SCIENCE SEQUENCE

9th	**Conceptual Physics**	**Freshman Physics**	**Honors Freshman Physics**

10th	**Systems in Science**	**Chemistry**	**Honors Chemistry**

11th	**Foundations and Investigations in Biology**	**Biology**	**Honors Biology**

11th – 12th **JUNIOR – SENIOR COURSE OPTIONS**

AP Biology (Full Year)
AP Chemistry (Full Year)
AP Environmental Science (Full Year)
AP Physics I (Full Year)
AP Physics II (Full Year)
Physics (Full Year)
Honors Physics (Full Year)
Anatomy and Physiology (Full Year)
Astronomy (One Semester)
Evolution (One Semester)
Anatomy, Physiology & Molecular Biology of Plants (One Semester)
Forensic Science (One Semester)
Advanced Forensic Science (One Semester)
Controversial & Hot Topics in Science (One Semester)
Science Career Seminar (One Semester)
Principles of Biomedical Science (Full Year Elective/Grades 9 – 12)
Human Body Systems (Full Year Elective/Grades 10 – 12)
Medical Interventions (Full Year Elective/Grades 11-12)
Biomedical Innovation (Full Year Elective/Grade 12)

SCIENCE

Enduring understandings:

- The systemic nature of all things.
- The interaction of energy and matter that flow through systems.
- The nature of change and equilibrium.
- The relationship between structures and functions.
- The creation of models to represent abstract ideas and phenomena.
- The process of scientific reasoning and evaluation of ideas.
- The interactions between science and society.

While the state graduation requirement in science is three units, most Clayton High School students enroll in science all four years. All courses are laboratory oriented. Extended sessions of one and one-half periods duration are scheduled on alternate days for most courses. Some junior/senior elective courses meet only for a single period each day, but may require attendance at field/laboratory experiences held outside of the normal school schedule. Laboratory investigations are organized to give students experiences in collecting data, in analyzing and interpreting data, and in using mathematics as a tool of science. Science courses are structured to allow students of varying abilities to have successful learning experiences. Some courses are quantitative and designed for the student of high ability in mathematics as well as in science. Other courses require less mathematics and emphasize qualitative observations. All courses give the student an appreciation for the way scientists work and arrive at generalizations about natural phenomena. Students will be given the background information necessary for the understanding of scientific concepts.

Students qualified for Honors Freshman Physics score high on a test for formal reasoning, take accelerated mathematics, and exhibit exceptional attitude and aptitude in 8th grade science. All students are expected to take physics, chemistry, and biology in high school. The standard courses (Physics, Chemistry, and Biology) are designed to challenge highly motivated students and also serve students with learning difficulties. The honors courses are fast-paced, require high cognitive skills, and involve extensive preparation and organizational ability. They are designed to challenge students at a high level and to prepare students for the Advanced Placement classes. The Advanced Placement classes follow the A.P. syllabus and are designed for students who will take an A.P. exam in May. Junior and senior electives are offered to students interested in specific aspects of science, and in most cases they are scheduled for a single period (rather than the extended schedule of most science courses) in order to more easily accommodate student scheduling. As previously stated however, a required field/laboratory experience may be held outside of the school day when appropriate.

Science teachers consider the requirements for the next level before recommending students. A few students who do not meet specific course prerequisites may be enrolled in a class with the consent of the instructor. The most qualified Honors Freshman Physics students will be recommended for Honors Chemistry; however, most sophomore students will take the general Chemistry class. Most juniors will take Biology. Some will qualify for Honors Biology and for a very few, Advanced Placement Biology may be recommended. Students taking Honors or A.P. Biology as juniors are encouraged to choose a second science course from the electives. Students who take Honors Chemistry as sophomores and take two science courses as juniors should take Honors or A.P. Biology and either A.P. Physics or A.P. Chemistry. Upon completion of Honors or A.P. Biology, students may enroll in A.P. Environmental Science as an A.P. option that meets in a one-period format.

CONCEPTUAL PHYSICS

9th Grade
Credit - 1
Full Year

Conceptual Physics is an introductory science course for students whose previous experiences in science and mathematics have not prepared them for the regular Freshman Physics course. The course is designed to minimize the entering mathematics requirements and is intended to build the science and mathematics skills of the students in order to help them better function in the remainder of the high school science sequence. Students will develop major concepts in motion, forces, energy, electricity, and wave motion. Students will learn to build scientific models to describe the physical world by analyzing the results of laboratory experiments. The skills of experimental design, data collection and graphical analysis will be emphasized, allowing students to express these models verbally, diagrammatically, graphically and algebraically. **Enrollment requires faculty recommendation**.

