

## **Philosophy**

The Science Department at St Joseph High School prepares students for life in a technologically advancing society. Students are taught the importance of science in everyday life as well as an appreciation of the laws of nature and the universe. Science is a process of inquiry rather than a collection of facts. Through laboratory work, students are taught how to ask the right questions about nature and learn how the sciences interconnect. The department goal is to prepare students to understand the mysteries of the planet, the ecosystems, and the various species populating Earth, and themselves as human beings. Our graduates are prepared for the rigors of college science programs, and have the scientific literacy to understand and evaluate issues at the interface between science and society.

Our department is comprised of ten science teachers with degrees in: Athletic Training and Exercise Physiology, Biology, Chemistry, Doctor of Chiropractic, Electrical Engineering, Environmental Science Education, Health Education, Human Anatomy, Physics, Sports Medicine, and Zoology.

We have eight laboratory classrooms: two advanced biology labs, two chemistry labs, one physics lab, an engineering/innovation lab, and two biology/natural science labs. Our campus contains forest and wetland ecosystems accessible through a boardwalk and trail system for environmental and ecological studies.

## **Curriculum Overview**

- Biology (CP, H) (Grade 9, 10)
- Chemistry (CP, H) (Grades 10, 11, 12)
- Physics (CP, H) (Grade 11, 12)
- Sports Medicine (CP) (Grades 11, 12)
- Human Anatomy and Physiology (CP, H) (Grades 11, 12)
- Environmental Science (CP) (Grades 12)
- Genetics (CP, H) (Grade 12)
- Microbiology (H) (Grade 12)
- Principles of Engineering (CP) (Grade 12)
- Aviation Engineering (CP) (Grades 11, 12)
- Robotics and Automated Systems (CP) (Grades 11, 12)
- AP Environmental Science (Grades 11, 12)
- AP Biology and Lab (Grades 11, 12)
- AP Chemistry and Lab (Grades 11, 12)
- AP Physics C (Grades, 11, 12)

## Science Department Chair

Daniel Walsh, Ph.D. | dwalsh@sicadets.org

## **Beyond the Classroom**

Go Green Ecology Club promotes environmental awareness and the practices that will lead us into a healthy sustainable future. Our hope is to make our school as "green" as possible and reduce the human footprint we will leave behind through our consumption of energy and industrial products.

The Robotics and Rocketry club advances student education about STEM through team-based engineering design projects. The club is centered around competing in engineering events such as the Team America Rocketry Challenge."

New for 2020-2021: Coding Club, Gaming Club, Science Competition Club, and Future Health Care Professionals Club.