## COURSE DESCRIPTION 20232024

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Graduation Requirements for the class of 2009 and thereafter:

| Advanced | Designation | Regents | Diploma | Local | Diploma |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Content Area | Credits | Content Area | Credits | Content Area | Credits |
| English | 4 | English | 4 | English | 4 |
| Social Studies | 4 | Social Studies | 4 | Social Studies | 4 |
| Math | 3 | Math | 3 | Math | 3 |
| Science | 3 | Science | 3 | Science | 3 |
| LOTE | 3** | LOTE | 1 | LOTE | 1* |
| Art/Music | 1 | Art/Music | 1 | Art/Music | 1 |
| Health | . 5 | Health | . 5 | Health | . 5 |
| Physical Education | 2 | Physical Education | 2 | Physical Education | 2 |
| Electives | 1.5 | Electives | 3.5 | Electives | 3.5 |
| Total: | 22 | Total: | 22 | Total: | 22 |

## Note:

* Students must complete 2 units of study and will earn 1 credit by the end of the freshmen year. Passing the Regional LOTE exam or earning a unit of commencement level credit in LOTE earns one unit of credit.
** Students acquiring 5 units in Art, Music, Business, or Vocational Education may be exempt.


## REQUIRED EXAMS

| Advanced Designations <br> (Passing score of 65 or above) | Regents Diploma <br> (Passing score of 65 and above) |
| :--- | :--- |
| Common Core English Language Arts | Common Core English Language Arts |
|  <br> Common Core Algebra II | Common Core Algebra I or Geometry or Algebra II |
| Regents Global History | Regents Global History |
| Regents US History | Regents US History |
| Regents Science (1 Life Science \& 1 Physical Science) | Regents Science |
| Regional Foreign Language Exam |  |

## English Language ARTS

"It is not in the stars to hold our destiny but in ourselves."-William Shakespeare

## ENGLISH 9

Prerequisite: Successful completion of $8^{\text {th }}$ grade English
Credits: 1
Full Year Course
English 9 builds upon the five categories of Common Core Learning Standards: Reading literature, reading information, writing, listening and speaking, and language. The course explores various genres of informational and literary texts with a significant focus on analysis of key textual ideas and details. Writing assignments focus on using text-based evidence to support claims and to develop literary analysis.

ENGLISH 9 HONORS
Prerequisite: Successful completion of $8^{\text {th }}$ grade English
Credits: 1
Full Year Course
English 9 Honors builds upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and includes the four aspects of language use: reading, writing, speaking, and listening. The course introduces and defines various genres of literature; writing activities and assignments are linked to reading selections and develop critical and close reading skills. Various genres of literature will be introduced and exploration of each genre's literary elements; determination of theme and intent; and examination of vocabulary and semantics are also included in the course content. Additionally, English 9 Honors emphasizes further development of critical thinking and discourse skills.

## ENGLISH 10

Prerequisite: Successful completion of English 9
Credits: 1
Full Year Course
English 10 offers a balanced focus on composition and literature. Typically, students learn about alternate aims and audiences of written compositions by writing persuasive, critical, and creative multi-paragraph essays and compositions. Through the study of various genres of literature, students can improve their reading rate and comprehension and develop the skills to determine the author's intent and theme and to recognize the techniques used by the author to deliver his or her message.

## English Language ARTS Cont.

## ENGLISH 10 HONORS

Prerequisite: Successful completion of English 9 with a minimum yearly average of at least 85, essay of application, teacher recommendation, and completion of summer reading and project. Students must also maintain a minimum average of at least 85 to maintain enrollment in the course. Credits:

1
Full Year Course

This course is designed as an introduction to novels, short stories, and poetry. We will be exploring each genre's literary elements, determining theme and intent, and examining vocabulary and semantics. You will also be building upon previous writing skills and developing the writing
 processes and practices necessary for producing successful compositions. You will be learning to write persuasive, critical, and creative multi-paragraph essays and compositions.

## ENGLISH 11

Prerequisite: English 10
Credit: $\quad 1$
Full Year Course

English 11 continues to develop students; writing skills, emphasizing clear, logical writing patterns, word choice, and usage, as students write essays and begin to learn techniques of writing research papers. Students continue to read works of literature, which often form the backbone of the writing assignments. Literary conventions and stylistic devices may receive greater emphasis than in previous courses.

## ENGLISH 11 HONORS

Prerequisite and Requirements: Teacher recommendation (based on final English 10 average), completion and submission of application, and completion of REQUIRED summer reading and project (to be submitted on the first day of school).
Credits: 1
Full Year Course

English 11 Honors continues to develop students' writing skills, emphasizing clear, logical writing patterns, word choice, and usage as students write essays and begin to learn the techniques of writing research papers. Students continue to read works of literature, which often form the backbone of writing assignments. Literary conventions and stylistic devices receive greater emphasis (than in previous courses). Additionally, English 11 Honors emphasizes comprehension, discernment, and critical thinking skills (close reading) in the reading of texts and literature. Advanced literary techniques are introduced and explored, with the aim of creating sophisticated readers.

## English Language ARTS Cont.

## ENGLISH 12

Prerequisite: Successful completion of English ELA Regents Examination and English 11 course work.
Credits: 1
Full Year Course
English 12 blends composition and literature into a cohesive whole as students write critical and comparative analyses of selected literature, continuing to develop and refine their language arts skills. Students study the language, character, action, and theme in works and write expository, argumentative, and narrative and write multi-paragraph essays; one


MAJOR research paper (Senior Thesis) is a required component. Additionally, students improve their critical thinking skills as they determine the underlying assumptions and values within selected literary works and develop critical standards for evaluating literature (both fiction and non-fiction).

## COLLEGE COMPOSITION (ENG101)

Prerequisite: (GCC) Completion of ENG100, or ESL100 with a grade of C or better, or by placement. (Perry Central School): 85 or above on the English Language Arts Regents Exam, completion and submission of application, and completion of REQUIRED summer reading and project (to be submitted on first day of school)
Credits: .5 High School, 3 GCC
Half Year Course - Fall Semester

## Full Genesee Community College Catalog Description:

Concentrates on the rhetorical principles and strategies essential for clear, effective academic writing. Emphasizes the stages of the writing process and the critical thinking skills necessary to create appropriately researched and documented college level prose. Draws readings and models for analysis from a variety of college level sources. Requires students to produce a minimum of 20 pages of writing, excluding exercises and quizzes.

## Course Description:

Students study and practice techniques of successful college and professional writing, with emphasis on the writing process (planning, drafting, revising): writing structures (common methods of development, paragraphs, sentences, diction, tone, and style); writing for special assignments (essay examination, critical essay, research paper); and readings with a purpose (student and professional essays arranged according to the common rhetorical strategies). The role of PURPOSE in the writing process, problems basic to composition, effective examples of how writers make decisions that produce successful writing products will be stressed.

## English Language ARTS Cont.

INTRODUCTION TO LITERATURE (LIT 201)
Prerequisite: ENG 101
Credits: .5 High School, 3 GCC
Half Year Course - Spring Semester
Catalog Description: Introduces the unique characteristics of poetry, fiction, and drama. Investigates the function of literature as a form of communication. The student learning objectives for Literature 201 include:

1. Given a sample of short fiction and a list of the significant elements of short fiction, write a response of at least 100 words identifying one of the significant elements of short fiction in order to demonstrate familiarity with the elements of short fiction;
2. Given a sample poem and a list of the significant elements of poetry, write a standard paper, employing appropriate academic usage and style, identifying one of the significant elements of poetry in order to demonstrate familiarity with the elements of poetry;
3. Given a sample drama and a list of the significant elements of drama, write a standard paper, employing appropriate academic usage and style, identifying one of the significant elements of drama in order to demonstrate familiarity with dramatic elements;
4. Write a standard paper tracing one common theme presented over time and/or across more than one literary form (in a given set of examples of fiction or poetry or drama), to demonstrate either chronological and cross-genre knowledge;
5. Write a standard paper, applying critical judgment, by drawing on at least one basis for making an informed critical judgment of a given example of short fiction or poetry or drama, in order to demonstrate familiarity with critical method;
6. Write a standard paper which relates one theme in short fiction or poetry or drama to the student's own world and experience, to examine the relationship between text and reader.

