

COLLEGE: Montgomery College

HIGH SCHOOLS: Wheaton

CLUSTER: Biosciences, Health Sciences, and Medicine

MCPS PROGRAM: Biomedical Sciences Project Lead the Way

MC PROGRAM: Life Sciences A.S.

Project Lead The Way Inc. (PLTW) is a national program that forms partnerships with public schools to increase the quantity and quality of biomedical scientists graduating from our educational system. The Biomedical Science curriculum is contemporary, high rigor, and high relevance material which emphasizes project-and problem-based learning and the development of critical thinking, problem resolution, and group collaboration skills.

STUDENT ENTRY POINTS	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES			
						RECOMMENDED ELECTIVE COURSES	OTHER ELECTIVE COURSES	CAREER AND TECHNICAL EDUCATION COURSES	
SECONDARY	9	English	Algebra 1 or Geometry	Matter & Energy or Biology	Social Studies	Foreign Language	Software Applications by Design A/B	Principles of Biomedical Sciences A/B	
	AP Biology and AP Chemistry and Foreign Language are highly recommended.								
	10	English	Geometry or Algebra 2	Biology, Chemistry or AP science coursework	Social Studies	Foreign Language	Health (.5) Elective (.5)	Human Body Systems A/B	
	11	English	Algebra 2 or Pre-Calculus, AP Calculus, AP Statistics	Chemistry, Physics, or AP science coursework	Social Studies	Physical Education	Elective	Medical Interventions A/B	
	Science Research A/B is required for program completion. Students are allowed to participate in an industry-related internship opportunity.								
	12	English	Pre-Calculus, AP Calculus, AP Statistics	Physics or AP science coursework	Social Studies Elective	Fine Arts	Elective	Science Research A/B	
An articulation agreement with Montgomery College and Villa Julie College is pending.									
POSTSECONDARY	Year 1 1st Quarter	English Foundation	MA 180 Precalculus or MA 181 Calculus I	BI 107 Principles of Biology		Speech Foundation	CH 101 Principles of Chemistry 1		
	Year 1 2nd Quarter	EN 101 Techniques of Reading and Writing I		BI 203 Microbiology		Health Foundation	BI 108 Principles of Biology II	Arts Distribution	
	Year 1 3rd Quarter		MA 182 Calculus II	BI 209 General Genetics	Behavioral and Social Sciences Distribution	Humanities Distribution	PH 203 or 161 General Physics I		
	Year 2 1st Quarter			CH 102 Principles of Chemistry II		CH 203 Organic Chemistry I	PH 204 or 262 General Physics II	Humanities Distribution	CH 204 or PH 262 Organic Chemistry II



This MCPS CTE program is approved by the Maryland State Department of Education for graduates in 2012.

Required Courses
Recommended Elective Courses
Career and Technical Education Courses
Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2) (◆=High School to Com. College)(●=Com. College to 4-Yr Institution)(■=Opportunity to test out)
Mandatory Assessments, Advising, and Additional Preparation



Biosciences, Health Sciences, and Medicine

2009–2010

Biomedical Sciences – Project Lead the Way (PLTW) (OASIS Code = BO) CIP 26.1201.0			
Requirements for Program Completion (1 credit A) + (1 credit B) + (2 credits C)			
Code	Course #	Course Title	Credit
A	3881/3882	Principles of Biomedical Science A/B	1.0
B	3681/3682	Human Body Systems A/B	1.0
C	5375/5376	Medical Interventions A/B	1.0
	TBD	Science Research A/B	1.0

For more information, go to:

<http://www.montgomeryschoolsmd.org/departments/cte/toolkit/ClusterInfo/BioTechnology/index.shtm>.