

Science Program

Class of 2005 and thereafter

Science Core Requirement: 3 Years

- A. Local or Regents Diploma
Pass the Living Environment course, a Physical Setting course and one other approved* science course, and pass a science Regents examination with a grade of 55 (for a Local diploma) or 65 (for a Regents diploma).
- B. Regents Diploma with Advanced Designation
Pass the course and Regents examination in two of the four Regents Science courses. One course and examination must be the Living Environment and one must be a Physical Setting course. An additional credit must be earned in an approved* science course.

*Science Regents Workshop, Science Research, and Emergency Medical Technician are not approved courses and may not be used to fulfill the science requirement.

Science Regents Workshop-Living Environment (11, 12) Full Yr., 1/2 Cr. Alternate Days

The New York State Education Dept. has mandated that any student who has not completed the Science Regents requirement be provided with remedial instruction. This regents requirement is necessary for graduation. This workshop fulfills the remedial requirement. This workshop is for students who have passed the Living Environment course and satisfied the laboratory requirement but have not scored a passing grade on the Living Environment Regents Examination.

Science Regents Workshop-Physical Setting: Earth Science (11, 12) Full Yr., 1/2 Cr. Alternate Days

The New York State Education Dept. has mandated that any student who has not completed the Science Regents requirement be provided with remedial instruction. This Regents requirement is necessary for graduation. This workshop fulfills the remedial requirement. This workshop is for students who have passed the Physical Setting: Earth Science course and satisfied the laboratory requirement, but have not scored a passing grade on the Physical Setting: Earth Science Regents Examination.

Physical Setting: Earth Science Challenge Extended (9, 10) Full Yr., 1 Cr., Double Period Each Day

Co-requisite: Math A developmental or Math A Regents Extended and teacher recommendation. The double period each day will give these students the increased time necessary to complete class and laboratory work. These students would generally be up to three grade levels below in reading ability and would experience difficulty with a regents level science laboratory program. This course allows students to study the earth as a complex system involving interactions among rock materials, water, air and living organisms. The basic principles of astronomy, geology and meteorology, and oceanography-related processes are reviewed in detail. Laboratory exercises reinforce the basic principles in each of the course topics. A strong emphasis is placed on interrelating the earth sci-

ence concepts and utilizing them in problem solving situations. A laboratory performance test is part of the June Regents Examination.

Physical Setting: Earth Science Skills (9, 10, 11, 12) Full Yr., 1 Cr.

Pre-requisite: Placement must be determined by the Committee on Special Education. This course allows classified students to study the Earth as a complex system involving interaction among rock materials, water, air and living organisms. The basic principals of astronomy, geology, meteorology, and oceanography-related processes are reviewed in detail. These concepts are developed through appropriate laboratory exercises. A strong emphasis is placed on interrelating the earth science concept and utilizing them in problem solving situations. A laboratory performance test is part of the June Regents Examination.

Physical Setting: Earth Science Challenge (9, 10 11, 12) Full Yr., 1 Cr., Lab Alternate Days

Pre- or Co-requisite: Math A Developmental or Math A Regents Extended and teacher recommendation. This course allows students to study the earth as a complex system involving interactions among rock materials, water, air and living organisms. The basic principles of astronomy, geology, meteorology and oceanography-related processes are reviewed in detail. Laboratory exercises reinforce the basic principles in each of the course topics. A strong emphasis is placed on interrelating the earth science concepts and utilizing them in problem solving situations. This challenge class is designed to assist the student who might be experiencing some difficulty with regents level science and might be up to two grade levels below reading ability. A laboratory performance test is part of the June Regents Examination.

Physical Setting: Earth Science (9, 10, 11, 12) Full Yr., 1 Cr., Lab Alternate Days

Pre or Co-requisite: Math A Regents. This course allows students to study the earth as a complex system involving interactions among rock materials, water, air and living organisms. The basis principles of astronomy, geology, meteorology and oceanography-related processes are reviewed in detail. Laboratory exercises reinforce the basic principles in each of the course topics. Students must be no more than one grade level below in reading ability and should have a strong background in mathematical skills such as graphing and the use of formulas/equations. It is designed for the average to above average ability and interest in science. A strong emphasis is placed on interrelating the earth science concepts and utilizing them in problem solving situations. A laboratory performance test is part of the June Regents Examination.