## CREATIVE WRITING

Prerequisite: None
Credits: . 5
Half Year Course
In this course students will read and look at many mentor texts that will model form, style, and techniques. Then we will practice creating a variety of works such as short fiction; poetry; blogs; scripts for videos, plays and podcasts; and artwork. Each student will complete their own portfolio publication at the end of the semester.

## English Language ARTS Cont.

## LIT FILMS

Prerequisite: None
Credits: . 5
Half Year Course

This course will lead students through interesting texts that were turned into films. Students will read and analyze the texts and then watch and analyze the film. They will explore choices made and liberties taken by producers and directors when developing themes, setting, characters, etc. The culminating activity will be a short story or poem that the student reads and turns into a film, making deliberate choices to cut and take liberties while being able to support their decisions.

## THEATRE 1:

Prerequisite: None
Credits: . 5
Half Year Course - Fall Semester
This course will be open to all grade levels. It will meet each day in the Auditorium, and focuses on developing the basic foundations of script and character analysis, acting, movement, and scene work. While individuality is encouraged in the course, the necessary risk-taking and personal nature of the work demands that a strong sense of teamwork be developed among participants. Students will:

- Read and analyze a play
- Participate in exercises to develop voice and body into character
- Develop a personal connection to character
- Produce Monologue/Scenes independent of a director

Since public performance is a typical expression of the course work, the midterms and finals will be open to audience members and invited guests.

## SAT/ACT TEST PREP

Prerequisite: None
Credits: 5
Half Year Course
This course is designed to prepare students for the verbal sections of the ACT and SAT. Students will utilize a variety of prep materials specifically designed to improve test scores, improve speed, teach test-taking strategies and improve problem-solving skills. Students can expect to strengthen their competency in critical reading, the study of vocabulary through context, use of grammar and mechanics, algebra, functions, statistics, and probability. A flexible curriculum is presented in order to address specific student needs.

## Social Studies Courses

"Belleve you Can and you're halfway there"- Theodore roosevelt

## HISTORY 9 - GLOBAL HISTORY \& GEOGRAPHY

Prerequisite: Successful completion of $8^{\text {th }}$ grade Social Studies Credits: 1
Full Year Course
History 9R is a chronological based study of world history. Ninth grade is the first half of a two-year course, which requires every student to take the state regent's examination at the end of the $10^{\pi}$ grade. In order to successfully complete History 9 , each student must maintain a combined
 passing average of the four quarterly grades and also a local final exam, which will include material covered throughout the entire year. Students study all of the world history from the beginning of the first civilizations until the Age of Exploration (about the year 1700 A.D.). Students will then continue their study of the world in $10^{n}$ grade from the year 1700 to modern times.

## HISTORY 10R - GLOBAL HISTORY \& GEOGRAPHY

Prerequisite: Successful completion of History $9 R$
Credits: 1
Full Year Course
History 10R is the second year in a two-year sequence of a chronological study of world events and concepts. This course covers world events from approximately 1700 to the present. This global History and Geography course is based on the premise that, in the world today, it is impossible for a nation to remain isolated from events and movements in other nations. To better understand our own history, culture and development, we must better try to understand the history, geography, culture and development of other nations. This course culminates in the Global History and Geography Regents Examination in June.

## WORLD CIVILIZATIONS 2 (HIS 102)

Prerequisite: 90 or above average in History $9 R$ and teacher recommendation
Credits: 1 High School, 3 GCC
Full-Year Course
This course covers the same material as History 10R; however, it includes many extension activities to enrich the overall learning experience for the student. This course is designed to prepare students for the Global History and Geography Regents Examination as well as History 11 Honors. This course will include the following topics in conjunction or addition to the regular $10^{n}$ grade curriculum:

1. Role of Science and Technology
2. Economics
3. Political and Social Developments
4. International Relationships and Cultural Trends on the Major Regions of the World

## Social Studies Courses Cont.

## US HISTORY AND GOVERNMENT

Prerequisite: Successful completion of History 9R and $10 R$
Credits: $\quad 1$
Full Year Course
History 11R covers the following topics that culminate in the US History and Government Regents Examination in June:

1. Constitutional Foundations
2. Industrialization of the U.S.
3. Rise of the American Business, Industry \& Labor
4. Adjusting Society to Industrialization
5. Reform in America
6. Americans Reaching Out
7. At Home and Abroad
8. The Great Depression
9. The U.S. in the Age of Global Crisis

10. Peace and Problems
11. World in Uncertain Times
12. The Decade of Change - 1960's
13. Limits of Power
14. Trends Towards Conservatism
15. America in the 1990's and Beyond

## HISTORY IN THE 20TH CENTURY (HIS 201)

Prerequisite: Teacher recommendation, Successful completion of History 9R and $10 R$
Credits: 1 High School, 3 GCC
Full Year Course
All students in HIS 204 will sit for the January Regents Exam and will cover the United States History from 1865 through 2007. This course offers an overview of American history from Reconstruction to the present. We will focus on the ideas and attitudes of ordinary Americans, as well as the contributions of better-known figures. Our goal is to understand not only what happened but also why it happened. Through lectures, readings, videos, and discussions we will consider a wide range of scholarly interpretations. As the semester progresses, you will be encouraged to make your own assessments about the events creating the American experience.

## PARTICIPATION IN GOVERNMENT

Prerequisite: Completed or enrolled in US History
Credits: .5
Half-Year Course
This course is a study of the American political processes as it applies to every person in our society. The course teaches students how to become actively involved in participatory government.

## Social Studies Courses

## ECONOMICS 12

Prerequisite: Completed or enrolled in US History
Credits: . 5
Half-Year Course
This course is a study of the American economic system, with special emphasis on the macro aspects of the economy. The course will provide students with basic decision-making skills allowing them to be effective consumers in the economy.

1. Supply and Demand
2. Business Organizations
3. Money Supply
4. Role of Government
5. Global Economy
6. Personal Economic Choices


## AMERICAN NATIONAL GOVERNMENT (POS 101)

Prerequisite: Completed or enrolled in US History
Credits: .5 High School, 3 GCC
Half-Year Course
This course is the study of the Constitutional development and the present practice of American Government. Special emphasis is placed on the three branches in regard to their function and operation. There will also be a significant amount of attention given to the role of political parties and the individual citizen.

## ECONOMICS 13

Prerequisite: Completed or enrolled in US History
Credits: . 5
Half-Year Course
This course is designed to familiarize students with the concepts and terminology of economics through analysis of government aggregates. There is an emphasis on the interrelationship of governmental, military, and educational institutions. Students will need to demonstrate an understanding of the basic relationships in the political economy.

## INTRODUCTION TO SOCIOLOGY (SOC 101)

Prerequisite: Completed or enrolled in US History
Credits: $\quad .5$ High School, 3 GCC
Half-Year Course
This course is an investigation of the major factors affecting the structure and functioning of group life. Social patterns such as cultural values, deviance, class structure and social change will be explored. Upon completion, each student will understand the methods and perspectives sociologists employ, as well as the way group forces influence the individual in society.

