater understanding of meal patterns of various countries and regions. Content of this course includes preparing and evaluating foods and exploring career opportunities.

Gourmet Foods (1/2 unit)
Grades 9, 10, 11, 12
This course is an exploratory food preparation course focusing on advanced preparation techniques, the appearance and presentation of foods, and the use of specialized equipment.

Personal Development and Career Planning (1/2 unit)
Grades 9, 10, 11, 12
Personal Development involves outcomes which enable the learner to explore his or her specific personality traits and skills, take personal responsibility for his or her behavior, develop positive selfesteem, and learn how to interact effectively with others. Lifelong Learning helps learners understand their unique learning style, develop lifelong learning and time management skills, and assume personal responsibility and self-motivation. Career Exploration and Planning helps students translate personal traits and skills into occupational terms and blend their work role with other life roles to develop a healthy lifestyle. Students learn to engage in career planning, using goal-setting and problem-solving strategies.

## Mathematics

NYS requires the use of the graphing calculator on NYS math Regents exams. In order for students to be proficient with the calculator, they need to use it daily. This will help them to be more successful in high school math courses. The school is requesting that the student provides his/her own graphing calculator. This calculator will be required for use in class and for homework. The calculator of choice is a TI-84+, however the TI-84, TI-83+ or TI-83 are acceptable models.

All math courses require the use of a graphing calculator.
Algebra I (1 unit)
Grade 9
This is a required course culminating with a Regents Exam at the end of the school year. All students must pass this Regents Exam in order to graduate. This course is a study of algebra focusing on linear equations and inequalities. Topics include a review of real numbers and basic algebra concepts, algebraic and graphic solutions of linear equations and inequalities, functions, and operations with polynomials and factoring. Word problems and vocabulary will be stressed. Completion of this course qualifies the student to take the Algebra I Regents Exam in June.

## Geometry (1 unit)

Grade 10
Students that qualify for this course have successfully completed Algebra I. This course is an introduction to geometry with an emphasis on the concepts of points, lines, planes, angles, proofs, triangles, quadrilaterals, area, volume, coordinate geometry and transformations. Completion of this course qualifies the student to take the Geometry Regents Exam in June.

## Intermediate Algebra II (1 unit)

Grade 11
Students who qualify for this course have successfully completed Algebra I and Geometry. This course is a partial study of advanced Algebra with an emphasis on procedural fluency, conceptual understanding and application to real world problems. Students will be asked to negotiate multistep questions that require knowledge and ability across more than one grade level. This course also reviews many important concepts from Integrated Algebra that are necessary to be successful in the advanced algebra topics. Specific areas to be reviewed are solving many types of linear and quadratic equations. This is a rigorous course that requires students to demonstrate procedural and conceptual proficiency in 6 areas: Number and Quantity (including the Complex Number System), Algebra, Functions(including Trigonometry), Geometry, Statistics and Probability, and Modeling. Completion of this course (with an $\mathbf{8 0 \%}$ overall average for this year) qualifies students to take the Algebra II Regents Exam in June. If a student is successful, they receive Regents credit. If a student does not pass the Regents exam, they will have the opportunity to take Algebra II and re-take the regents exam.

Algebra II (1 unit)
Grade 11
Students who qualify for this course have successfully completed Integrated Algebra and Geometry. This course is a study of advanced Algebra with an emphasis on procedural fluency, conceptual understanding and application to real world problems. Students will be asked to negotiate multistep questions that require knowledge and ability across more than one grade level. This is a rigorous course that requires students to demonstrate procedural and conceptual proficiency in 6 areas: Number and Quantity (including the Complex Number System), Algebra, Functions (including Trigonometry), Geometry, Statistics and Probability, and Modeling. Completion of this course qualifies students to take the Algebra II Regents Exam.

Financial Applications (1 unit)
Grade 11
Students who qualify for this course have successfully completed two units of math. The finance topics explored in this course will include: checking/savings accounts, payroll, budgeting, income, credit management, tax preparation, types of insurance, investments (stocks, bonds, mutual funds), mortgages determining "best buys", statistics, inflation and depreciation, and career opportunity exploration.