Physical Setting: Earth Science Honors (9)**Full Yr., 1 Cr., Lab Alternate Days**

Pre-requisite: Math A (8th Grade), teacher recommendation, Living Environment, and meets department guidelines for Honors status. This course allows students to study the earth as a complex system involving interaction among rock materials, water, air and living organisms. The basic principles of astronomy, geology, meteorology and oceanography-related processes are reviewed in detail. Students must have a strong background in reading comprehension and mathematical skills including graphing and use of formulas/equations. Additional required laboratory exercises with completion of optional sections further reinforce the course topics. Computer technology will be used in a number of laboratory exercises and class work. It is designed for high school students of above average ability and interest in science. A stronger emphasis is placed on interrelating the earth science concepts and utilizing them in problem solving situations. Students will delve into related mathematical models and complete additional curriculum topics. All honors classes complete additional curriculum projects throughout the year. A laboratory performance test is part of the June Regents Examination.

Living Environment Challenge Extended (9, 10)**Full Yr., 1 Cr., Double Period Each Day**

Co-requisite: Math A Developmental or Math A Regents Extended and teacher recommendation. This course will provide a broad understanding of the fundamental principles of biology and will give treatment to the specific areas of biochemistry, human physiology, reproduction and development, modern genetics, modern evolution and ecology. These concepts are developed through appropriate laboratory experiences which emphasize the disciplined approach of the scientist. This course terminates with a Regents Examination. Challenge Extended is designed for students who would have been originally recommended for General Science or General Science AT in grade 9. The double period each day will give these students the increased time necessary to complete class and laboratory work. These students would be generally up to three or more grade levels below reading ability. They would experience difficulty with a Regents level science laboratory program.

Living Environment Challenge (9, 10, 11, 12)**Full Yr., 1 Cr., Lab Alternate Days**

Pre- or Co-requisite: Math A Developmental or Math A Regents Extended and teacher recommendation. This course will provide a broad understanding of the fundamental principles of biology and will give treatment to the specific areas of biochemistry, human physiology, reproduction and development, modern genetics, modern evolution, and ecology. These concepts are developed through appropriate laboratory experiences which emphasize the disciplined approach of the scientist. This course terminates with a Regents Examination. These students would be generally two to three grade levels below reading ability. The Challenge classes are designed to assist the student who might be experiencing some difficulty with Regents level science.

Living Environment (9, 10, 11, 12)**Full Yr., 1 Cr., Lab Alternate Days**

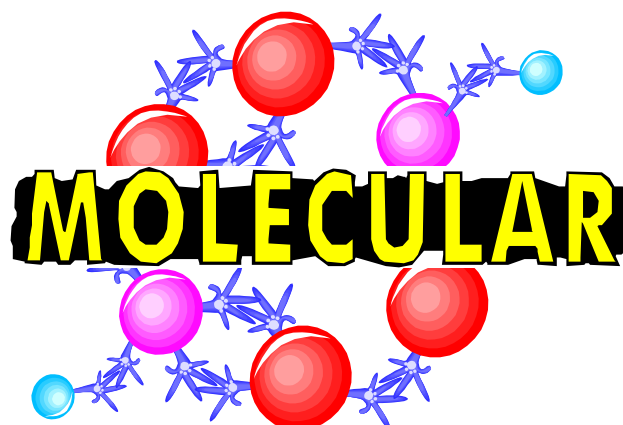
Pre- or Co-requisite: Math A Regents. This course is designed primarily for college-bound students. It will provide a broad understanding of the fundamental principles of biology and will give treatment to the specific areas of biochemistry, human physiology, reproduction and development, modern genetics, modern evolution, and ecology. These concepts are developed through appropriate laboratory experiences which emphasize the disciplined approach of the scientist. This course terminates with a Regents Examination. These students should not be more than one year below reading ability.