## Social Studies Courses

## GENERAL PSYCHOLOGY (PSY 101)

Prerequisite: Completed or enrolled in US History
Credits: .5 High School, 3 GCC Credits
Half-Year Course
This course is an introduction to the scientific study of human and animal behavior. Topics covered include basic methodology, motivation, learning, memory, human development, personality, psychological disorders, and therapy.

## FOUNDATIONS ACADEMIC SUCDESS (FYE 100)

## Prerequisite: Completed or enrolled in US History

Credits: $\quad .5$ High School, 3 GCC
Half-Year Course
This course presents techniques that help students cope successfully with the demands of the first year in college. Enlarges the student's awareness of self with respect to academic and personal goals, and assists each person to gain the necessary skills to succeed in college, perspectives sociologists employ, as well as the way group forces influence the individual in society.

## THE TURBULENT 1960's

Prerequisite: Open to students in grades 10-12
Credits: . 5 High School
Half-Year Course
This course will trace the political and social changes of the 1960s through music. Topics include: the fallout of President Kennedy's assassination, the Vietnam War, anti-war protests, the Civil Rights Movement, the Cold War, and the changing role of women. Some of the best bands were the soundtrack of this decade, from Creedence Clearwater Revival, to The Beatles, and The Rolling Stones. While learning the history of the 1960s, we will analyze some of the most popular rock and roll songs ever created to gain an even deeper understanding of the pop culture of the era.

## HOLOCAUST \& GENOCIDE STUDIES

Prerequisite: Open to students in grades 10-12
Credits: . 5 High School
Half-Year Course
How can we understand the impact of the Holocaust and its ongoing legacies? This course will look at the Holocaust perpetrated by Nazi Germany as well as the genocides in Armenia, Rwanda, and Darfur. The course will not only look into the causes of these tragic events, but analyze the ways in which they are remembered through movies, literature, and survivor testimonies today.

## Mathematics Courses

"LIFE IS A MATH EQUATION. IN ORDER TO GAIN THE MOST, YOU HAVE TO KNOW HOW TO
CONVERT NEGATIVES INTO POSITIVES." - UNKOWN

## COMMON CORE ALGEBRA 1

Prerequisite: Successful Completion of $8^{\text {th }}$ grade math
Credits: 1
Full Year Course
Common Core Algebra I is the first year in the New York State math sequence of the Common Core Curriculum. The topics discussed
 include relationships between quantities and reasoning with equations, linear and exponential relationships, descriptive statistics, expressions and equations, and quadratic functions and modeling. The course will terminate with the Common Core Algebra regents exam in June.

## COMMON CORE ALGEBRA IA

Prerequisite: Successful Completion of $8^{\text {th }}$ grade math
Credits: 1
Full Year Course
Common Core Algebra IA is the first year of the two-year extended Algebra I course of the New York State Common Core Math Curriculum, and covers the first-half of the Common Core Algebra I Curriculum. The topics discussed include relationships between quantities and reasoning with equations, linear and exponential relationships, descriptive statistics, expressions and equations, and quadratic functions and modeling. The course will terminate with a local final exam. The regents exam will be taken in June of the second year of the course.

## COMMON CORE ALGEBRA 1B

Prerequisite: Successful Completion of Common Core Algebra 1A
Credits: $\quad 1$
Full Year Course
Common Core Algebra IB is the second year of the two-year extended Algebra I course of the New York State Common Core Math Curriculum, and covers the second-half of the Common Core Algebra I curriculum. The topics discussed include relationships between quantities and reasoning with equations, linear and exponential relationships, descriptive statistics, expressions and equations, and quadratic functions and modeling. The course will terminate with the Common Core Algebra I Regents exam in June.

## Mathematics Courses Cont.

## COMMON CORE GEOMETRY

Prerequisite: Successful completion of Common Core Algebra I
Credits: 1
Full Year Course
Common Core Geometry is the second year of the New York State Common Core Math Curriculum. The topics discussed include surface area and volume, constructions, parallel and perpendicular lines, triangle relationships, similarity, quadrilaterals, transformations, and circle relationships. The course will terminate with the Common Core Geometry Regents exam in June.

## COMMON CORE ALGEBRA II (MAT 136)

Prerequisite: Successful completion of CC Algebra I and CC Geometry
Credits: 1 High School, 3 GCC
Full Year Course
Common Core Algebra II is the second year of the New York State Common Core Math Curriculum. The topics discussed include investigating polynomials, factoring, solving and applying equations, complex numbers, trigonometry, real numbers, logarithms, exponential and logarithmic functions and graphs, arithmetic and geometric series and sequences, probability, statistics, and data distributions. The course will terminate with the Common Core Algebra II Regents exam in June.

## COMMON CORE ALGEBRA II A

Prerequisite: Successful Completion of CC Algebra and CC Geometry
Credits: $\quad 1$
Full Year Course
Common Core Algebra IIA is the first year of the two-year extended Algebra II course of the New York State Common Core Math Curriculum, and covers the first-half of the Common Core Algebra II Curriculum. The topics discussed include investigating polynomials, factoring, solving and applying equations, complex numbers, real numbers, logarithms, exponential and logarithmic functions and graphs, and arithmetic and geometric series and sequences. The course will terminate with a local final exam. The regents exam will be taken in June of the second year of the course.

## COMMON CORE ALGEBRA II B

Prerequisite: Successful Completion of Common Core Algebra IIA
Credits: $\quad 1$
Full Year Course
Common Core Algebra IIB is the second year of the two-year extended Algebra II course of the New York State Common Core Math Curriculum, and covers the second-half of the Common Core Algebra II Curriculum. This course reviews polynomials, factoring, solving and applying equations, complex numbers, real numbers, logarithms, exponential and logarithmic functions and graphs, arithmetic and geometric series and sequences. Probability, statistics, trigonometry, and data distributions will be explored in preparation for the Common Core Algebra II Regents exam in January/June.

## Mathematics Courses Cont.

## MATH AND FINANCIAL APPLICATIONS

## Prerequisite: None

Credits: 1
Full Year Course
Math and Financial Applications is a full year course. The topics discussed include income, banking, taxes, student loans, vehicle loans, mortgages, credit cards, insurance and investing. The course will terminate with a local final exam.

## PRE-CALCULUS (MAT 140)

Prerequisite: Successful completion of Common Core Algebra II
Credits: 1 High School, 4 GCC
Full Year Course
A standard first course in calculus intended for (but not restricted to) students majoring in mathematics, science, engineering. The major emphasis of this course is on understanding the concepts and using them to solve a variety of physical problems. The topics discussed include functions of a single variable with regard to limits, continuity, differentiation, anti-differentiation, and applications of these topics, the definite integral, and the fundamental theorem of calculus. The course will terminate with a local final exam.

## CALCULUS I (MAT 141)

Prerequisite: Pre-Calculus
Credits: 1 High School, 4 GCC
Half Year Course
A standard first course in calculus intended for (but not restricted to) students majoring in mathematics, science, engineering. The major emphasis of this course is on understanding the concepts and using them to solve a variety of physical problems. Calculus I studies functions of a single variable with regard to limits, continuity, differentiation, anti-differentiation, and applications of these topics. Concludes with a study of the definite integral and the fundamental theorem of calculus.

## CALCULUS II (MAT 142)

Prerequisite: Calculus I
Credits: 1 High School, 4 GCC
Full Year Course
A standard first course in calculus intended for (but not restricted to) students majoring in mathematics, science, engineering. The major emphasis of this course is on understanding the concepts and using them to solve a variety of physical problems. The topics discussed include applications of the definite integral, analysis of the natural logarithmic, exponential, trigonometric, and hyperbolic functions, introduction to differential equations, techniques of integration, L'Hopital's Rule and indeterminate forms, improper integrals, and infinite series. The course will terminate with a local final exam.