General Geometry (1 unit)
Grade 10, 11, 12
Students that qualify for this course have successfully completed Algebra I. This course is and introduction to geometry (but at a reduced pace in comparison to the Regents Geometry class). An emphasis is placed on the concepts of points, lines, planes, angles, proofs, triangles, quadrilaterals, area, volume, coordinate geometry and transformations. Completion of this course qualifies the student (with an $80 \%$ average or higher) to take the Geometry Regents exam in June.

Pre-Calculus (1 unit)
Grade 12
Students who qualify for this course have successfully completed Algebra II. This course addresses advanced topics in algebra and trigonometry. An understanding of this material is necessary before beginning a standard college calculus course. Topics which will be taught include polynomial, rational, exponential, and logarithmic functions and their graphs, trigonometry, analytical trigonometry, systems of equations and inequalities, matrices and determinants, sequences, series, probability, and topics in analytical geometry.

## Statistics (1 unit)

Grade 12
Statistics is a course that students are often required to take at the college level. In high school, students get one unit of statistics in Algebra 1 and one unit in Algebra 2 (if they take Algebra 2). This class is a year long course on statistics that lays a better foundation for students in preparation for college level statistics. Topics of study include: organizing data, sampling methods, experiments in the real world, and data distributions.

## Fall Semester:

MTH 185 - Pre-Calculus (1/2 unit)
Grade 12
4 credits at JCC
This course is designed to prepare students for success in the study of calculus. Concepts and functions will be represented graphically, numerically, symbolically, and verbally. Linear, quadratic, exponential, and logarithmic functions are reviewed. Critical thinking is developed as instruction focuses on the study of trigonometric, power, polynomial, and rational functions and their operations. Students will be expected to demonstrate competence in the use of current technology as it applies to Pre-calculus topics.

## Spring Semester:

MTH 221 - Calculus I (1/2 unit)
Grade 12
4 credits at JCC
MTH 221 is the first course in the calculus sequence for students in mathematics, science, computer science, and engineering. Basic analytic geometry, functions, limits and continuity, derivatives of algebraic and trigonometric functions, chain rule, implicit differentiation, antiderivatives, definite integrals, Fundamental Theorem, and applications of derivatives and integrals form the core concepts. Students are required to develop and demonstrate literacy with current technology as it applies to the study of Calculus 1 .

Pre-Requisite: Completion of MTH 185 Pre-calculus with a C or better.

## Music

Senior Band ( $1 / 2$ unit)
Grades 9, 10, 11, 12
This class meets three days out of the six day cycle. Students develop music reading skills and band performance skills. There are two mandatory concerts a year (December and June). Each student is required to participate in one lesson lab every six day cycle. There are three mandatory parades per year (two on Memorial Day and the General Brown Days parade).

## Senior Chorus ( $1 / 2$ unit)

Grades 9, 10, 11, 12
This class meets three days out of the six day cycle. Students develop music reading skills through the use of the Solfege system (Do, Re, Mi, Fa, Sol, La, Ti, Do). Students learn proper vocal technique and choral performance skills. Each student is required to participate in one lesson lab per lesson schedule. Pending class size, the lesson schedule may rotate differently, but students should expect to attend at least two lessons per marking period. There are two mandatory concerts per year, which will count toward each student's midterm and final exam grade.

Music in Our Lives (1 unit)
Grades 9, 10, 11, 12
This class meets one period per day for the entire school year. In this class, students will be introduced to various units of study, such as Music Theory, Guitar, Ukulele, Piano, Percussion and Music Technology, which will expand their knowledge of music in the world around them. This class fulfills the one credit in fine arts needed for high school graduation.

Intermediate Guitar/Piano (1⁄2 unit)
Grades 9, 10, 11, 12
This class is a half credit course that will meet every day for 20 weeks. 10 weeks will be a study on the piano, which will focus on technique, melodic playing, chord playing, and music theory. The second 10 weeks will be a guitar study for students who ideally have already had exposure to the guitar. This portion of the class will focus on classical technique for melodic playing, and more advanced chord studies.