FRESHMAN PHYSICS

9th Grade
Credit - 1
Full Year

Freshman Physics is an introductory course to the formal study of the physical sciences. Students will develop major concepts in electricity, motion, forces, energy, and wave motion. Students will learn to build scientific models to describe the physical world by analyzing the results of laboratory experiments. The skills of experimental design, data collection and graphical analysis will be emphasized, allowing students to express these models verbally, diagrammatically, graphically and algebraically. Students will build a laboratory portfolio, which includes results of each of the major investigations throughout the year.

HONORS FRESHMAN PHYSICS

9th Grade
Credit - 1
Full Year

Honors Freshman Physics is an introductory course to a formal study of the physical sciences, with emphasis on mathematical problem solving. Students will develop major concepts in motion, forces, energy, electricity, and wave motion. Students will learn to build scientific models to describe the physical world by analyzing the results of laboratory experiments. The skills of experimental design, data collection, and graphical analysis will be emphasized, allowing students to express these models in words, in diagrams, graphically and algebraically. This course moves at an accelerated pace and it requires excellent reasoning skills and well-developed work and study habits. Fluency in the application of algebra is essential. Students will build a laboratory portfolio, which includes results of each of the major investigations throughout the year. **Enrollment requires faculty recommendation**.

SYSTEMS IN SCIENCE

10th Grade
Credit - 1
Full Year

This course will address questions such as: What is the nature of matter? How does matter change? How do changes in the world around us affect us? What is the nature of life? What is inside us? How do humans interact with the natural world? Students will investigate these questions and others through a variety of "hands-on" and written experiences as they explore how science is relevant to daily life. **Departmental approval is required for enrollment in this course.**

CHEMISTRY

10th Grade
Credit - 1
Full Year

This course introduces important concepts of chemistry while applying these concepts to the students' everyday lives and experiences. Topics addressed include basic problem solving, scientific measurement, atomic structure, the periodic table, chemical formula writing, chemical reactions, states of matter, chemical bonding, thermochemistry, acids and bases, and nuclear chemistry. Activities will include reading, writing, discussion, laboratory activities, laboratory reports and student projects. Students will frequently work together in teams. Basic algebra skills are required.

HONORS CHEMISTRY

10th Grade
Credit - 1
Full Year

The models and theories of chemistry are developed in this course. Considerable emphasis is placed on the student's ability to interpret data, solve problems, and use higher-order thinking skills. The core topics include models for atoms, chemical reactions, kinetic molecular theory, thermochemistry, chemical bonding, rates of reactions, equilibrium, acids and bases, and electrochemistry. The course will include reading, lecture/discussion, laboratory activities and problem solving. This course is designed for students who have demonstrated success in honors mathematics and science courses. Laboratory reports will be required and homework assignments are given daily. Each student needs a calculator. A college level text is used. **Enrollment requires faculty recommendation**.

BIOLOGY

11th - 12th Grade
Credit - 1
Full Year

This course examines all aspects of life science including cellular, structural, functional, behavioral, environmental and evolutionary history. Students will develop an appreciation of the biological issues that they will confront in the twenty-first century. Students will conduct experiments, collect and analyze data, and maintain a laboratory notebook or a portfolio to gain an understanding of the processes of science. The main objective is to present biology as a science and to see the process of science as a reliable method of gaining useful, objective knowledge. The key to this understanding lies in the meaningful investigation of real scientific problems. Homework assignments will require readings from periodicals, printed handouts and the textbook, Biology by Johnson and Raven. These will support classroom lectures and discussions and help students solve problems.