Living Environment Honors (9)**Full Yr., 1 Cr., Lab Alternate Days**

Pre-requisite: Math A (8th Grade), teacher recommendation, Physical Setting: Earth Science, and meets department guidelines for Honors status. This is an advanced level biology course designed for the more academically talented college-bound students. This course will help prepare students for future science courses in Physical Setting: Chemistry Honors, AP Biology, Anatomy, Physiology and Genetics. Portfolios and other alternative assessments will be an integral part of the student's evaluation. A science project is a requirement of this Honors course. Students are required to take the New York State Regents Examination in June.

Living Environment Skills (9, 10, 11, 12)**Full Yr., 1 Cr.**

Pre-requisite: Placement must be determined by the Committee on Special Education. This course will provide classified students with a broad understanding of the fundamental principles of Biology. It will address the areas of biochemistry, human physiology, reproduction and development, modern genetics, modern evolution and ecology. These concepts are developed through appropriate laboratory exercises. Students must take the Living Environment Regents Examination in June.



Science Research Program

The science research program provides students with the support and experience to do independent project work. Student project work can be in the area of the biological, chemical, physical, behavioral/social sciences or engineering. The area of project work is dependent upon the student's grade level. Older students might establish an arrangement with a mentor at a university. They will develop a senior project for submission to contests such as the Intel Science Talent Search.

Science Research (9) Full Yr., Alternate Days, 1/2 Cr.

Pre-requisite: Teacher recommendation. In this course, students will develop skills used in science research. Students will make use of computer based information retrieval systems, investigate some tools suitable for the observation and recording of data, work with some organisms and techniques suitable for certain projects and use some tools for data analysis. The scientific method will be reviewed so that each student can develop and report on a research project following the guidelines of the Long Island Science Congress. These guidelines include project proposal, bibliography, abstract, research paper, backboard and oral presentation. A notebook/log book must be maintained as part of the student portfolio. A limited number of students from the Research classes will be selected to participate in the Long Island Science Congress. Students may participate in field trips to the SUNY Stony Brook Student Research Support Program, university libraries and Long Island Science and Engineering Fair. Students are graded on a Pass/Fail basis. The 1/2 credit cannot be used as part of a sequence toward graduation. Students will participate in the school science symposium.

Science Research (10) Full Yr., Alternate Days, 1/2 Cr.

Pre-requisite: Teacher recommendation. In this course, students will continue to develop skills used in science research. Students will make use of computer based information retrieval systems, investigate some tools suitable for the observation and recording of data, and continue to work with data analysis. Each student will develop and report on a research project following the guidelines of the Long Island Science Congress. These guidelines include a project proposal, bibliography, abstract, research paper, backboard and oral presentation. A notebook/log book must be maintained as part of the student's portfolio. A limited number of students will be selected to participate in the Long Island Science Congress. Students may participate in field trips to SUNY Stony Brook Students Research Support Program, university libraries and Long Island Science and Engineering Fair. Students are graded on a Pass/Fail basis. The 1/2 credit cannot be used as part of a sequence toward graduation. Students will participate in the school science symposium.

Science Research (11)

