



**SAINT  
JOSEPH  
PREP**

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## **Physics**

*Grade 11/12*

### **Honors**

This lab-based course is designed so that students will conduct a thorough investigation of the fundamental topics of physics. Topics include: vectors, gravity, force and motion, planetary motion, impulse, momentum, work, energy, acoustics, and waves. Electrical currents and magnetism are also introduced. Students will engage in interactive, hands-on activities and lab work that emphasizes quantitative observations and measurements. Students will develop skills in critical thinking, problem solving, data interpretation, technical writing, lab work, research, and public speaking. Finally, upon completion of the course, students will demonstrate an understanding of the fundamental principles of physics, understand how physics applies to every day life, develop sound laboratory practices and techniques, write formal lab reports, and gain a deeper understanding of the scientific method.

### **College Prep**

This lab-based course is designed so that students will conduct an exploration of the fundamental topics of physics. Topics include: vectors, gravity, force and motion, planetary motion, impulse, momentum, work, energy, and waves. Electrical current is also introduced. Students will engage in interactive, hands-on activities and lab work that utilizes both quantitative and qualitative observations and measurements. Students will develop skills in critical thinking, problem solving, data interpretation, technical writing, lab work, research, and public speaking. Finally, upon completion of this course, students will demonstrate an understanding of the fundamental principles of physics, understand how physics applies to every day life, develop sound laboratory practices and techniques, write formal lab reports, and gain a deeper understanding of the scientific method.