FOUNDATIONS AND INVESTIGATIONS IN BIOLOGICAL SCIENCE

11th - 12th Grade
Credit – 1
Full Year

This course will emphasize an inquiry-based exploration of the topics of ecology, biotechnology, cellular biology, body systems, and evolution. Students will develop a thoughtful and well-reasoned understanding of the living world. **Departmental approval is required**. **(This course does not qualify for NCAA eligibility.)**

HONORS BIOLOGY

11th - 12th Grade
Credit - 1
Full Year

Honors Biology is an experimental science course that demonstrates the importance of biology in the twentieth century. Eleven core themes are interwoven throughout the course to build a holistic understanding of the essential elements of modern biology. These themes include the following: science as inquiry, science and society, biochemistry, the cell, organ systems and homeostasis, structure and function, heredity, molecular genetics, evolution, the diversity of life, and ecology. Honors Biology is geared for students who have demonstrated solid scientific reasoning skills, exceptional work and study habits, and a record of academic excellence in previous science courses. The textbook will be BSCS Biology. **Enrollment requires faculty recommendation**.

PHYSICS

11th - 12th Grade
Credit - 1
Full Year

Prerequisite: Chemistry and Biology or departmental approval; facility with Algebra and Trigonometry

This course is designed as an introduction to the study of physics. It is appropriate for students who have never studied physics. It is also intended for students who have completed Freshman Physics and would like to extend their study of physics to include a broader range of topics with slightly greater emphasis on mathematical problem solving. The fundamental concepts of physics are emphasized with topics chosen from among the following: mechanics, wave motion, light, electricity, and magnetism. The course is laboratory based as students will build physics concepts through laboratory investigations. Students will be expected to gather and interpret data, analyze experimental results and draw conclusions. Emphasis will be placed on the graphical analysis of experimental data. Experimental results will be documented in laboratory reports and organized as a laboratory portfolio. A scientific calculator capable of performing scientific notations and trigonometric functions is required. Although this course is taught at an introductory level, it is an excellent follow-up to Freshman Physics and includes many new topics and previously encountered topics in greater depth.

HONORS PHYSICS

11th - 12th Grade
Credit - 1
Full Year

Prerequisite: Honors Freshman Physics or teacher recommendation, Chemistry, and Biology; excellent skills in Algebra and Trigonometry.

This course is designed as an extension of the concepts learned in Honors Freshman Physics, but is also appropriate for the strongest students from Freshman Physics. The fundamentals of physics are emphasized with topics chosen from among the following: mechanics, electricity and magnetism, wave motion, light, and modern physics. The course is laboratory based as students will build physics concepts through laboratory investigations. Students will be expected to gather data, interpret data, summarize the results and draw conclusions. Emphasis will be placed on the graphical analysis of experimental data. Experimental results will be documented in laboratory reports and organized as a laboratory portfolio. Solving physics problems using Algebra and Trigonometry will be a significant component of the course. A scientific calculator capable of performing scientific notation and trigonometric functions is required. This course is excellent preparation for students considering the study of science or medicine in college. Successful completion of the course will prepare students for success on the SAT II in physics.

AP CHEMISTRY

11th - 12th Grade
Credit - 1
Full Year

Prerequisite: Honors Chemistry or departmental approval.

This course is designed to be the equivalent of the general chemistry course usually taken during the first year of college. The course is designed to provide students with sufficient depth and breadth of understanding of chemical fundamentals, competence in dealing with chemical calculations, and experience in the nature and variety of laboratory experiments equivalent to that of a typical college course. Topics such as the atomic and molecular structure of matter, kinetic theory of gases, chemical equilibrium, chemical kinetics, electrochemistry, and basic principles of thermodynamics are emphasized. A substantial portion of class time is spent on understanding and applying these concepts through chemical problem solving. Students develop the ability to think clearly and to express their ideas in writing with clarity and logic. In addition, the behavior of chemical systems is investigated in the laboratory. A laboratory notebook is kept, and students submit a report of each experiment. Each student is expected to take the AP Chemistry exam.

AP BIOLOGY

11th - 12th Grade
Credit - 1
Full Year

Prerequisite: Chemistry, Honors Biology or departmental approval.

Advanced Placement Biology is an in-depth study of living systems. All levels of biology, from the molecular to the biosphere, will be presented to ensure that the students have developed an appreciation of the relationships among these levels. Investigations that include careful observation, question posing, hypothesis formulation, and hypothesis testing under controlled conditions will ensure that the students use the scientific process. The pupils will develop higher cognitive skills by analyzing and synthesizing experimental data and discussing contemporary biological issues. Biological concepts and principles will be taught at a university level. Emphasis will be placed on biochemistry, physiology, evolution, ecology, genetics, and cytology. The students will be prepared for and expected to take the AP Biology examination. A few exceptional science students will be recommended to take AP Biology as a junior without first taking Biology.