(Research Projects) Full Yr., Alternate Days, 1/2 Cr.
Class Meets By Appointment

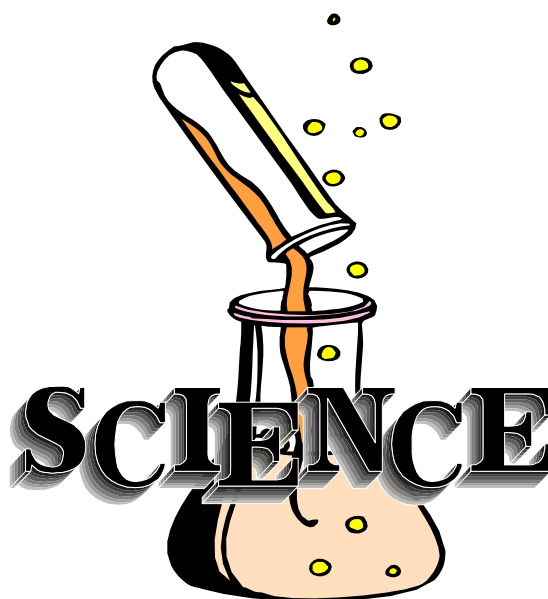
Pre-requisite: Science teacher and research teacher recommendations. Students should submit a request for participation to the research teacher. Students will develop and conduct a project which will provide them with the opportunity, in twelfth grade, to enter competitions such as: Intel Science Talent Search, Siemens-Westinghouse Science and Technology Competition; in addition to the Science and Engineering Fair. This project will involve a literature search, development of a hypothesis, hypothesis testing and analysis of the collected data. Possible areas for research are biological, physical, computer or behavioral/social sciences and engineering. Students will seek a mentor from local universities, hospitals, or laboratories for the research. In some cases, students can develop and conduct the research at school. Students will also participate in the school science symposium. The grade for Independent Study is on a Pass/Fail basis. The credit cannot be used for graduation requirements.

Science Research (12)

(Research Projects and Competitions)

Full Yr., Alternate Days, 1/2 Cr.
Class Meets By Appointment

Pre-requisite: Science teacher and research teacher recommendations. Students should submit a request for participation to the research teacher. Students will complete the research that was begun during eleventh grade (or under some circumstances, through a summer program). The research will be used to write a formal report. Students will complete applications for submission to the major applicable contests: Intel Science Talent Search, Siemens-Westinghouse Science and Technology Competition; in addition to the Science and Engineering Fair. Students will also participate in the school science symposium. The grade for Independent Study is on a Pass/Fail basis. The credit cannot be used for graduation requirements.



Advanced Placement Biology (11, 12)

Full Yr., Alternate Days, 1 Cr.

Pre-requisite: Living Environment, **Physical Setting: Chemistry, and teacher recommendation.** This course is designed to meet the objectives of a general biology course on the college level. Considerable time is spent in the laboratory collecting, analyzing and interpreting data; in order to meet the lab standards mandated by the College Board. Students taking this course should have demonstrated a strong interest in biological science and must have done well in Living Environment and Chemistry. Successful completion will prepare the student for the Advanced Placement examination, which can result in the acquisition of college credit. It is our experience that taking Genetics and Biotechnology will assist students with the AP exam.

Advanced Placement Biology and Human Anatomy and Physiology (11, 12)

Full Yr., 1 1/2 Crs.

Double Period Each Day

Pre-requisite: Living Environment, **Physical Setting: Chemistry, and teacher recommendation.** This advanced course is a combination of Advanced Placement Biology and Human Anatomy and Physiology. The student is registered for both subjects concurrently. The course is especially designed for students planning to take both the Advanced Placement examination in Biology and the New York State Regents College examination in Human Anatomy and Physiology. This course eliminates overlaps between regular Advanced Placement Biology and the separate half year Anatomy course, so that additional Anatomy Physiology preparation may be given to increase the success rate on the New York State College Examination. Like regular anatomy and Physiology, a thorough cat dissection culminating with two practical exams on this experience are integral to the course. Only students who have demonstrated superior performance in biology and are considering a career in the biological sciences or health fields should consider this subject.

Physical Setting: Chemistry (10, 11, 12)

Full Yr., 1 Cr.

Lab Alternate Days

Pre-or co-requisite: Math B or B1. This course is designed for students majoring in science, related fields of science, and other college preparatory students. It will provide the student with up-to-date chemistry concepts. Laboratory work is an integral part of the course.

Physical Setting: Chemistry Challenge (11, 12)

Full Yr., 1 Cr.

Lab Alternate Days

Pre-or co-requisite: Math B or B1 and **Teacher recommendation.** This course incorporates all the fundamental aspects of Regents Chemistry through the use of lectures, discussions, demonstrations and a strong emphasis on laboratory work. It will provide the student with an important focus on up-to-date chemistry concepts. Since this course terminates with the Chemistry Regents Examination, students will receive extensive preparation and review. The challenge classes are designed to assist the student who might be experiencing some difficulty with Regents-level science.

