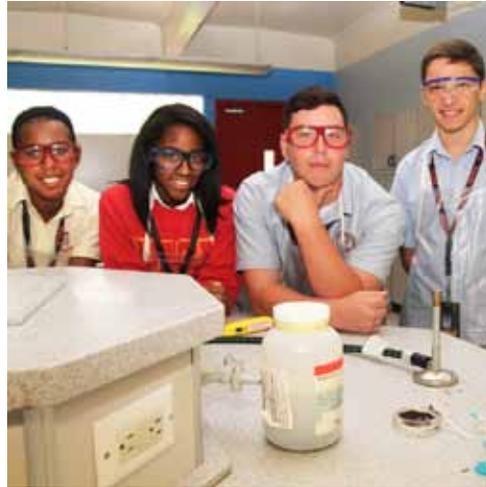
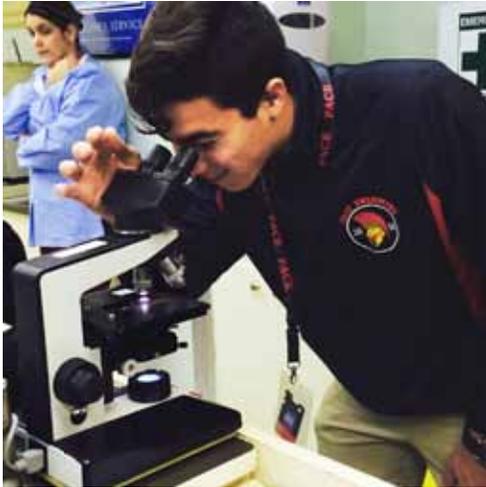




# The STEM Academy

## ADVANCED BIOMEDICAL SCIENCES PROGRAM



**“IN ESSENCE, SCIENCE IS A PERPETUAL SEARCH FOR AN INTELLIGENT AND INTEGRATED COMPREHENSION OF THE WORLD WE LIVE IN.”**

*Cornelius Bernardus Van Neil*

### THE PROGRAM

Biomedical science is a broad field consisting of many different medical, health-care and science disciplines. Young people with a solid foundation in math, science and health are better prepared for post-secondary education and will find that the career opportunities are limitless.

The four-year Advanced Biomedical Sciences Program provides hands-on, project-based, and problem-based learning which increases student motivation, cooperative learning skills, and higher-order thinking.

Students will become active participants in the learning process as they develop their skills through the application of the scientific method to relevant, real-world scenarios. Students will gain in-depth knowledge of the human body, disease mechanisms, major biological themes, mathematical topics and other concepts related to biomedical science.

Students will become proficient in the laboratory as they learn laboratory safety, practice aseptic techniques, and follow many standard laboratory protocols using research/industry grade laboratory equipment. Regularly, students will utilize technology and the Internet to gather up-to-date information as they research, design and conduct experiments, as well as interpret and present the results.

### PROGRAM TRACK

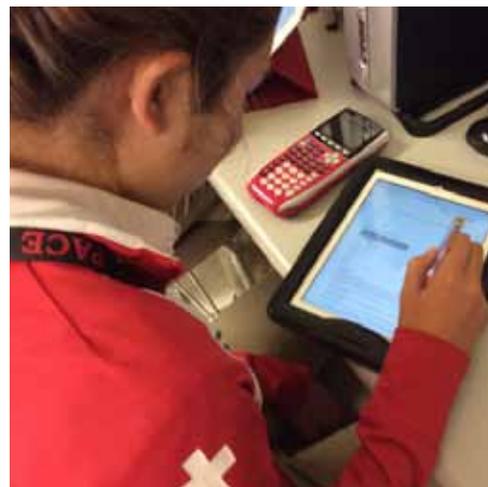
BIOMEDICAL SCIENCES	
9th Grade	Health Science II
10th Grade	Anatomy and Physiology
11th Grade	Medical Interventions
12th Grade	Biomedical Innovations

\*Courses subject to change  
 \*\* Students in the program must be active members of the Pace Health and Medical Society

EDUCATE

MOTIVATE

INSPIRE



[LMAYO@PACEHS.COM](mailto:LMAYO@PACEHS.COM)

### ABOUT THE LEAD TEACHER

Mr. Luis Mayo is a Pace alumnus from the Class of 1998. After graduation, he attended Florida International University and earned his Bachelor's of Science in Biology in 2003. Thereafter, he went on to work for his high school alma mater, where he enjoys teaching. He has engaged his students to partake in various biological activities and laboratory experiments that encouraged and motivated them to use higher order thinking skills. In 2004 Mr. Mayo started a program for students who have an interest in health and medicine called Advanced Health. Students who have taken this course have benefited and partaken in various health fields after graduating from high school. As a result, many of these students gained an interest in biology and health science, and plan on pursuing careers in those subject areas. The success of the Advanced Health course led to the creation of the current academy program.

In 2007, Luis Mayo earned the highest honor from his peers when he was awarded the Cervantes Teacher of the Year award in 2007. He earned this recognition during his first year of eligibility. Following that prestigious honor, Luis decided to pursue a Master's degree in Education over at St. Thomas University. His area of focus for his Masters was on Instructional Technology. At St. Thomas University, he was a member of the National Catholic College Graduate Honor Society, Kappa Gamma Pi, and he graduated with honors in 2010.

Besides teaching general and honors level life science courses, Mr. Mayo teaches AP Biology and AP Environmental Science, where he instructs the students on these college level science courses and prepares them for the AP National Exam. Furthermore, Luis is certified in the Biology curriculum for grades 6-12. Along with that, Mr. Mayo is the adviser for both the National Honor Society and Science National Honor Society, and the moderator for the Pace Health and Medical Society. Furthermore, he is the co-adviser of the Spartan Ambassador Society.

### PROGRAM OUTCOMES

Students who successfully complete the STEM Academy Advanced Biomedical Sciences Program will be prepared to pursue a post-secondary education with career opportunities including but not limited to: Pharmacist, Forensic Scientist, Medical & Clinical Lab Technician, Nurse, Physician, or Physician Assistant.

### APPLICATION & FEES

Applicants will be admitted to the program on a trial basis during their freshman year. Academy participants must maintain a minimum B average in all science classes to continue in the program.

Additional fees will be incurred as part of this program, including but not limited to, testing fees and required special events.