AP ENVIRONMENTAL SCIENCE

11th - 12th Grade
Credit - 1
Full Year (Unlike other full year courses, this course does not have an extra lab period)

Prerequisite: Chemistry, Honors Biology or departmental approval.

The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. Students will work to identify and analyze natural and human made environmental problems, assess risks associated with these problems and examine possible solutions. Themes of the course will include processes of science, the systematic nature of the earth, energy flow, and human impact on natural systems.

AP PHYSICS I

11th – 12th Grade
Credit – 1
Full Year

Prerequisite: Excellent skills in Algebra, at least concurrent enrollment in Geometry, or by teacher recommendation

AP Physics I is a rigorous treatment of the classical physics areas of mechanics, mechanical waves, and introductory electric circuits. It is the equivalent of a typical first semester, algebra-based college physics course. Physical models will be developed through laboratory investigation in the areas of one and two-dimensional kinematics, Newton's laws, energy, circular motion, gravitation, linear momentum, rotational motion, oscillations, mechanical waves, sound, and introductory electric circuits. Students will submit lab reports for each laboratory investigation. Students will be required to solve problems mathematically, with extensive use of proportional and symbolic reasoning. The ability to translate between multiple representations of physical models will be emphasized. The course is designed to provide excellent preparation for students considering the study of science, medicine, or engineering in college. Students who successfully complete the course will be well-prepared for, and expected to take, the College Board Advanced Placement Physics I examination in May. Except when recommended by the instructor, students should have successfully completed Freshman Physics or Honors Freshman Physics prior to enrollment in AP Physics I.

AP PHYSICS II

11th – 12th Grade
Credit – 1
Full Year

Prerequisite: Algebra, Geometry, Algebra II and Trigonometry. Students who take this class must be concurrently enrolled in, or have previously completed, AP Physics I, or by teacher recommendation

AP Physics II is a rigorous treatment of fluid statics and dynamics, thermodynamics with kinetic theory, electrostatics, electric circuits, magnetic fields, electromagnetism, geometric and physical optics, and topics in modern physics. It is the equivalent of a typical second semester, algebra-based, college physics course. Physical models in the areas listed above will be developed through laboratory investigation. Students will submit lab reports for each laboratory investigation. Students will be required to solve problems mathematically, with extensive use of proportional and symbolic reasoning. The ability to translate between multiple representations of physical models will be emphasized. The course is designed to provide excellent preparation for students considering the study of science, medicine, or engineering in college. Students who successfully complete the course will be well-prepared for, and expected to take, the College Board Advanced Placement Physics II examination in May.

ANATOMY AND PHYSIOLOGY

11th - 12th Grade
Credit - 1
One Year

Prerequisite: Project Lead the Way Principles of Biomedical Science, Honors Biology or departmental approval.

This one year course is an introductory course geared to upperclassmen preparing for study in health-related areas. Students will engage in the study of the processes, structures, and interactions of the human body systems. Important concepts in the course include: communication, transport of substances, locomotion, metabolic processes, defense, and protection. The central theme is how the body systems work together to maintain homeostasis and good health. The systems are studied as "parts of a whole," working together to keep the amazing human machine functioning at an optimal level. Students design experiments, investigate the structures and functions of body systems, and use data acquisition software to monitor selected body functions. Students work through interesting real world cases and often play the role of biomedical professionals in solving medical mysteries. This course will be taught concurrently with PLTW Human Body Systems. Each semester, students will be expected to complete a selected mastery project, suitable for presentation. Note: This course does not have an extended lab period.

ASTRONOMY

11th - 12th Grade
Credit - 1/2
One Semester

Prerequisite: Freshman Physics and Chemistry, or departmental approval.

This one-semester course for juniors and seniors will capitalize on the students' inherent interest in the limitless universe that surrounds them. Study of the physical nature of objects in the universe and methods used by astronomers to understand them will be emphasized. Topics are selected from basic laws of nature, the Solar System, stars, nebulae, galaxies and cosmology. Observations will be made both by the individual student (motion of Earth, Sun, and phases of moon) and at night group outings with a telescope. This course meets one period per day with additional laboratory/field experiences planned outside of the regular school schedule.