Physical Setting: Chemistry Honors (10)

Full Yr., 1 Cr.

Lab Alternate Days

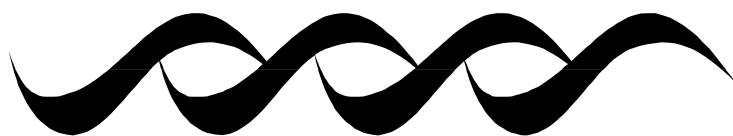
Pre-requisite: Living Environment Honors and **Physical Setting: Earth Science Honors, Math A/B Regents or Honors and teacher recommendation: or meets department guidelines for Honors status and teacher recommendation. Co-requisite:** Math B Regents or Honors. Honors Chemistry is an advanced level course. The Honors student will go beyond Regents work by delving into more intricate scientific theories and applications. The course places emphasis on descriptive content. Topics tested on the SAT II Chemistry examination will be covered in class. Those students who excel in this class may wish to take the SAT II Chemistry examination in early June. Investigative laboratory work is an integral part of the program. All of the laboratory investigations will utilize computerized technology to assist students in the analysis, measuring, and/or reporting of laboratory activities. Students are required to perform a science project. This requirement may be satisfied by concurrent project work completed in Science Research or completing individual projects within the class. Additional topics learned throughout the year are tested during the SAT II Test and the regular classroom examinations. This course terminates in a Regents Examination. *This course also qualifies for the Dowling College Dual Credit Program (refer to page V).*

Advanced Placement Chemistry (11, 12)

Full Yr., 1 Cr.

Lab Alternate Days

Pre-requisite: **Physical Setting: Chemistry and teacher recommendation.** This course is designed to be the equivalent of the general chemistry course usually taken during the first year of college. Students should attain a depth of understanding of fundamentals and competence in dealing with chemical problems while developing the ability to think clearly and to express ideas, both orally and in writing, with clarity and logic. Major emphasis is placed on chemical calculations and the mathematical formulation of chemical principles. Students taking this course should have demonstrated a strong interest in chemistry and should have maintained an 85% average in Regents Chemistry. Successful completion will prepare the student for the Advanced Placement examination, which can result in the acquisition of college credit.



Physical Setting: Physics (11, 12)**Full Yr., 1 Cr.****Lab Alternate Days**

Pre-requisite: Math B or B1. This course presents a modern view of physics based on conservation of matter, energy and momentum. The topics include mechanics, waves, electricity, magnetism, and modern physics. This is a lab-oriented program designed to produce skill in problem solving, critical thinking and cooperative learning. It requires students to learn by doing and is a transitional course into college level educational processes. A good background in mathematics is strongly recommended for success in the course. This course culminates with a Regents Examination.

Advanced Placement Physics B (11, 12)**Full Yr., 1 Cr.****Lab Alternate Days**

Pre-requisite: Math B or B2, Physical Setting: Chemistry and teacher recommendation. This course covers the material that would be covered in an introductory, one year, non-calculus college physics course. All of the topics in the NYS Regents Physics syllabus will be covered in much greater depth than in the standard Regents Physics class; along with many additional topics found in a College Physics course. The course will culminate with the students taking both APB Physics exam and the NYS Physics Regents. Although calculus is not required to take this course, the student must have strong mathematical skills. This course is a pre-requisite for the Advanced Placement "C" (with calculus) Physics class. Math B or B2 must be completed before the student can take this course, and the student should have maintained 90% or better in both Math B or B2 and Chemistry.

Advanced Placement Physics C (12 Only)**Full Yr., 1 Cr.****Lab Alternate Days**

Pre-requisite: Physics A. P. B. and teacher recommendation. Co-requisite: A. P. Calculus. This course covers the material that would be covered in a one year college physics course. Topics covered include mechanics, electricity, and magnetism. Calculus will be introduced and used where appropriate. Laboratory work will supplement the classroom presentation. This course is strongly recommended for college-bound students who intend to major in science, engineering or pre-medicine. Students who take the course should have maintained at least 85% average in APB Physics. Successful completion will prepare the student for the Advanced Placement examination, which may result in the acquisition of college credit.