Pre-Requisite: Music 7, Band or Music in Our Lives

## Intermediate Drumming ( $1 / 2$ unit)

Grades 9, 10, 11, 12
This class is a half credit course that will meet every day for 20 weeks. Students will learn percussion technique and gain extensive rhythm reading skills. The instruments used will use a range of percussion instruments including (but not limited to) snare drum, bass drum, drum set, marching drums, boomwhackers, buckets and auxiliary percussion. As part of their final, the group will learn two pieces and march with the percussion section of marching band on Memorial Day and General Brown Days.

## Science

## Living Environment (1 unit)

Grades 9, 10
Living Environment is the student's introduction to Biology. A very wide array of topics, ranging from Evolution to Ecology, Cells to Classification, and the systems of the human body are taught. This course is designed to teach students the basics of a wide survey of biological disciplines. A separate lab period is offered to allow for the completion of state mandated lab time. This course concludes with students taking the New York State Regents exam in Living Environment.

Earth Science (1 unit)
Grade 10
Earth Science is the study of the planet earth - its features, its forces of change, and its place in space. Earth Science draws upon geology, astronomy, meteorology, paleontology, and other sciences to form its framework.

This course is based upon an investigative approach. This involves the student more deeply than the traditional descriptive approach. It casts the student in the role of investigator. The student is given the opportunity for direct experience of earth phenomena. From these experiences the student will not only be asked to describe, but also be challenged to interpret, these experiences.

Earth Science also requires that each student enrolled be assigned three periods per six-day cycle of laboratory work. These learning activities will be designed to allow students to become active participants in a wide variety of experiences. Laboratory work will constitute a major part of both the Earth Science course and the Earth Science Regents final exam grade. This course concludes with students taking the New York State Regents exam in Earth Science.

Environmental Science (1 unit)
Grades 11, 12
Environmental Science is a course designed to investigate not only modern environmental techniques, but the issues surrounding the science. Topics from Ecology to Pollution and Global climate Change to Environmental Ethics are taught. The Environmental Science course is designed for students to learn by a variety of learning modes. Students will experience not just traditional science lectures, but also a multimedia approach as well as case studies and thought experiments to help students understand the environmental issues facing society.

Science in Our Lives ( $1 / 2$ unit)
Grades 11, 12
This course focuses on the basics of everyday encounters with basic scientific principles that are applicable to every person and is for students who may not be going into a science-based career.

## Chemistry (1 unit)

Grade 11
Chemistry investigates the composition and properties of substances and interactions between substances. The degree to which chemistry has changed civilization is evident by considering contemporary food, clothing, building materials, medicine, and environmental changes. Recently we have become aware of the problems which have arisen from our increased technology. It requires knowledge of chemistry to adequately understand current news issues and act as responsible citizens and consumers.

This course is recommended for college-bound students. A separate lab period is offered to allow for the completion of state mandated lab time. This course concludes with students taking the New York State Regents exam in Chemistry.

General Chemistry (1 unit)
Grade 10, 11, 12
General Chemistry is for students in grades 10-12 who do not need Regents level Chemistry, but need a chemistry background for their desired career. Chemistry is the study of matter and its behavior and interactions. We will cover the basics of matter, simple stoichiometry, chemical reactions, and behaviors of matter using notes, labs, and activities.

## Physics (1 unit)

Grade 12
Physics is the foundation of all other sciences. It is a gateway course that explores engineering through the study of motion, energy, heat, light, sound, mechanics of solids, liquids and gases, electricity, electronics, and atomic energy. These topics will be learned through a variety of hands-on activities, laboratory activities, cooperative group assignments, and independent activities. It is a class that uses mathematics to discover through cars, toys, and kinesthetic motion what physics is and how objects work and move. A separate lab period is offered to allow for the completion of state mandated lab time. This course concludes with students taking the New York State Regents exam in Physics.
Prerequisite: Algebra II
Forces in Motion ( $1 / 2$ unit)
Grades 11, 12
This course is the study of basic physics principles relating to everyday life.
Zoology/Animal Behavior I (1⁄2unit)
Grades 11, 12
This course deals with the study of animals and their origins. This class will examine the scientific principles used within Zoology, before following the evolutionary paths that led to modern animals. This course will cover invertebrates (animals without a skeleton).

