



Career-related
Programme

IBCP: PLTW Biomedical Science

Rockville High School

This program does meet Maryland State Career and Technology Education Requirements as a program completer as well as the IB Career-related Programme Requirements.



Overview: Students explore prevention, diagnosis, and treatment of disease through a nationally recognized, hands-on curricula to design innovative solutions for today's health challenges. Students explore multiple medical fields to develop a strong foundation for success in university pre-medical, medical, and biomedical programs.

Discover. Explore. Transform Lives. Your biomedical journey starts here:

- **Learn by Doing** – Practice real-world skills like suturing and modeling body systems with hands-on activities.
- **Team Up for Success** – Build communication, collaboration, and problem-solving skills.
- **Explore Biomedical Science** – Gain knowledge in anatomy, physiology, and medical research while developing critical and creative thinking.
- **Show What You Know** – Opportunities to earn college credit, take the Biotechnology Aptitude and Competency Exam (BACE) and earn industry-recognized certification, and graduate with the skills and confidence to pursue health and science careers.

This program is taught by Certified Teachers using the PLTW Curriculum.

Transferable college credit for PLTW coursework at MCPS is supported by Rochester Institute of Technology. More information can be found here:

<https://www.rit.edu/pltw/undergraduate-college-credit>

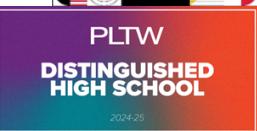


PLTW Biomedical Science Course Sequence

Freshman	Principles of Biomedical Science
Sophomore	Human Body Systems
Junior	Medical Interventions
Senior	Biomedical Innovation

Why choose Rockville High School? At Rockville High School, an International Baccalaureate (IB) World School, students push their limits with challenging academics, a welcoming and inclusive community, and endless opportunities to get involved.

- Located in Rockville, MD—home to leading biomedical and tech companies—RHS puts students at the heart of innovation.
- Ranked among the top 25 schools sending graduates to the University of Maryland's A. James Clark School of Engineering.
- Proud to be a **PLTW Distinguished High School**, recognized for outstanding Engineering and Biomedical Science programs.



Rockville High School gives students the skills, experiences, and confidence to succeed in college, careers, and beyond.

Additional IBCP Program Requirements:

- Students will complete the IBCP Core Components:
 - Personal and Professional Skills (critical thinking course)
 - The Reflective Project (a research-based essay on a career-based ethical issue)
 - Language and Cultural Studies
 - Community Engagement
- Students must also complete at least two IB courses
 - English Language and Literature
 - Spanish Language and Literature
 - French
 - Spanish
 - Environmental Systems and Society
 - Social Cultural Anthropology
 - Psychology
 - Biology
 - Chemistry
 - Computer Science
 - Physics
 - Math Analysis and Approaches
 - Math Applications and Interpretations
 - Visual Art

Sample IBCP Student Schedule

	11th Grade	12th Grade
Period One	IB Language and Literature	IB Language and Literature
Period Two	Medical Interventions	Biomedical Innovation
Period Three	IB Personal and Professional Skills	IB Personal and Professional Skills
Period Four	Math	Math
LUNCH		
Period Six	Honor Physics	IB ESS
Period Seven	AP Precalculus	AP Calculus AB
Period Eight	AP World History	IB Psychology

Prepare for College & Careers in STEM: PLTW Biomedical Science at Rockville High School immerses students in hands-on labs, real-world medical experiences, and collaborative projects that build skills for top universities and future careers. Launch your future in biomedical science!

Biomedical Careers

- Medicine | Nursing | Pharmacy | Physical Therapy | Forensics | Genetics | Medical Research

Related Careers

- Biotechnology | Public Health | Biomedical Engineering | Laboratory Science

Skills for Any Career: Even if you don't pursue a medical or science career, PLTW Biomedical Science gives you a competitive edge. Hands-on labs and projects build problem-solving, collaboration, and communication skills that are valued across every industry.

Questions? Please contact us!

Jason L. Greenberg
CTE Dept Chair, IB Career Programs Case Manager
jason_l_greenberg@mcpssmd.org

Natasha L. Ezerski
IB Coordinator
natasha_l_ezerski@mcpssmd.org

Jason Lomax
CTE Resource Teacher
jason_lomax@mcpssmd.org