## Mathematics Courses Cont.

## MATH A. I.

Prerequisite: None
Course meets on alternate days.
Academic Intervention Services are designed to support students who are struggling to achieve the learning standards in Mathematics in grades 7-12. These additional general education services include:

- Extra instructional time to help students achieve the learning standards in the course requiring support. This time may include but is not limited to: reteaching or pre-teaching of major concepts, additional practice of specific skills, or time to complete homework with the support of a teacher.
- Support services to help students overcome barriers that may affect their ability to learn, such as, attendance problems, lack of organization skills, discipline problems, family-related issues, health-related issues, or deficits in foundational skills. (These support services could include school guidance and counseling services to improve attendance and/or coordinate services provided by other agencies.)


## MATH CREDIT FOR BOCES VOCATIONAL COURSES

Students may be able to obtain their $3^{\text {rd }}$ credit of math via a BOCES Vocational Course.

## Science Courses

"EVERYTHING IS THEORETICALLY IMPOSSIBLE, UNTIL IT IS DONE."- ROBERT A. HEINLEIN

## PHYSICAL SETTING: EARTH SCIENCE

Prerequisite:
Credits: 1 High School
Full Year Course
The Living Environment is a lecture and laboratory course based upon the "Living Environment Core Curriculum" as produced by the New York State Education Department. It is comprised of the ten main "Key Ideas" listed below (as they apply to NYSED Learning Standards for Mathematics, Science, and Technology \#1 and 4.


Standard \#1: Students will use mathematical analysis, scientific inquiry, and engineering design, as appropriate, to pose questions, seek answers, and develop solutions

- Key Idea 1: The central purpose of scientific inquiry is to develop explanations of natural phenomena in a continuing and creative process.
- Key Idea 2: Beyond the use of reasoning and consensus, scientific inquiry involves the testing of proposed explanations involving the use of conventional techniques and procedures and usually requiring considerable ingenuity.
- Key Idea 3: The observations made while testing proposed explanations, when analyzed using conventional and invented methods, provide new insights into natural phenomena.

Standard \#4: Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

- Key Idea 1: Living things are both similar and different from each other and from nonliving things.
- Key Idea 2: Organisms inherit genetic information in a variety of ways that result in continuity of structure and function between parents and offspring.
- Key Idea 3: Individual organisms and species change over time.
- Key Idea 4: The continuity of life is sustained through reproduction and development.
- Key Idea 5: Organisms maintain a dynamic equilibrium that sustains life.
- Key Idea 6: Plants and animals depend on each other and their physical environment.
- Key Idea 7: Human decisions and activities have had a profound impact on the physical and living environment

In addition to a daily lecture, students will be scheduled for lab periods that meet every other day ( $\mathrm{A} / \mathrm{B}$ cycle). To qualify to sit for the Regent's Exam, each student must have successfully completed $\mathbf{1 2 0 0}$ minutes ( $\mathbf{3 0}$ credits) of laboratory experience with satisfactory written reports for each laboratory investigation.

## Science Courses Cont.

## LIVING ENVIRONMENT BIOLOGY

Prerequisite: Successful completion of Earth Science and completed or enrolled in Common Core Algebra I
Credits: 1 High School
Full Year Course
The Living Environment is a lecture and laboratory course based upon the "Living Environment Core Curriculum" as produced by the New York State Education Department. It is comprised of the ten main "Key Ideas" listed below (as they apply to NYSED Learning Standards for
 Mathematics, Science, and Technology \#1 and 4.

Standard \#1: Students will use mathematical analysis, scientific inquiry, and engineering design, as appropriate, to pose questions, seek answers, and develop solutions

- Key Idea 1: The central purpose of scientific inquiry is to develop explanations of natural phenomena in a continuing and creative process.
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- Key Idea 1: Living things are both similar and different from each other and from nonliving things.
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- Key Idea 5: Organisms maintain a dynamic equilibrium that sustains life.
- Key Idea 6: Plants and animals depend on each other and their physical environment.
- Key Idea 7: Human decisions and activities have had a profound impact on the physical and living environment

In addition to a daily lecture, students will be scheduled for lab periods that meet every other day ( $\mathrm{A} / \mathrm{B}$ cycle). To qualify to sit for the Regent's Exam, each student must have successfully completed 1200 minutes ( $\mathbf{3 0}$ credits) of laboratory experience with satisfactory written reports for each laboratory investigation.

## Science Course Cont.

## LIVING ENVIRONMENT A (LEA) - FUNDAMENTALS OF BIOLOGY

Prerequisite: None
Credits: 1
Full Year Course (First year of a two-year course)
Four areas of biology (1-4) are studied during this course.

1. Foundations of Biology
2. The Living Cell
3. Energy Transformations in Living Things
4. Life Functions of Organisms


This course lays the groundwork for Living Environment Biology (LEB). There is a comprehensive final exam given at the end of the year. This course takes a hands on approach to helping students understand the fundamental concepts of biology including basic laboratory skills. The lab component of this class is incorporated into the class time. Labs completed in the course count toward the 30 credit ( 1200 minute) laboratory requirement for the Regents Examination at the end of the second year.

## LIVING ENVIROMENT B (LEB) - BIOLOGY

Prerequisite: Fundamentals of Biology (LEA) or teacher recommendation
Credits: 1 High School
Full Year Course (Second year of a two-year course)
Four areas of biology (5-8) are studied during this course.

1. Heredity
2. The Continuation of Life
3. Evolutionary Relationships
4. Ecology and Human Impact on the Environment

This course prepares students to successfully complete the Living Environment Regents Exam. This course takes a hands on approach to helping students understand the fundamental concepts of Biology including basic laboratory skills. The lab component of this class is incorporated into the class time. To qualify to take the Regents Examination, students must successfully complete a minimum of 30 lab credits ( 1200 minutes) over two years.

## AQUATIC SCIENCE

Prerequisite: Successful completion of Living Environment Biology/ Living Environment A-B Sequence. Successful completion of Earth Science.
Credits: 1 High School
Full Year Course
Our earth is unique in its possession of water masses. They are what give our planet its distinct look, and they are where life began. This course provides an introduction to the physical, chemical, and biological aspects of our freshwater and marine environments and their importance to the global system. The physical and living components of our "water planet" will be studied including a survey of freshwater/marine fauna and flora and mankind's effects on and uses of the water's resources. Research projects, laboratory investigations, including dissections, and outdoor activities will augment classroom lessons.

## Science Courses Cont.

## ENVIRONMENTAL SCIENCE

Prerequisite: Successful completion of 2 Regents science credits (One credit must be Regents Earth Science)
Credits: 1 High School
Full Year Course
In this course, you will learn about the connections between living things, ecosystems, land use, water, and the atmosphere. We will focus on current topics in environmental science, including climate change, energy use, environmental law, land and species management policies, and careers in environmental science. You will learn both in and outside of the classroom, participating in a few field trips as well as ongoing projects. By the end of this course you will be well-versed in environmental science concepts, be comfortable presenting ideas to others, and will understand how to apply these concepts to solve real-world problems.

## APPLIED SCIENCE

## Prerequisite: Successful completion of a Regents Science <br> Credits: 1 High School

## Full Year Course

Understanding is best accomplished by doing - Taking a problem, designing solutions, and testing them out. This physical science elective will look to establish the patterns of thought and problem-solving skills that come with scientific inquiry. Content will include most anything in science and engineering (motion and mechanics, electricity and magnetism, chemistry, structural engineering, and more). If it interests you, we'll try to find a way to work on it. Students will complete teacher directed experiments as well as being given regular design challenges to create solutions for. The end project for the course will involve each student choosing a topic to investigate, designing tests for that topic, and documenting their outcome.