Zoology/Animal Behavior II (½unit)
Grades 11, 12
This course deals with the study of animals and their origins. This class will examine the scientific principles used within Zoology, before following the evolutionary paths that led to modern animals. This course will continue where Zoology I left off; however, Zoology I is not necessary for this course.

Computer Science I (1/2 unit)
Grades 10, 11, 12
This course will teach students how to program simulations and learn a basic coding language. This course uses a newly-developed coding language that is used by thousands of app developers today. Overall, this course will introduce students to the fundamental principles of how a computer thinks and will allow students to gain necessary skills that will be useful towards a degree in computer engineering.
Prerequisites: Algebra, Geometry, and Trigonometry.
Computer Science II ( $1 / 2$ unit)
Grades 10, 11, 12
This course is a continuation of Computer Science I and will teach students how to program simulations and learn a basic coding language. This course uses a newly-developed coding language that is used by thousands of app developers today. Overall, this course will introduce students to the fundamental principles of how a computer thinks and will allow students to gain necessary skills that will be useful towards a degree in computer engineering. Prerequisites: Algebra, Geometry, and Trigonometry

## Bioethics (1/2 unit)

Grades 11, 12
Bioethics is the investigation and a study of ways in which tough decisions in medicine and science are made. It is concerned with questions about basic human values such as the rights to life and health, and the rightness or wrongness of certain developments. Very little in this world is "black and white", the fun of Bioethics is in examining the "gray".

Bioethics has an impact on every level of the human community from the local nursing home to the huge international conferences on issues like the Human Genome. In order to understand bioethics, all aspects that govern our lives must be considered, including: law, philosophy, theology, medicine, life sciences, nursing and social science. As a class we will explore, discuss, and debate many but not all of the bioethical issues we are faced with in today's society. We will not advocate any one position in the issues we address- rather, we will try to investigate the perspectives of many different stakeholders. We will strive to respect and honor the family and cultural values that all students in the class bring to our discussions at ALL times. As a class, we will aim to become better speakers, thinkers and listeners.

Bioethics will include a mixture of notes, in - class debates/discussions, and position papers/presentations.
Prerequisite(s): Living Environment \& at least one of the following: Earth Science, General Chemistry or Regents Chemistry

BIO 106 - Human Biology (1/2 unit)
Grade 12
4 credits at JCC
This one-semester laboratory course relates concepts of human anatomy and physiology to human behavior. Topics include cell and human organization; metabolic functions of the nervous system, reproductive system, musculoskeletal system, and cardiovascular system as they contribute to homeostasis; human inheritance and reproduction; and human evolution and ecology. Each topic covered will focus on adaptive mechanisms by which human physiology affects human behavior. BIO 106 is specifically designed to fulfill transfer requirements for Human Services majors. It is recommended that students take this course after completing any required non credit coursework in Reading, Math, or English. High school biology strongly recommended.

## Social Studies

Global History and Geography 9 (1 unit)
Grade 9
The first year of Global History and Geography focuses on global history through 1750.
Global History and Geography 10 (1 unit)
Grade 10
The second year of Global History and Geography focuses on global history from 1750 through the present day. Completion of this course (and Global History and Geography 9) qualifies the student to take the Global History and Geography Regents Exam in June. Passing the Regents examination is a graduation requirement.
U.S. History and Government (1 unit)

Grade 11
This course is the study of the American people, their past, and their present. Beginning with the discovery of America, the student will progress chronologically through the events which form their heritage, to the present time.

Areas of interest include the American people, culturally and sociologically; government and politics, with special emphasis on historical documents and their interpretations; American economic life; the United States in world affairs; and the American civilization in historic perspective. It is necessary to pass a Regents examination in U.S. History and Government to qualify for a Regents diploma.

