



**Anatomy/Physiology \*732\* \*\$25\* Phase 2 SUS/FBF 2000350 [Year]**

This course is geared for the average student interested in pursuing a career in the medical field. It will provide exploratory activities in the structures and functions of the components of the human body. This course is enhanced with laboratory experiences. Fee required.

**Prerequisite:** 73 or better in Biology I or 70 or better in Biology I - Honors and cumulative average of 2.33 or better and teacher recommendation. Enrollment preference given to juniors and seniors. If the student does not meet the pre-requisites, the student must obtain a signed approval from the course's teacher.

**Anatomy/Physiology – Honors \*733 \*\$25 \* Phase 3 SUS/FBF 2000360 [Year]**

This course is geared for the above average student who is interested in pursuing a career in the medical field. It provides a comprehensive survey of the anatomy and physiology of the human body, as well as current medical information. The course is enhanced by a wide selection of media and is further supplemented by guest speakers, comprehensive laboratory and practical testing. Fee required. Also available for Dual Enrollment credit.

**Prerequisite:** 83 or better in Biology I or 77 or better in Biology I - Honors and cumulative average of 3.33 or better and teacher recommendation. If the student does not meet the pre-requisites, the student must obtain a signed approval from the course's teacher.

**Biology I \*712\* \*\$25\* Phase 2 SUS/FBF 2000310 [Year]**

This course is designed to give the student a thorough knowledge of the development of biological principles starting with simple levels of biological organizations and progressing to more complex levels. This course is designed also to give the student the information and tools necessary for applying the scientific method in scientific investigation. Laboratories are used to reinforce scientific investigation. Microscope use and simple animal dissections are introduced. Course content includes cell biology, biological chemistry, genetics, reproduction and AIDS awareness. Additional topics include animal digestion, transport, gas exchange, and excretion. Fee required.

**Prerequisite:** departmental placement

**Biology I – Honors \*713\* \*\$25\* Phase 3 SUS/FBF 2000320 [Year]**

The purpose of this course is to provide advanced exploratory experiences and activities in the fundamental concepts of life. Topics such as the scientific method and measurements, laboratory safety and use of apparatus, biochemistry, cell biology and reproduction, genetics, classification and taxonomy, microorganisms and disease, structure and function of plants and animals, ecological relationships, as well as topics concerned with the environment and diseases that pertain to today's world are covered. Lectures are reinforced with practical laboratory experiments. Fee required.

**Prerequisite:** departmental placement

**Biology II – Honors \*753\* \*\$50\* Phase 3 SUS/FBF 2000330 [Year]**

This course gives an overview of the functions of living things, placing an emphasis on their organizations (both anatomical and cellular metabolism and behavior). Topics include: genetics and DNA technology, reproduction, regulation of the internal environment, responsiveness, coordination, and evolution. Microscopic and dissecting techniques will be introduced. Fee required.

**Prerequisite:** 83 or better in Biology I or 77 or better in Biology I - Honors and cumulative average of 3.33 or better and teacher recommendation. If the student does not meet the pre-requisites, the student must obtain a signed approval from the course's teacher.

**Chemistry I \*722\* \*\$30\* Phase 2 SUS/FBF 2003340 [Year]**

This course introduces the student to topics in inorganic chemistry ranging from the properties of matter to solution chemistry. Lecture theory will be reinforced with practical laboratory experiments. Algebra topics will be reviewed as needed. Fee required.

**Prerequisite:** 77 or better in Algebra I (Phase 2) or 70 or better in Algebra I / II Honors and cumulative average of 2.33 or better, or successful completion of Algebra 1 (Phase 1) and Physical Science. If the student does not meet the pre-requisites, the student must obtain a signed approval from the course's teacher.



**Chemistry I – Honors \*723\* \*\$25\* Phase 3 SUS/FBF 2003350 [Year]**

This course introduces the student to various topics in inorganic chemistry ranging from the properties of matter to solution chemistry and electrochemistry. Quantitative problem solving will be emphasized. Lecture theory will be reinforced with practical laboratory experiments. Fee required.