Ecology Skills (11, 12)**Full Yr., 1 Cr.**

Pre-requisite: Placement must be determined by Committee on Special Education. The main emphasis of this full year course is the terrestrial environment-to compose and contrast the flora and fauna of fields and secondary forests to define ecology in terms of these interrelationships. The course is designed to get the student directly involved in the discovery of common life forms in his local environment. Becoming knowledgeable in the ecology of these plants and animal forms, the student will see the significant roles that they play in the general ecology of the entire biosphere. In the fall, the concentration will be on the dormancy of organisms in local

ecosystems. The spring semester will focus on budding and regeneration of these ecosystems. This course will deal with the actual and potential factors which upset the balance so necessary to nature. The student will see that we ourselves generate the forces that are potentially dangerous to us and, realizing this, will become involved in the current problems of pollution and conservation. Much attention is also given to pollution of Long Island's ground water. This course is dynamic in that it deals with current events. Background materials constantly relate to everyday problems and their possible solutions.

Ecology-Fall (11, 12)**One Semester, 1/2 Cr.**

Pre-requisite: Living Environment. The main emphasis of this course is the terrestrial environment-to compose and contrast the flora and fauna of fields and secondary forests to define ecology in terms of these interrelationships. The course is designed to get the student directly involved in the discovery of common life forms in his local environment. Becoming knowledgeable in the ecology of these plants and animal forms, the student will see the significant roles that they play in the general ecology of the entire biosphere. The course will also deal with the actual and potential factors which upset the balance so necessary to nature. The student will see that we ourselves generate the forces that are potentially dangerous to us and, realizing this, will become involved in the current problems of pollution and conservation. This course is dynamic in that it deals with current events. Background materials constantly relate to everyday problems and their possible solutions.

Ecology Spring (11, 12)**One Semester, 1/2 Cr.**

Pre-requisite: Living Environment. The goals of this course are the same as in Fall Ecology, except in the spring, the objectives will center around changes that occur in all life forms as they emerge in the warmth of spring. Much attention is also given to pollution of Long Island's ground water.

Marine Studies (11, 12)**Full Yr., 1 Cr.**

Pre-requisite: Living Environment and Physical Setting: Earth Science. Marine Studies is an introductory course designed to introduce students to the fields of Marine Biology & Oceanography. The first half of the year covers the history and subdivisions of Oceanography.

- Physical Oceanography-the movement of the oceans through waves, tides and currents;
- Chemical Oceanography-the various elements and compounds dissolved in sea water, and;
- Geological Oceanography-a study of the geological features of the ocean floor and shoreline and the forces that have created them.

The second half of the year focuses on marine ecology and marine biology. Students will be introduced to ecological principles associated with various marine environments and aquatic organisms, a variety of marine ecosystems, as well as various groups of marine organisms, many of which are known to inhabit the waters surrounding Long Island. In addition, students will learn how human interaction and pollution endanger the lives of many aquatic organisms and marine ecosystems, and will research conservation efforts as a method of preserving these delicate species and habitats. Finally, students will use appropriate technologies to research potential careers in marine biology and/or oceanography.

Course Descriptions **Science**

Grades 9, 10, 11, 12

Marine Studies Skills (11, 12)

Full Yr., 1 Cr.

Pre-requisite: Placement must be determined by the Committee on Special Education. Marine Studies is an introductory course designed to introduce students to the fields of Marine Biology and Oceanography. Students will be introduced to ecological principles associated with various marine environments and aquatic organisms, a variety of marine ecosystems, as well as various groups of marine organisms, many of which are known to inhabit the waters surrounding Long Island. In addition, students will learn how human interactions and pollution endanger the lives of many aquatic organisms and marine ecosystems, and will research conservation efforts as a method of preserving these delicate species and habitats.