## ASTRONOMY

Prerequisite: Successful completion of Earth Science
Credits: 1 High School

## Full Year Course

In this project-based course, students explore the solar system, the Milky Way, and beyond. there is a strong emphasis on the connection between science, technology, engineering, and mathematics. Students will learn to use all of these skills together in order to plan missions to the Moon \& Mars, prevent an asteroid from impacting the Earth, discover how stars form, and how the universe came to be. The course will conclude with a final project.

## PHYSICAL SETTING - CHEMISTRY

Prerequisite: Successful completion of Earth Science \& Biology, CC Algebra and currently enrolled in Geometry or Algebra II.
Credits: 1 High School
Full Year Course
Chemistry is the study of the composition, structure and properties of matter, the changes which matter undergoes, and the energy accompanying these changes. This is a topical course with the following units of study:

| Matter and Energy | Kinetics and Equilibrium | Mathematics of Chemistry |
| :--- | :--- | :--- |
| Atomic Structure | Acids and Bases | Nuclear Chemistry |
| Periodic Table | Redox and Electrochemistry | Solutions |
| Bonding | Organic Chemistry |  |

Lab experiences are often related to classroom instruction and provide reinforcement for that instruction. Laboratory experience is required. Labs meet every other day. Students must perform and prepare satisfactorily written lab reports equivalent to a minimum of 1200 minutes ( 30 credits) prior to taking the Regents examination at the end of the school year.

## Science Courses Cont.

## PHYSICAL SETTING - PHYSICS

Prerequisite: Successful completion of Earth Science, Biology, and preferably Chemistry; CC Algebra and Geometry and currently enrolled in Algebra II or
Pre-Calculus or Calculus.
Credits: 1 High School, 3 GCC
Full Year Course

The major emphasis is a modern view of physics based on the fundamental concepts underlying the basic science. By using a unifying theme approach, concepts of conservation of momentum, conservation of charge, vectors, scalars, and fields are studied. Students are asked to weigh new evidence and develop critical thinking and problem-solving skills and attitudes to become informed citizens capable of making sound decisions on societal issues and problems.

Topics covered include:

1. Mechanics
2. Work and Energy
3. Electricity and Magnetism
4. Wave Phenomena
5. Geometric Optics
6. Modern Physics

Lab experiences are often related to classroom instruction and provide reinforcement for that instruction. Laboratory experience is required. Labs meet every other day. Students must perform and prepare satisfactorily written lab reports equivalent to a minimum of 1200 minutes ( 30 credits) prior to taking the Regents examination at the end of the school year.

## CELL BIOLOGY - (BIO 104)

Prerequisite: Successful completion of Chemistry (Physics highly encouraged but not mandatory)
Credits: $\quad .5$ High School, 3 GCC
Half-Year Course (Semester 1)
Introduces basic chemistry, the structure, function, and biochemistry of cells, and the scientific method. Laboratory exercises develop skills including use of binocular microscopes and measuring. This is a preparatory course, for students with little or no recent experience in biology and chemistry, who plan on taking additional biology courses. Two class hours, two lab hours. Prerequisite: Completion of the Genesee Community College reading requirement and completion of the Genesee Community College math requirement or concurrent enrollment in MAT 108 or MAT 092. Students planning to enroll in Physical Therapy Assistant or a Math or Natural Science program should choose MAT092. Not open to students with credit in BIO 115, BIO 152 or higher. (Not for credit in Math/Science curriculum)

## PRINCIPLES OF BIOLOGY (BIO 100)

Prerequisite:
Credits: . 5 High School, 3 GCC
Half-Year Course (Semester 2)
Catalog Description: Introduction to the basic characteristics of life, organisms, their interactions, and the scientific process. Improves scientific thinking and increases science literacy. Explores five core concepts of biology: studying and using the scientific method, evolution, ecology, genetics, and biodiversity. Two class hours, two lab hours. (Not for credit in Math/Science curriculum or students with credit in restricted biology electives) Not open to students with credit in BIO152, BIO153, BIO115, or BIO116.

## Languages Other Than English

"THE BEST WAY TO PREDICT YOUR FUTURE IS TO CREATE IT." - ABRAHAM LINCOLN

## INTRODUCTION

The increased importance of foreign language proficiency is evident. Opportunities for entrepreneurial success and career advancement can be greatly enhanced for those with proficiency in a second language. Research shows many benefits to the study of another language. Students who study another language do better on SAT scores. The longer those students continue a language sequence, the greater the level of proficiency they will attain.

Students hoping to earn a four-year college degree in New York State, including those who wish to transfer from community colleges, need to have foreign language credits in order to complete their degree, regardless of the major. In addition, Spanish III satisfies one of the requirements for the Advanced Regents Diploma. Students in Perry are fortunate to have the opportunity to earn nine college credits in
 Spanish before graduating from High School.

## SPANISH I

## Prerequisite: None

Credits: 1
Full Year Course
This course is for students who need to earn the required foreign language credit for graduation or for students who would like to strengthen their Spanish skills before entering the Regents language sequence. In this course, students learn how to communicate about daily activities at home, in school and in the community using the present tense. Students learn basic formulas to carry out the communicative functions of socializing, providing and obtaining information, expressing feelings and opinions, and persuading. Students review major social etiquette and are able to compare and contrast aspects of their own daily life with the daily life in Spanish speaking countries. Throughout the course, students demonstrate their language proficiency through pair skits, individual projects, frequent quizzes and chapter tests. A local final examination is given.

## SPANISH II

Prerequisite: Spanish I
Credits: $\quad 1$
Full Year Course
Level II Spanish builds upon the skills developed in Spanish I. Students extend their language abilities in the present tense with special emphasis on uses of reflexive verbs and object pronouns. In addition, students learn how to narrate stories in the past in order to talk about leisure activities, vacation trips and current events. Finally, students learn how to give and comprehend oral and written commands. Students learn new formulas to carry out the communicative functions of socializing, providing and obtaining information, expressing feelings and opinions, and persuading. Culturally authentic artifacts and tests are used to develop speaking, reading and writing skills. Students explore customs, history and art of Spanish speaking people in order to build upon their knowledge of the culture. Throughout the course, students demonstrate their language proficiency through pair skits, group and individual projects, frequent quizzes and chapter tests. A local final examination is given.

## Languages Other Than English

## SPANISH III - ELEMENTARY SPANISH 2 (SPA 102)

Prerequisite: None<br>Credit: 1 High School, 3 GCC

Full Year Course
Students review and extend vocabulary for all fifteen-syllabus topics in order to expand their conversational abilities. Students review and extend their abilities to narrate stories in the present and past tense. They also learn how to use the future tense. Students learn additional formulas to carry out the communicative functions of socializing, providing and obtaining information, expressing feelings and opinions, and persuading. Comprehensive goals include attaining faster understanding when listening to a native speaker. Culturally authentic artifacts and texts are used to develop listening, speaking, reading and writing skills. Throughout the course, students demonstrate their language proficiency through pair skits, group and individual projects, frequent quizzes and unit tests. A local final examination is given.