## American Government ( $1 / 2$ unit)

Grade 12
This course covers our citizen-government relationship, principles of American freedom, American government at the federal, state, and local levels, trends in American government, and comparative government.

Economics ( $1 / 2$ unit)
Grade 12
This course covers the nature of economics, production, consumption and income, foreign and domestic trade, distribution, comparative economic heritage, and economic interpretation.

Sociology ( $1 / 2$ unit)
Grade 12
This course would be an alternative to the distance learning, college prep course currently offered. This will function as a general intro and will attempt to be relevant to the local issues faced by our own community.

History Through Film I ( $1 / 2$ unit)
Grades 9, 10, 11, 12
The purpose of this course is to examine World and United States History through the lens of film and movies. Along with watching these films, you will also be examining primary and secondary sources in order to critically analyze the accuracy of the film, as well as the purpose and direction of the film. Throughout the semester we may be examining films including but not limited to the following time periods: Ancient History and the Pre-Modern and Modern World. We will be watching short clips from selected films and as well as films in its entirety.
Students will also examine sources related to the era, including but not limited to works of art, literature, primary sources, artifacts, and photographs to further create an understanding of the historical era presented. Students will then use the films as "historical evidence" in determining accuracy of the film, the point of view of the directors/producers of the film, their target audience, and their reasons for producing this film. Students will ask themselves: what motive did these individuals have when they decided to make this film? Does this present an accurate and unbiased
portrayal of the event studied? If not, which perspective is being presented here and why? How can the experiences of the fictional (or non--fictional) characters help us to create a complete understanding of what life was like during this era?

## History Through Film II ( $1 / 2$ unit)

Grades 9, 10, 11, 12
The purpose of this course is to examine World and United States History through the lens of film and movies. Along with watching these films, you will also be examining primary and secondary sources in order to critically analyze the accuracy of the film, as well as the purpose and direction of the film. Throughout the semester we may be examining films including but not limited to the following time periods: World War Eras and Modern Issues in Africa, Asia and the Middle East. We will be watching short clips from selected films and as well as films in its entirety.
Students will also examine sources related to the era, including but not limited to works of art, literature, primary sources, artifacts, and photographs to further create an understanding of the historical era presented. Students will then use the films as "historical evidence" in determining accuracy of the film, the point of view of the directors/producers of the film, their target audience, and their reasons for producing this film. Students will ask themselves: what motive did these individuals have when they decided to make this film? Does this present an accurate and unbiased portrayal of the event studied? If not, which perspective is being presented here and why? How can the experiences of the fictional (or non--fictional) characters help us to create a complete understanding of what life was like during this era?

Psychology ( $1 / 2$ unit)
Grades 10, 11, 12
This class is an elective designed to introduce students to the field of Psychology. This class focuses on a number of different topics in accordance with the APA Framework including biopsychology, scientific method, and abnormal psychology.

## Technology

Design and Drawing for Production (1 unit)
Grades 9, 10, 11, 12
Students learn the basic skills of freehand sketching and technical drawing using traditional drafting tools and computer aided design (CAD) programs. Students will produce isometric, multiview, oblique, and other drawing types. Through various activities and projects students will utilize sketches, technical drawings, the design process and models or prototypes to communicate solutions to given problems. This course may be used to satisfy the New York State graduation requirement in fine arts.

## Physical Education

Physical Education (1/2 unit per year)
Grades 9, 10, 11, 12
The Regents Action Plan mandates that $1 / 2$ credit be given each year for the successful completion of the required objectives of the physical education program in grades $9-12$. During the four years in high school a student would earn two credits toward a high school diploma.

Curriculum (for Physical Education)
General Brown Physical Education is normally taught in units. Some of the units offered are:

Recreational Games
Cross Country Skiing
Football
Soccer
Strength Training

Gymnastics
Physical Fitness
Softball
Volleyball
Basketball

Lacrosse
Self Defense
Tennis

