"RESEARCH IS FORMALIZED CURiosity. IT IS POKING AND PRYING WITH A PURPOSE."
Zora Neale Hurston
ABOUT THE PROGRAM

The EDEN Research program is built upon the foundations of Education and Environment. It is designed to provide highly motivated students with the opportunity to explore scientific investigations that extend beyond the traditional classroom environment.

Through their participation in the program, students will develop a profound understanding of the scientific method and its application to both the natural and social sciences; learn proper research methodology; enhance critical thinking, collaboration, writing, presentation, and communication skills; and apply STEM concepts to solve real-world problems.

The four-year program offers inquiry-based, experiential learning that supports the gradual release of responsibility from teacher to student. OLMA’s 96-acre campus offers copious flora and fauna, a pond habitat, and a fully-functional greenhouse, all of which are at the students’ disposal for research. A critical component of our program requires that students structure their research within the Catholic Church’s guidelines for ethical and moral research.

COURSE SEQUENCE

EDEN 1 (GRADE 9)
Introduction to Scientific Research (0.5 credit)

Introduction to Scientific Research is an elective course in which students are exposed to a wide variety of research topics. The course includes an in-depth exploration of the scientific method and research design, and emphasizes development of skills in observation, questioning, hypothesis formulation, experimentation, data analysis, and communication. Classes work collaboratively on a number of small research projects throughout the year. This course is intended to prepare students for independent research and equip them with skills and confidence to pursue STEM-related fields.

EDEN 2 (GRADE 10)
Independent Research I (1.0 credit)

Students advancing to the next level of the program develop their research skills while designing an original research project. Over the year-long course, students select a topic, write a research proposal, perform the research and evaluate the data using statistical methods. All Grade 10 students write a formal research paper in the form of a scientific manuscript prepared for publication in the Academy’s EDEN Journal and are required to prepare a poster for presentation at the annual Research Symposium. Although not a requirement, students are encouraged to apply for programs offered by universities and other research institutions beginning in the second half of their sophomore year.

EDEN 3 (GRADE 11)
Independent Research II (1.0 credit)

Students in Grade 11 have the opportunity to pursue a new research direction. Alternatively, students may choose to continue and expand upon their previous research question(s). Over the course of the year, students collect and analyze data, as well as further hone their research skills. All Grade 11 students write a formal research paper in the form of a scientific manuscript prepared for publication in the Academy’s EDEN Journal and are required to prepare a poster for presentation at the annual Research Symposium. Students are strongly encouraged to participate in local science research competitions.

EDEN 4 (GRADE 12)
Independent Research III (1.0 credit)

Students in Grade 12 are challenged to explore new research questions. All Grade 12 students will write a formal research paper in the form of a scientific manuscript prepared for publication in the Academy’s EDEN Journal and are required to prepare a poster for presentation at the annual Research Symposium. Students are strongly encouraged to participate in local science research competitions and to submit their research for publication in a peer-reviewed scientific journal. Upon successful completion of the program, students will be well prepared to conduct research at the undergraduate level.