## SPANISH IV - INTERMEDIATE SPANISH 1 (SPA 201)

Prerequisite: Spanish III - SPA 102
Credits: 1 High School, 3 GCC

## Full Year Course

Students advance their ability to read, write, speak and understand the Spanish language in order to maintain simple conversations. Students learn more about the culture of the Spanish-speaking world through authentic readings, videos, and individual research. In Spanish IV, students learn about the geography, history, arts, literature, customs and attractions of Spain. Special emphasis is given to examining current events in Spain through resources from the Internet. Students learn more advanced formulas to carry out the communicative functions of socializing, providing and obtaining information, expressing feelings and opinions, and persuading. Grammar points are reviewed as needed to carry out communicative tasks. Culturally authentic artifacts and texts are used to develop speaking, reading and writing skills. All students prepare a 5 -minute oral presentation on a cultural topic. Throughout the course, students demonstrate their language proficiency through pair skits, group and individual projects, oral reports, essays, quizzes and unit tests. A local final examination is given.

## SPANISH V - INTERMEDIATE SPANISH 2 (SPA 202)

Prerequisite: Spanish IV - SPA 201
Credits: 1 High School, 3 GCC
Half-Year Course
The goal of Spanish V is to offer students a chance to improve their speaking and writing proficiency and to maintain and refine language skills. Universal cultural themes are explored by examining the Hispanic perspective and comparing and contrasting it to an American perspective. Special emphasis is given to examining current events in Spanish speaking countries using authentic video, audio and Internet resources. Students learn more advanced formulas to carry out the communicative functions of socializing, providing and obtaining information, expressing feelings and opinions, and persuading. Grammar points are reviewed as needed to carry out communicative tasks. The uses of the subjunctive and compound tenses are reviewed and expanded. Throughout the course, students demonstrate their language proficiency through pair skits, group and individual projects, oral reports, journals and unit tests. All students prepare an 8 -minute oral presentation on a cultural topic. A local final examination is given.

## Business Courses

"There's no shortage of remarkable ideas, What's missing is the will to execute them."- Seth Godin

## CAREER \& FINANCIAL MANAGEMENT 0 CAREER \& EDUCATIONAL PLANNING (CEP 101)

Prerequisite: None
Credit: 1 High School, 3 GCC
Full Year Course
Career and Financial Management is a course to help you start thinking about and preparing for your FUTURE. You will be taking a look at many important decisions that you will have to make and skills that you will need to develop in order to be successful, such as:


- Identifying your values, interests and abilities while exploring different career areas
- The process of selecting a career, identifying opportunities, applying for positions and going to work
- Handling personal finances, budgeting, financial services, taxes
- How businesses are organized and how they operate

Several projects and activities will help you begin making decisions and choices that will affect the rest of your life!!

## ACCOUNTING

Prerequisite: None
Credits: 1
Full Year Course (Offered every other year)
Accounting is a full year course, which covers basic accounting principles and procedures. Much of the time is spent recording business transactions and preparing financial statements. Students will be provided with a hands-on approach for learning how automated accounting systems function. The course covers four major accounting systems commonly found in computerized accounting environments: general ledger, accounts payable, accounts receivable and payroll.

## BUSINESS LAW

Prerequisite: None
Credits: 1

## Full Year Course (Offered every other year)

Business Law is a full year course designed for students who want a better understanding of our laws and how they affect both business and personal life. Students will become aware of a legal environment in which the business firm and consumer operate. Some of the many topics covered include: the court system, litigation, criminal law, torts, bailments, and contracts

## KEYBOARDING - ELEMENTARY KEYBOARDING (OFT 101)

Prerequisite: None
Credits: . 5 High School, 3 GCC
Half Year Course
College Keyboarding is a half-year course that is required of all business majors. Students use Microsoft Word to learn proper keyboarding techniques and word processing skills. This course covers a variety of business document formats and personal applications.

## Business Courses Cont.

## COMPUTER APPLICATIONS - INTRODUCTION TO COMPUTERS

## (CIS 102)

Prerequisite: None<br>Credit: . 5 High School, 3 GCC<br>Half-Year Course

Computer Applications is a half-year advanced business course that usually follows College Keyboarding in the business major sequence. Students will use the Business Department's networked IBM compatible computers to learn various areas of Microsoft Office in depth. This will include Publisher (desktop publishing), Excel (spreadsheets and charts), Access (database and mail merge) and PowerPoint (presentations). Internet projects are an important part of this course.

## ENTREPRENEURSHIP

Prerequisite: None
Credits: 5

## Half-Year Course

Entrepreneurship is a half year course. Students learn business concepts and attitudes, while developing their own business. Through guest speakers, Junior Achievement, and class instruction, students learn how to recognize characteristics and practices of successful entrepreneurs, evaluate an idea based on product, customer and competitive-advantage criteria, and learn business planning skills for venture start up, marketing, financing, management and ethical decision making. The end product is the opportunity to put their own idea for a real business into motion.

## MARKETING

Prerequisite: None
Credits: 5
Half-Year Course
Marketing is a half-year course that follows Entrepreneurship. Marketing impacts every aspect of our lives - where we shop, what we buy, how we eat, what we drive and even where we live. This Marketing course will introduce learners to the concepts of marketing, including the development of new products, the elements of the marketing mix-product, price, place and promotion, identifying market segments and targeting consumer groups, and the various types of promotional activities. Emphasis will be placed on oral and written communications, mathematical applications, problem solving, and critical thinking skills as they relate to advertising/ promotion/selling, distribution, financing, marketing-information management, pricing, and product/service management. Instructional strategies may include computer/technology applications, real \&/or simulated occupational experiences, a school-based enterprise, and/or projects in marketing functions. A final project will allow students the opportunity to apply marketing principles to a field of their particular interest such as Sports, Fashion, Recreation, or Entertainment.

## BUSINESS COMMUNICATIONS

Prerequisite: None
Credits: . 5 High School, 3 GCC

## Half-Year Course

Want to own a business?? Run a business? Work at a business? Communication is the key to success! Tune in to improve your listening skills. Polish up your writing skills with better grammar and lots of flash. Learn to speak like a pro. But it is not just for business majors. Develop real life skills that will prepare you for success in any career in any field.

## Art Courses

"Creativity takes courage."- Henri matisse

## STUDIO IN ART

Prerequisite: None
Credit: $\quad 1$
Full Year Course

## Studio Art is:

- An introductory course in fine arts
- The encouragement of creativity, craftsmanship and development of personal ideas through a variety of problem-solving assignments

- The development of student skills in a range of media
- The exploration of 2D and 3D design
- The preparation for more advanced and specialized studio courses


## Students Will:

- Study drawing, painting, printmaking, glass, textiles, and ceramics techniques
- Learn to incorporate the elements and principles of art in their work
- Develop skills and techniques using various art materials
- Work toward creating and refining their own individual style
- Increase their aesthetic awareness and appreciation for the arts
- Increase their awareness of art history and contemporary styles


## STUDIO IN DRAWING \& PAINTING

## Prerequisite: Studio in Art

Credits: $\quad 1$
Full Year Course

## Drawing/Painting is:

- A course specific to drawing and painting
- The encouragement of creativity, craftsmanship and development of personal ideas through a variety of problem-solving assignments
- The development of student skills in a range of drawing and painting materials such as: charcoal, ebony pencils, colored pencils, pastels, acrylic paints, watercolor, ink and oil paints
- The learning to draw from observation as well as conceptually


## Students Will:

- Study techniques such as blending and shading, rendering objects to look 3D and realistic, creating a range of values and giving the illusion of texture
- Learn to incorporate the elements and principles of art in their work
- Work toward creating and refining their own individual style
- Increase their aesthetic awareness and appreciation for the arts
- Increase their awareness of art history and contemporary styles


## Art Courses Cont.

## CERAMICS I

Prerequisite: Studio in Art
Credit: . 5
Half-Year Course

## Ceramics is:

- A course specific to the production of ceramic pieces and teaches students the mastery of clay materials
- The encouragement of creativity, craftsmanship and development of personal ideas through a variety of problem solving assignments.
- The development of student skills in various methods of hand building techniques as well as with the pottery wheel
- The exploration of 3D design and sculpture techniques
- The exploration of the glazing process