Atmospheric Science (11, 12)

Full Yr., Alternate Days 1/2 Cr.

Pre-requisite: Physical Setting: Earth Science. This is a course for a student with a keen interest in the field of meteorology and the related earth sciences. Climate and climate change are covered depicting past hurricanes and other atmospheric phenomena. There will be a map analysis of daily weather conditions.

Astronomy (11, 12)

One Semester, 1/2 Cr.

Pre-requisite: Physical Setting: Earth Science. Nature offers no greater splendor than the starry sky on a clear, dark night. Silent, jeweled with the constellations of ancient myth and legend, the night sky has inspired wonder throughout the ages; a wonder that leads our imaginations far from the confines of Earth and the pace of the present day and out into the distant reaches of space and cosmic time itself. Come explore such topics as space exploration, planets, stars, time travel, extra-terrestrial life, and asteroid impacts.

Human Anatomy and Physiology (11, 12)

One Semester, 1/2 Cr.

Pre-requisite: Living Environment. This course is designed for students who are interested in a detailed study of vertebrate anatomy. A frog and cat are thoroughly dissected in the laboratory. **This dissection is an integral course requirement.** Classroom work will deal with the functions of human organs and systems. Students completing both Advanced Placement Biology and Human Anatomy and Physiology will be eligible to take the objective format, three hour, New York State Regents College Examination, for which there is a fee. A passing grade on the latter could enable the student to earn up to six college credits at most colleges in New York State and many others nationwide.

Genetics and Biotechnology I (11, 12)

One Semester, 1/2 Cr.

Pre-requisite: Living Environment. This course is an in-depth study of inheritance with particular emphasis on training students in the techniques of biotechnology. Students will produce a recombinant DNA molecule, insert it into an E coli bacterium, and observe it's function. The full nine lab recombinant DNA curriculum developed by Cold Spring Harbor Laboratory will be followed. **This course will greatly assist those students who are planning to take the Advanced Placement Biology course. This course is only offered in the fall semester and may be taken with a Pass/Fail option.**

Genetics II - Advanced Biotechnology Honors (11, 12) **One Semester 1/2 Cr.**

Pre-requisite: Genetics and Biotechnology I. This is an advanced, lab-oriented course that builds upon the recombinant DNA techniques of the Genetics and Biotechnology course. Utilizing highly advanced research techniques, students will create genomic libraries, isolate one gene from an organism's DNA by Southern Blot Hybridization, perform human DNA fingerprinting, and design their own genetic engineering experiments. **This course will only be offered in the Spring semester.**

Advanced Placement Environmental Science (11, 12)

Full Yr., 1 Cr.

Lab Alternate Days

Pre-requisite: Physical Setting: Chemistry and Teacher Recommendation. The goal of this course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationship of the natural world. Students will also identify and analyze environmental problems both natural and human-made, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving and/or preventing them. The course will focus on the "real science" behind environmental problems and issues. Laboratory and field study are envisioned to be an important element of the course.

Emergency Medical Technician (12) Full Yr., 1 Cr.

Lab alternate Days

This interdisciplinary course for seniors, combining the natural and social sciences, will enable students to follow a career path in emergency medicine. This course, concluding in a state certification exam, will cover anatomy/physiology of the human body, trauma injuries, environmental problems, abuse injuries, writing pre-hospital care reports and treatment modalities. Time and experience in a hospital emergency room is also required as part of the curriculum. Practical skills taught will include first aid techniques, the appropriate application of oxygen, the use of the automatic defibrillator, a well as other ambulance equipment. Successful completion of the course and passing the state examination will provide the student with N.Y.S. certification as an Emergency Medical Technician. EMT's can pursue jobs with private paid ambulance services, apply for positions in the NYFD Emergency Services, as a patient-care technician in hospitals, as well as jobs in various recreational areas. This is an entry level certification for advanced certification as critical care cardiac technician or paramedic. Some NYS colleges provide tuition reduction for those students volunteering time on their emergency squads. Students must be 18 years of age to take the New York State Certification Exam.

