CPS High School

Department: Science

Course title: Biology-421, 422, 423

PGBR: 1.0

Course description:
In terms of the CPS Biology courses, emphasis will be placed on an understanding of the scientific method, the formation and testing of a hypothesis, and the collection and evaluation of data. Topics of study include theories on the origin of life and the theory of evolution, cellular structure and function, production and use of energy in living things, life functions of major animal and plant groups, and genetics. This course provides the student with knowledge of molecular biology and the rapidly changing advances in biotechnology. Laboratory investigations are an important part of the presentation of this course. Emphasis is placed on problem solving techniques, experimentation, interpretation of experimental data, and writing of laboratory reports.

NEW ORDER 8/24/20 All Schools

Unit 1 - Cell Specialization and Homeostasis

Unit 4 - DNA & Inheritance

Unit 5 - Natural Selection

Unit 6 – Evolution

Unit 2 - Matter & Energy

Unit 3 - Interdependent Relationships in Ecosystems

Unit 7/8 - Human Activity, Climate, & Biodiversity

Unit 9 - Bio-ecology

Standards:

Biology Units of Study

CPS High School

Department: Science

Course title: Chemistry-411,412,413

PGBR: 1.0

Unit 1: Structure and Properties of Matter

Unit 2: Energy and it Applications (Nonliving)

Unit 3: Bonding and Chemical Reaction

Unit 4: Energy and its Applications (Living)

Unit 5: Nuclear Energy

Unit 6: Human Impact

Standards:

Chemistry Units of Study

CPS High School

Department: Science

Course title: Physical and Earth Science: 401,402,403

PGBR: 1.0

Course description: The emphasis for learning is in the strong connection between mathematics and science by providing students with frequent opportunities to apply basic mathematics and algebra concepts to science processes such as problem solving, collection and analysis of data, and evaluation of hypotheses. Use of algebra will increase as the year progresses. Students design and conduct experiments, write lab reports, and conduct independent research on a variety of physics and technology topics using Internet and text sources. Successful completion of this course provides students with a solid foundation for further honors coursework in science

Unit 1 - Forces and Motion

Unit 2 - Fundamental Forces

Unit 3 - Kepler's Laws

Unit 4 - Energy

Unit 5 - Plate Tectonics

Unit 6 - Wave Properties

Unit 7 - Electromagnetic Radiation

Unit 8 - Electricity and Magnetism

Standards:

Units of Study Physical Science