## Students Will:

- Study ceramics through discussion, research and application
- Learn to incorporate the elements and principles of art in their work
- Develop skills and techniques using various methods of hand building pottery as well as glazing techniques
- Work toward creating and refining their own individual style
- Increase their aesthetic awareness and appreciation for the arts
- Increase their awareness of art history and contemporary styles


## DIGITAL PHOTOGRAPHY

Prerequisite: Studio in Art
Credits: 1
Full Year Course

## Digital Photography is:

- An introductory course in visual communications through digital cameras
- The encouragement of creativity, craftsmanship and development of personal ideas through a variety of problem-solving assignments
- The exploration of creating fine art compositions through the use of a digital camera
- The developing of student skills in a range of photographic topics such as Lighting, Action shots, Portraits, Landscapes and more


## Students Will:

- Know how to use various features of the camera to have creative control of your photographs
- Be able to decide what type of lighting to use in a given situation to produce optimum results
- See how photographic composition can make or break a photograph
- Understand how to use photo editing to improve the overall appearance of images
- Work toward creating and refining their own individual style
- Increase their aesthetic awareness and appreciation for the arts
- Increase their awareness of art history and contemporary styles


## Art Courses Cont.

## CERAMICS II

Prerequisite: Studio in Art and Ceramics
Credit: . 5
Half-Year Course- Offered every other year

## Ceramics II is:

- A course specific to the production of ceramic pieces and teaches students the mastery of clay materials
- The encouragement of creativity, craftsmanship and development of personal ideas through a variety of problem-solving assignments.

- The development of student skills in various methods of hand building techniques as well as with the pottery wheel, kiln and glass work.
- The exploration of 3D design and sculpture techniques
- The exploration of the glazing process


## Students Will:

- Study ceramics through discussion, research and application
- Learn to incorporate the elements and principles of art in their work
- Learn the skills needed to load, fire and unload the kiln.
- Create works of glass and compare it to the ceramics process
- Develop skills and techniques using various methods of hand building pottery as well as glazing techniques
- Work toward creating and refining their own individual style
- Increase their aesthetic awareness and appreciation for the arts
- Increase their awareness of art history and contemporary styles


## DRAWING I (ART 110)

Prerequisite: Studio in Art, Drawing and Painting
Credits: . 5 High School, 3 GCC

## Half-Year Course

Drawing I introduces beginning drawing skills, focuses on observational drawing and the development of an artistic imagination. Students supply their own materials. This introductory drawing course will cover a range of fundamental concepts that develop and improve drawing skills. Students will explore a variety of drawing equipment and techniques to exercise and increase their understanding of drawing. Projects build on basic techniques and discussions into finished works.

## PAINTING I (ART 114)

Prerequisite: Studio in Art, Drawing and Painting, Drawing I
Credits: $\quad .5$ High School, 3 GCC
Half Year Course
Painting I introduces acrylic painting techniques and focuses on the use of color theory, design fundamentals and painting styles. This introductory painting course will cover a range of fundamental concepts that develop and improve painting skills. Students will explore a variety of painting equipment and techniques to exercise.

## Art Courses Cont.

## DESIGN

Prerequisite: Studio in Art
Credit: . 5
Half-Year Course- Offered every other year

## Design is:

- An introductory course in visual communications through digital resources as well as fine art materials
- The encouragement of creativity, craftsmanship and development of personal ideas through a variety of problem-solving assignments
- The development of student skills in a range of computer programs as well as photography
- The development of student skills in a range of fine art materials such as cut paper and drawing/painting
- Problem solving for consumer needs


## Technology Courses

"TECHNOLOGY IS NOT JUST A TOOL. It CAN GIVE LEARNERS A VOICE THAT THEY MAY NOT HAVE HAD BEFORE." - GEORGE COUROS

## DDP - DESIGN \& DRAWING FOR PRODUCTION

Prerequisite: Grades 9-12
Credit: 1
Full Year Course
This course is an introductory course that is focused on developing problem solving skills and abilities. By the completion of this class you will:

- Being able to draw and visually communicate your ideas with others
- Understanding the basic principles of the design process and learning through doing

- Create and us technical drawings to produce a product


## CONSTRUCTIONS SYSTEMS

Prerequisite: Grades 10-12, Completion of DDP with 70 or higher
Credits: . 5
Half-Year Course
This course will provide you with an introduction to basic building construction and building principles. By the completion of this class you will:

- Have developed both virtual and material models of residential structures using industry standard processes in individual and group activities.
- Layout a building site for a small structure.
- Be able to locate a building site, understand the basics of owning, managing and purchasing property for building.
- Develop a spreadsheet that will calculate a list of building materials and provide current pricing.
- Understand the systems and structures found in a typical residential structure and be able to facilitate basic repairs.


## ENGINEERING DESIGN \& DEVELOPMENT

Prerequisite: Grades 10-12, Completion of DDP with 90 or higher
Credits: 1
Full Year Course
This course will provide you with the opportunity to understand how to design the world around you and to develop new solutions or improve upon existing ones. By the end of this class you will:

- Produce a product or process to solve an actual problem you or someone else is experiencing.
- Bring an idea for a productive process or solution to a problem to reality and creat a working model or prototype.
- Work with and understand the various materials and manufacturing processes used to make every day products.
- Design and build models and projects using the design process and elements of design.


## Technology Courses Cont.

## ENERGY SYSTEMS

Prerequisite: Grades 10-12, Completion of DDP with 80 or higher
Credit: . 5
Half-Year Course
This course will provide you with a basic understanding of energy and how it affects our lives in several different aspects. By the conclusion of this class you will:

- Explore various renewable energy sources.
- Have an understanding of the social, societal, economical, and ecological impacts of our energy use.
- Understand energy transfer and conversion.
- Design an energy efficient and self reliant system for a residential structure.


## BASIC PROGRAMMING

Prerequisite: Grades 9-12
Credits: . 5
Half Year Course
This class will provide you with introductory programming skills that will let you write and understand how computer programming languages work and how to write basic programs. You will be able to

- Critically think how to use algorithms, math, to solve problems.
- Learn computer coding structure.
- Write basic programs to do calculations, store and retrieve data.


## ROBOTICS

Prerequisite: Grades 10-12, Basic Programming
Credit: . 5
Half-Year Course
In this course you design and assemble a remote-control vehicle that will perform a specific task. By the end of this class you will:

- Build various vehicle structures for a robot to complete specific tasks.
- Develop automated robotic programs to perform repeatable specific tasks with precision.
- Learn about safe drone operation


## Certifications: Recreational drone operators license

## Technology Courses Cont.

## AGRICULTURAL MECHANICS

Prerequisite: Grades 10-12
Credit: $\quad 1$
Full Year Course
This course offers a basic understanding of the skills needed by today's agricultural engineers and mechanics. Students learn basic skills in small engines, ag safety, agriculture equipment maintenance and design. Students utilize skills through "hands-on" applications
 where they design and build projects, fix machinery and learn safe machine shop management. Students also have the opportunity to participate in various field trips where they compete in career development events at colleges and fairs if desired.

Certifications Available: NSTMOP Tractor and Machinery safety course.

