

# Recommended Science Courses for Freshmen In Pre-Diploma Program

## **PHYSICS FIRST 5626-5627**

Physics First is designed to improve students' understanding of science and mathematics and to better prepare our students for the new Science AIMS test. The math and physics teachers will be working closely together to improve understanding of the material in both classes. This course is intended to appeal to both the science and non-science oriented student. The program includes concepts of motion, forces, sound, light, relativity, electricity, radioactivity, and basic atomic/quantum theory. The relationship to other sciences is discussed, along with some of the history and philosophy of science. Extensive lab work and engineering-type projects are integral to the course. After taking Physics First, a student would enroll in Biology as sophomore and Chemistry as a junior. As a junior or senior, a student would be eligible for a variety of Advanced Placement and Dual Enrollment classes. **Student must be concurrently enrolled in Algebra I.**

## **PHYSICS FIRST HONORS 5628-5629**

This course covers the same concepts as Physics First, but with more depth and breadth. The students can expect more advanced lab exercises and a more rigorous treatment of mathematics. This class is highly recommended for IB students. **Matrix scores and eighth grade science grades will determine placement. Student must be concurrently enrolled in Geometry/Trig Honors or received a grade of A in both semesters of Algebra.**

## **BIOLOGY I 5410-5411**

The prime objectives in biology are that the students: (1) learn biological principles and theories; (2) be able to recognize the relationship of biology to themselves and the world around them; (3) appreciate all life and how to protect it; (4) be aware of major biological problems in the world today; (5) learn basic laboratory techniques; and, (6) acquire an appreciation of advancements in science. Class work includes lecture, demonstration, films, discussion, and lab activity.

## **BIOLOGY I HONORS 5412-5413**

This is a beginning biology course to be elected (instead of regular biology) by the above average student with a strong interest in science. Lab work emphasizes self-discovery and problem solving techniques. A high level of reading ability, self-motivation, and recording of lab observations will be expected. **Matrix scores and eighth grade science grades will determine placement.**