

IB SL Physics

Instructor: Shabeah Usmanali

Course Description:

SL Physics is a pre-university course that prepares students to succeed with the rigor they will face at the university level. This course allows students to experience a fundamental experimental science. With this approach, they gain a better understanding of the universe itself. The students are challenged in using their scientific knowledge in a social, moral and ethically responsible way. Students learn the value of collaborating and effective communication between each other. The course includes the scientific methods and techniques which are crucial to understanding scientific investigation.

The following main topics are covered:*

Measurements and Uncertainties

- Mechanics
- Thermal Physics
- Waves
- Electricity and Magnetism

Core

- Circular Motion and Gravitation
- Atomic, Nuclear, and Particle Physics
- Energy Production

Option

- Engineering Physics

**Course work will include but is not limited to lecture, Socratic seminars, laboratory experiments, research, and assessments (quizzes, tests, exams).*