## Agriculture Courses

"IF AGriCulture GOes Wrong, Nothing else will have a chance to Go right." -

INTRODUCTION TO AGRICULTURE, FOOD, \& NATURAL RESOURCES - AFNR
Prerequisite: 9-10 Grade
Credits: $\quad 1$
Full Year Course
The Introduction to Agriculture, Food, \& Natural Resources course includes:


- Agricultural Education - Agriculture, FFA, and SAE.
- Communication Methods
- Science Processes
- Natural Resources
- Plants and Animals
- Agricultural Power and Technology

Students participating in the Introduction to Agriculture, Food, and Natural Resources course experience hands-on activities, projects, and problems. Student experiences involve the study of communication, the science of agriculture, plants, animals, natural resources, and agricultural mechanics. While surveying the opportunities available in agriculture and natural resources, students learn to solve problems, conduct research, analyze data, work in teams, and take responsibility for their work, actions, and learning. For example, students work in groups to determine the efficiency and environmental impacts of fuel sources in a practical learning exercise.

## FLORAL DESIGN

Prerequisite: None
Credit: 1
Full Year Course
Principles and Elements of Floral Design is a course designed to give students a deeper understanding of the artistic floral design techniques and the floral design industry. Students will identify flowers and plants used in floral design, and demonstrate design elements in relation to specific occasions. The students will explore career opportunities, practice management factors of the floral enterprise, and evaluate arrangements based on the artistic principles and elements of floral design.

## Course Topics:

Preparing Floral Designs Using Fresh and Silk Flowers
Career Development \& Entrepreneurship Opportunities
Principles and Elements of Floral Design
Supervised Agricultural Experience
Personal and Occupational Safety
Specialty Floral Designs
Specialty Orders

Preparing Corsages and Boutonnieres Evaluation of Product Production Blooming into Business
History of Floral Art
Plant Identification
Event Planning
Weddings

## Agriculture Courses Cont.

## HORTICULTURE

Prerequisite: None
Credits: . 5
Half-Year Course
This course is intended to introduce individuals to the world of plants and flowers. Concepts will include growing plants, growing media, plant structure, plant anatomy, plant nutrition, plant reproduction, insects, floriculture, flower design and plant production business. Students in this class will not be obligated to join FFA, but
 membership is encouraged, as the coursework will be centered around certain career development events

## LEADERSHIP

Prerequisite: None
Credits: . 5
Half-Year Course
The purpose of this course is to help students develop leadership skills necessary for success for future careers through effective communications, the course will focus on leadership categories and styles, including employment skills. It covers the fundamentals of communication, public speaking, working in groups, parliamentary procedure, group dynamics and team building, goal setting, problem solving and decision making, personal development and the transition to work skills.

## ANIMAL SCIENCE

Prerequisite: Biology
Credits: 1
Half-Year Course
This course will explore the sciences involved in animal production. Instruction will lead students through animal anatomy and physiology, reproduction, nutrition, health issues, marketing, and animal products. Students will gain knowledge and skills through direct instruction, labs, and field trips. This information will tie into students' FFA, CDE, and SAE experiences.

## Health and Physical Education

## "THE GROUNDWORK OF ALL HAPPINESS IS GOOD HEALTH." - L. HUNT

## PHYSICAL EDUCATION

## Prerequisite: None

Credit: . 5 Credit per year (2 credits required for graduation)
Full Year Course- Every other day
Physical Education is considered an integral part of the total education of the student. The program at the High School level contributes to the child's growth and development in the following areas: Social growth, skill development for successful participation in lifetime recreational activities and instilling an awareness of the importance of a healthy lifestyle in today's society. This course includes a 6 -week swimming unit.


## HEALTH - INTRODUCTION TO HEALTHFUL LIVING (HED 204)

Prerequisite: None
Credits: .5 High School, 3 GCC
Half-Year Course
The high school health curriculum is a required unit of study for graduation. Students will develop techniques in dealing with physical, mental and social health aspects through the study of substance use and abuse, nutrition, and fitness, human sexuality and parenting. Students will participate in a CPR and AED certification unit.

## BODY CONDITIONING (PED 171)

Prerequisite: None
Credits: .5 High School, 1 GCC
Half-Year Course, Every other day
Designed for students with minimal workout experience. Emphasizes weight control techniques, nutritional recommendations, safety precautions, warming up and cooling down, and cardiovascular training. Provides the opportunity to work out and learn new techniques including plyometrics, speed and agility exercises, balance exercises, and stability ball exercises.

## Music Department Courses

"A STRANGE ART-MUSIC- THE MOST POETIC AND PRECISE OF ALL THE ARTS, VAGUE AS A
DREAM AND PRECISE AS ALGEBRA."- GUY DE MAUPASSANT

## SENIOR HIGH CONCERT BAND

Prerequisite: Junior High Band or Permission of Instructor
Credit: . 5
Full Year Course- Every other day
Instrumental performing ensemble for students in grades 9-12. Course includes advanced study in tone, articulation, technique, theory and rhythmic studies for all instruments. Students will explore a wide variety of musical
 styles. Two required performances per year and rotating weekly lessons. Opportunities for solos and select ensembles are available. Strongly recommended for a sequence in music.

## SENIOR HIGH CHOURS

Prerequisite: Previous choral experience suggested but not required
Credits: .5
Full Year Course- Every other day
Vocal performing ensemble for students in grades 9-12. Course includes advanced exercise to cover breathing, tone production, range, flexibility and articulation. Students will explore a wide variety of musical styles. Two required performances per year, with opportunities for solos and select ensembles available. Strongly recommended for a sequence in music.

## SENIOR HIGH JAZZ ENSEMBLE

Prerequisite: Member of Senior High Band and Successful Audition
Credits: 5
Full Year Course, Every other day
Instrumental performing ensemble for selected students in grades 9-12. Course includes study of various styles of jazz music, technique, rhythmic studies, improvisation, and listening skills. Five-six required performances per year. Opportunities for clinics/work- shops and select ensemble are available. Strongly recommended for a sequence in music

## SENIOR HIGH SELECT CHORUS

Prerequisite: Member of Senior High Chorus and Successful Audition
Credit: . 5
Full Year Course - Every other day
Vocal performing ensemble for selected students in grades 9-12. Course includes study of various styles of vocal music, choreography, breathing, tone production, range, flexibility, and articulation. Five-six required performances per year. Strongly recommended for a sequence in music.

## Music Department Courses Cont.

## MUSIC APPRECIATION (MUS 101)

Prerequisite: $10^{\text {th }}-12^{\text {th }}$ Grade
Credit: . 5 High School, 3 GCC
Half-Year Course
This course is offered to music and non-music majors who wish to develop an awareness of and appreciation for the art of Western Music. Course studies include musical styles, composers, instrumentation, and musical time periods. In addition, students will have an awareness of political, scientific, and cultural events as they correspond to the relative music period. Music majors are strongly recommended to take this course
 as part of their sequence.

## HISTORY OF ROCK \& ROLL (MUS 203)

Prerequisite: $10^{\text {th }}-12^{\text {th }}$ Grade
Credit: 5 High School, 3 GCC
Half-Year Course
Surveys the development of rock and roll through a basic narrative of American culture, politics, and economic history. Examines race, gender, class, technology, and the music business as it relates to the creation of rock music in the United States and globally. Learning activities include critical analysis of audio and video recordings, attendance at live concerts of various rock and roll styles, group discussions, and research projects. Note: Students wishing to use this course to fulfill the SUNY General Education requirement in American history must have earned an 85 or higher on the US History Regents exam. Three class hours.

## MUSIC THEORY

Prerequisite: $10^{\text {th }}-12^{\text {th }}$ Grade
Credit: . 5 High School, 3 GCC
Half-Year Course
"Music Theory is a course for students with little to no background in music performance or theory who wish to obtain the skills necessary to read music and learn to apply the skills they learn in a practical way. Students will study music scales, intervals, key signatures, meters, rhythmic reading, aural skills, piano basics and chords."