EVOLUTION

11th - 12th Grade
Credit - 1/2
One Semester

Prerequisite: Biology (or concurrent enrollment in the second semester of Biology), or departmental approval.

Evolution is a course of study that explores the nature of change on the universal, planetary, and population levels. The broad theme of the class is that the laws of nature have shaped the development of the cosmos, the formation of the Earth, its geologic processes, and the organisms that inhabit it. We will investigate this theme by exploring the Big Bang, rock formation, the fossil record, relative and absolute dating techniques, plate tectonics, and population genetics. We will also examine the paleontological evidence for the progression of life forms, from the first cells to modern-day plants and animals, including humans.

ANATOMY, PHYSIOLOGY & MOLECULAR BIOLOGY OF PLANTS

11th – 12th Grade
Credit –1/2
One Semester

Students will examine the fundamentals of plant science, emphasizing plant anatomy and physiology. Topics such as plant cells, tissues, organs, evolution, germination, growth, photosynthesis, transpiration, cell signaling, cellular respiration, and pollination will be explored as students heighten their understanding of plants and their role in the future of our species. Learning will be tied to topical research on how emerging plant science can contribute to sustainable production of food and bio-fuels for our future.

FORENSIC SCIENCE

11th - 12th Grade
Credit - 1/2
One Semester

Forensic science is the application of science to legal situations. Students will formulate and critically examine problems, and investigate probable solutions. They will collect and scientifically evaluate data, draw conclusions based on evidence, apply data to authentic situations, and communicate the results of the work. The topics used to teach these skills include: crime scene investigations, evidence collection, DNA, physics properties of glass, soil and sand, paper and ink analysis, handwriting analysis, forensic anthropology, odontology, prints including those from fingers, lips, shoes, and tires, and trace evidence including hair, fibers, and body fluids including blood typing, genetics, and splatter patterns. This course gives students the opportunity to apply the concepts and skills learned in physics, chemistry, and biology to the real-life problems of crime scene investigation. CSI fans take note! **(This course does not qualify for NCAA eligibility.)**

ADVANCED FORENSIC SCIENCE

11th - 12th Grade
Credit - 1/2
One Semester

Prerequisite: Forensic Science

Students in Advanced Forensic Science will process more complicated evidence than in the first level course. When studying arson, students will learn how to determine if a fire was accidental or intentional, what type of accelerant was used and how to identify common motives of arsonists. When exploring toxicology, students will learn about drugs, poisons and alcohol and how they affect the body. DNA, how it works and how it is used in the legal system will be addressed. Additionally, students will learn about eyewitness testimony and polygraphs as they study the criminal mind in forensic psychology. Cases solved will be complex, involving subtle clues with many twists. **(This course does not qualify for NCAA eligibility.)**

CONTROVERSIAL AND HOT TOPICS IN SCIENCE

11th - 12th Grade
Credit - 1/2
One Semester

Prerequisite: Biology (or concurrent enrollment in Biology), or departmental approval

Students in this course will explore scientific issues that have the potential for both immediate and long-term effects on their lives. Topics may include issues such as nuclear energy, alternative fuels, stem-cell research, genetic engineering, ozone depletion, global warming, pollution and more. Students will leave the course with an increased understanding of how science is relevant to their lives as they become the decision makers of the future. **(This course does not qualify for NCAA eligibility.)**

SCIENCE CAREER SEMINAR

11th - 12th Grade
Credit - 1/4
One Semester

Prerequisite: Biology, Concurrent Enrollment in Biology or departmental approval.

Designed for students who wish to explore careers in science, this semester course will meet two times per week and will focus on interaction with professionals working in various scientific fields. Students interested in obtaining firsthand information about life as a scientist, potential networking opportunities, and career options in science should consider enrolling. **(This course does not yet qualify for NCAA eligibility.)**

PRINCIPLES OF BIOMEDICAL SCIENCES – PROJECT LEAD THE WAY (PLTW)

9th – 12th Grade
Credit – 1
Full Year

The death of a fictional character, Anna Garcia is the thread that ties all of the units of this course together. In reading Mrs. Garcia's autopsy report, students discover what contributed to her death. Students study metabolism as they discover that Mrs. Garcia suffered from diabetes. Through this study, carbohydrates, proteins and calorimetry will be explored. As they learn about her sickle-cell disease, students study genetics and DNA. Models and

computers will be used to simulate changes in the DNA and proteins. Mrs. Garcia also had hypercholeteremia. A study of this will involve dissection of sheep hearts and the use of computers to analyze and experiment with student blood pressure, heart rate and EKG. Students will also learn to analyze abnormal EKGs. When it is discovered that the patient also had an infectious disease, students learn about the differences between bacterial infections and viruses. Gram staining will be done and students will learn how to choose an antibiotic based on the results. The final project for the class will be to write a grant proposal on a topic of the student's choice, using what was learned about research and writing science summaries. The proposals will be shared through a PowerPoint presentation.