**Prerequisite:** 90 or better in Algebra I Phase (2) or 80 or better in Algebra I/II Honors and cumulative average of 3.33 or better and teacher recommendation: If the student does not meet the pre-requisites, the student must obtain a signed approval from the department chairperson

**Conceptual Physics I \*741\* \*\$25\* Phase 2 SUS/FBF 2003380 [Year]**

The purpose of this course is to present students with the basic concepts and principals of Physics. Six fundamental units will be covered: mechanics, waves, properties of matter, thermodynamics, electricity and magnetism, and atomic and nuclear physics. The course will be complemented with activities and experiments to assist students in exploring, developing, and applying the concepts of Physics. Fee required.

**Prerequisite:** successful completion of Algebra I, a cumulative average of 2.5 or better, and recommendation of department chairperson

**Environmental Health Ethics \*703\* \*\$25\* Phase 3 SUS/FBF 2002430 [Year]**

The course focuses on dynamic interactions of biological organisms and the atmospheric environment; it will examine health issues, scientific understanding of causes, and possible future approaches to control major environmental health problems. The course will focus on environmental health, causes, effects, and ethical reasoning. Labs, field work, as well as case problems are some, but not all, of the activities in which students will engage.

**Prerequisite:** approval of department chairperson; Anatomy/Physiology-Hnrs., Biology II-Hnrs, or Anatomy/Physiology with a 73 average in the course, *and* a 3.0 GPA, *and* senior standing. Juniors requesting the class will be evaluated first on a case-by-case basis by the department chairperson.

**Environmental Science \*725\* \* \$15\* Phase 2 SUS/FBF 2001340 [Year]**

This course will integrate various concepts of life, earth and physical sciences as they relate to the environment. All current environmental topics (including water quality, pollution, resources, land management, recycling, conservation, population dynamics, and economic implications), will be discussed at length with special emphasis on the local environment and ecology. Lab and field work will reinforce the concepts covered in class.

**Prerequisite:** 70 or better in Biology I or 63 or better in Biology I – Honors, chemistry, and cumulative average of 2.33 or better or department chairperson recommendation

**Physical Science \*728\* \* \$15\* Phase 2 SUS/FBF 2003310 [Year]**

This is an introductory course that permits the student to form a basic understanding of physics and chemistry. Topics include: matter and energy, property changes and composition of matter, acids, bases and salts, chemistry of water, causes of motion, heat energy, wave motion and energy. This course is also geared to applying basic concepts to modern applications, for example, environmental education, energy education, consumer education, and occupational education.

**Prerequisite:** sophomore standing and teacher placement

**Physics I \*742\* \*\$25\* Phase 2 SUS/FBF 2003380 [Year]**

This course represents a general overview of the topics of physics. It is the study of matter and the laws that govern it. Topics include force and motion, work and energy, heat, electricity and magnetism, and energy of waves. Laboratory experiments will reinforce concepts covered in class. Fee required.

**Prerequisite:** 73 or better in Geometry/Trig Honors or B- or better in Algebra II/Trig and cumulative average of 2.55 or better and teacher recommendation. If the student does not meet the pre-requisites, the student must obtain a signed approval from the department chairperson.



The purpose of this course is to provide a rigorous introductory study of the theories and laws governing the interaction of matter, energy and the forces of nature. Students use the scientific method to solve problems, employ the metric measurements, and demonstrate safe and effective use of laboratory instruments. They will study Newton's laws of motion and gravitation, the First and Second Law of Thermodynamics, simple harmonic and projectile motion, and calculate friction and torque and uniform circular motion problems. Students will learn the laws that govern gases, liquids and solids as well as electric and magnetic forces and the nature of sound. Laboratory experiments will reinforce concepts covered in class. Fee required. Dual Enrollment credit is available.

**Prerequisite:** Currently enrolled in Calculus, AP Calculus, with a cumulative average of 2.75 or higher, and recommendation of teacher. If the student does not meet the pre-requisites, the student must obtain a signed approval from the department chairperson.

