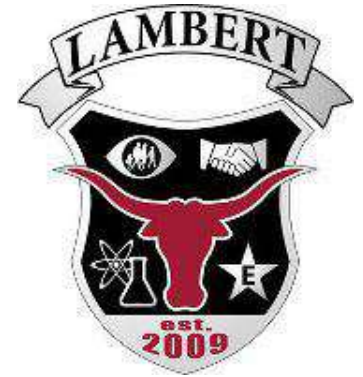




LAMBERT HIGH SCHOOL

Medical Science Academy



- The LHS Medical Science Academy (MSA) is dedicated to helping students make connections between rigorous core science courses and diagnostic/biomedical healthcare offerings to engage students in relevant and real-world studies.
- This unique program is immersed in the medical sciences providing students with advanced curriculum and exposure to the medical profession through community partnerships.

MSA Considerations



- Plan academic and extracurricular schedule to accommodate the demands of the rigorous coursework, including Advanced Placement classes in math and science.
- Students are encouraged to participate in medical job shadowing and/or volunteering opportunities during summers.
- Complete all pathway, core science and math requirements to be considered a Medical Science Academy completer.
- Active participation in HOSA and/or iGEM is required for

HOSA



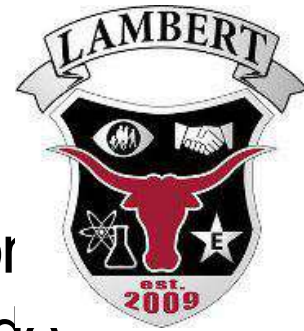
- HOSA is an international student organization endorsed by the U.S. Department of Education and the Health Science Education Division of ACTE
- Provides students with opportunities in:
 - Leadership
 - Service
 - Career development in Healthcare Fields
- Operates as an integral component of the healthcare science pathway at Lambert High School
- Students need to be active throughout their years of high school



iGEM

- The International Genetically Engineered Machine (iGEM) Foundation - an independent, non-profit organization dedicated to synthetic biology education and competition.
- Provides students with opportunities:
 - Research in synthetic biology
 - Open source science
 - Collaboration with collegiate labs and professionals
- Operates as an integral component of the biotechnology education curriculum at Lambert High School
 - Competitive team- based on experience, skills and aptitude in advanced biology subjects.
 - Students are selected in November of previous school year.
 - Students must plan for a period for an iGEM class during the day.
 - Travel and compete in International Collegiate Jamboree.

4th Year Options



- A 4th year applied program is **required** to graduate from the Medical Science Academy. Applied programs include.
 - Internship; Healthcare or Biotech related
 - Work-based Learning; Healthcare or Biotech related
 - AP Capstone- Healthcare oriented research project
 - Independent Study: Science/Healthcare based. Must get prior approval from the MSA advisors
- Each 4th year opportunity requires an application and may take up to 3 scheduled periods in the school day:
 - * Acceptance is competitive.
 - * Community internships are not guaranteed to MSA students.

Minimum Requirements - Recognition for the Medical Science Academy

Course Requirements for Academy Completers	Healthcare Sciences	Core Sciences	Mathematics
	1. Introduction to Healthcare 2. Essentials of Healthcare <u>or</u> Essentials of Biotechnology 3. Diagnostic Phlebotomy <u>or</u> Applications of Biotechnology 4. Internship <u>or</u> Work-based Learning <u>or</u> Independent Research Project <u>or</u> AP Capstone	1. Honors Biology 2. Honors Chemistry 3. AP Biology <u>and</u> AP Chemistry 4. Biology II (Human Anatomy & Physiology with Dissection Component) 5. AP Physics	1. Honors Geometry 2. Honors Algebra II 3. Honors Pre-Calculus 4. AP Calculus <u>or</u> AP Statistics

Program Completion Requirements



- Students are expected to work with their teachers and counselors to meet all other non-academy graduation requirements determined by the State of Georgia.
- Students have choice in the rigor level for English/Social Studies/World Languages.
 - Spanish and/or Latin are highly recommended for academy completers.

Students are required to adhere to the Medical Science Academy course requirements set forth to graduate with MSA distinction.

- Minimum GPA Requirements – 4.0 unweighted in STEM related coursework
- Completion of all required coursework
- Documented **25** Service Hours in the Sophomore year to meet application eligibility as tracked through the Online HOSA Service Activity Tracker
- Documented **50** Service Hours in Junior and Senior years as tracked through the Online HOSA Service Activity Tracker
- Must pass the appropriate End of Pathway Exam

Minimum Coursework Requirements by

YEAR	Healthcare	Science	Math	Language Arts	Social Studies	World Language	Elective
9 th	Intro to Healthcare	Honors Biology	Any Accelerated	On-level LA Or Honors	Elective	As needed Latin is recommended	PE/ Health
10 th	Essentials of Healthcare or Biotech	Honors Chemistry	Any Accelerated	On-level LA Or Honors	AP World History	As needed	Anatomy or AP Physics
11 th	Phlebotomy or Applications of Biotech	AP Chem	Any Accelerated	On-level LA Or Honors Or AP Lang	AP US History	As needed or another Elective	Elective
12 th	MSA Applied Program	AP Bio	AP Calculus or AP Statistics	On-level LA Or Honors Or AP Lit	Gov/Econ on-level or AP Gov	AP Econ	MSA Applied Program Or Other Elective

Must complete:

AP Biology and AP Chemistry and AP Physics
AP Calculus or AP Statistics
Biology II (Human Anatomy & Physiology with dissection component)

Spanish or Latin Recommended

All Georgia High School Graduation Requirements
***or Juniors who are new to the program in 2019.**
***All AP Courses require prerequisite coursework in both Math and Science**

APPLICATIONS

- Will be available during students Junior/Senior Year.
- MSA Committee will review the applications and transcripts.
- Students will be notified prior to graduation to receive their Honor Medallion.

ACADEMY