This is the introductory course in a potential four-course program that ends with an on-site research assignment with a health care professional.

STUDENTS WILL RECEIVE ELECTIVE CREDIT FOR THIS CLASS.
THIS CLASS IS NOT AVAILABLE FOR SCIENCE CREDIT.

HUMAN BODY SYSTEMS – PROJECT LEAD THE WAY (PLTW)

10th – 12th Grade
Credit – 1
Full Year

Prerequisite: **Project Lead the Way Principles of Biomedical Science, Honors Biology or instructor approval.**

Students will engage in the study of the processes, structures, and interactions of the human body systems. Important concepts in the course include: communication, transport of substances, locomotion, metabolic processes, defense, and protection. The central theme is how the body systems work together to maintain homeostasis and good health. The systems are studied as "parts of a whole," working together to keep the amazing human machine functioning at an optimal level. Students design experiments, investigate the structures and functions of body systems, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary actions, and respiratory operation. Students work through interesting real world cases and often play the role of biomedical professionals to solve medical mysteries. This course will be taught concurrently with Human Anatomy and Physiology. Science credit is not offered for this class. Students desiring science credit should enroll in Human Anatomy and Physiology. Please note that in order to receive science credit an extra project is required. This course does not have an extended lab period.

This is the second course in a potential four-course program that ends with an on-site research assignment with a health care professional.

STUDENTS WILL RECEIVE ELECTIVE CREDIT FOR THIS CLASS.
THIS CLASS IS NOT AVAILABLE FOR SCIENCE CREDIT.

MEDICAL INTERVENTIONS – PROJECT LEAD THE WAY (PLTW)

11th – 12th Grade
Credit – 1
Full Year

Prerequisite: **Project Lead the Way Principles of Biomedical Science, PLTW Human Body Systems, Honors Biology or instructor approval.**

Students investigate a variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the lives of a fictitious family. The course is a "How-To" manual for maintaining overall health and homeostasis in the body as students explore how to prevent and fight infection; how to screen and evaluate the code in human DNA; how to prevent, diagnose and treat cancer; and how to prevail when the organs of the body begin to fail. These scenarios expose students to the wide range of interventions related to immunology, surgery, genetics,

pharmacology, medical devices, and diagnostics. Each family case scenario introduces multiple types of interventions and reinforces concepts learned in the previous two courses, as well as presenting new content. Interventions may range from simple diagnostic tests to treatment of complex diseases and disorders. These interventions are showcased across generations of a family and provide a look at the past, present and future of biomedical sciences. Lifestyle choices and preventive measures are emphasized throughout the course as are the important roles scientific thinking and engineering design play in the development of interventions of the future. This course does not have an extended lab period.

This is the third course in a potential four-course program that ends with an on-site research assignment with a health care professional. **(This course does not qualify for NCAA eligibility.)**

STUDENTS WILL RECEIVE ELECTIVE CREDIT FOR THIS CLASS.
THIS CLASS IS NOT AVAILABLE FOR SCIENCE CREDIT.

BIOMEDICAL INNOVATION – PROJECT LEAD THE WAY (PLTW)

12th Grade
Credit – 1
Full Year

Working through progressively challenging, open-ended problems that address topics such as clinical medicine, physiology, biomedical engineering, and public health, students will explore innovative solutions for the health challenges of the 21st century. They will have the opportunity to work on independent projects with a mentor or advisor from a university, hospital, research institution, or the biomedical industry. Throughout the course, students will be expected to present their work to an audience of STEM professionals. The course is designed for 12th grade students.

This is the fourth course in a potential four-course program that ends with an on-site research assignment with a health care professional.

STUDENTS WILL RECEIVE ELECTIVE CREDIT FOR THIS CLASS.

THIS CLASS IS NOT AVAILABLE FOR SCIENCE CREDIT.