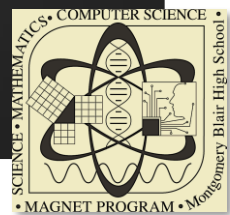


Science, Mathematics and Computer Science Magnet Program

MONTGOMERY BLAIR HIGH SCHOOL

OCTOBER 9, 2023



General Blair Information

- ▶ www.mbhs.edu
- ▶ Blair (DCC) Open House Information - [Blair Open House 2023-24 - YouTube](#)

Eligibility

- *Must be a current 8th grade student*
- *Must complete Algebra 1 by the end of grade 8*
- *Must reside in Montgomery County within one of the following clusters at time of application:*
 - ▶ *DCC*
 - ▶ *NEC*
 - ▶ *BCC*
 - ▶ *Churchill*
 - ▶ *Walter Johnson*
 - ▶ *Richard Montgomery*
 - ▶ *Rockville*
 - ▶ *Sherwood*
 - ▶ *Whitman*
 - ▶ *Wootton*

Application and Screening Process

- ▶ Application information available through Synergy ParentVUE by October 9
- ▶ Application Due November 3
- ▶ No teacher recommendations or external testing
- ▶ Private school students
 - ▶ Future register with MCPS at local middle school to get Synergy account
 - ▶ Must provide standardized test scores
 - ▶ MAP testing available through Home School Boss
- ▶ More information at

<https://www.montgomeryschoolsmd.org/curriculum/specialprograms/high/>

Magnet vs. Honors/AP

- ▶ *Interdisciplinary instruction*
- ▶ *Advanced coursework beyond Honors/AP*
- ▶ *Expectation of going beyond requirements*
- ▶ *Depth vs. Breadth*
- ▶ *Independent Research*

Courses

- ▶ *Mathematics*
- ▶ *Science*
- ▶ *Computer Science*
- ▶ *Interdisciplinary (Research and Engineering)*
- ▶ *Non-magnet Courses*
 - ▶ *Social Studies*
 - ▶ *English/Reading*
 - ▶ *Physical Education*
 - ▶ *Electives*

Mathematics: Required Courses

Magnet
Geometry A/B

Precalculus
A/B/C

Analysis 1 A/B

Electives

Precalculus
A/B/C

Analysis 1 A/B

Analysis 2 A/B
and/or Electives

Electives

Functions A/B

Analysis 1 A/B

Analysis 2 A/B
and/or Electives

Electives

Mathematics: Elective Courses

Analysis 2

Linear Algebra

*Advanced
Geometry*

*Applied
Statistics*

*Modeling and
Simulation*

*Discrete
Mathematics*

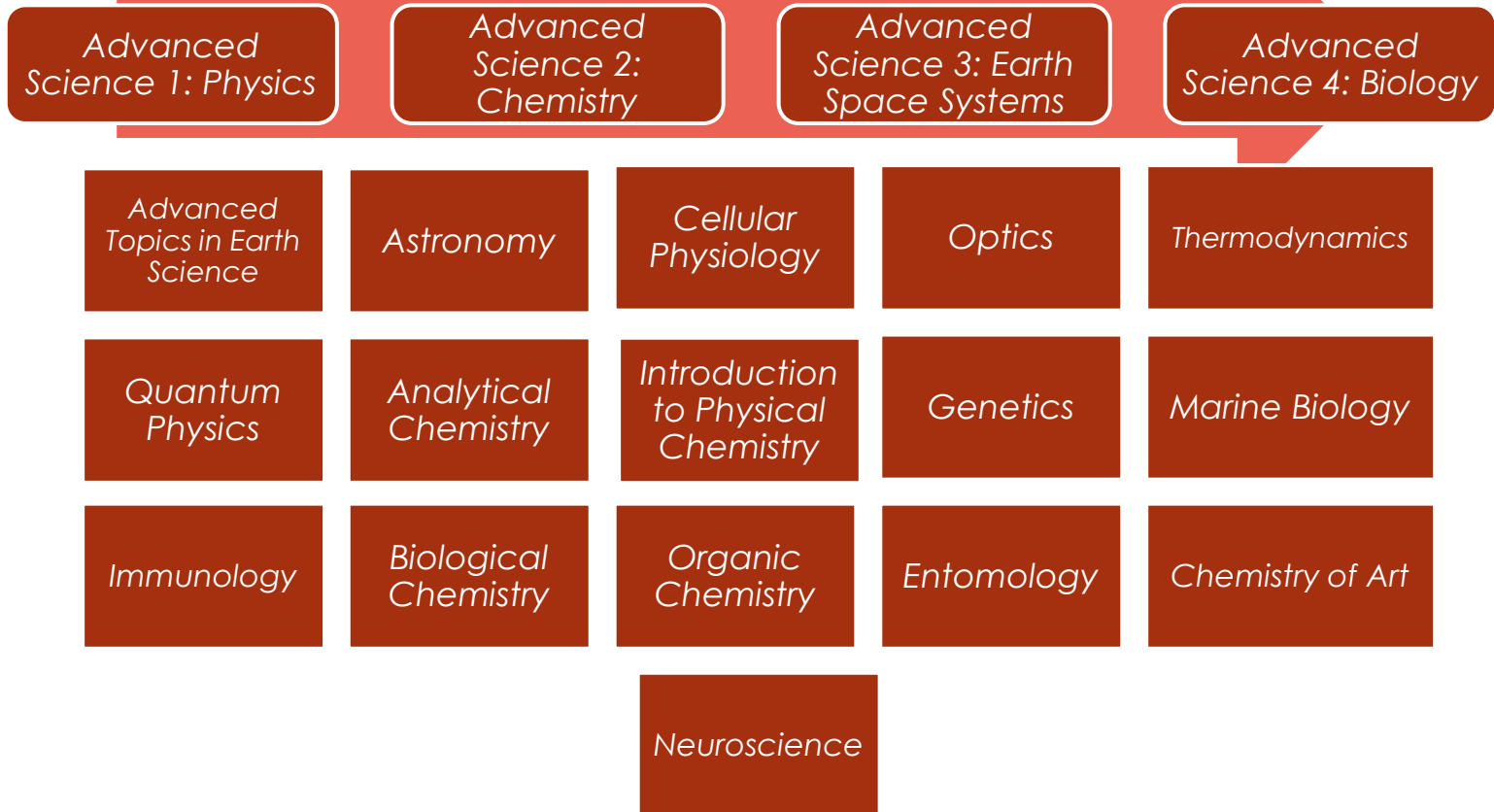
*Complex
Analysis*

Logic

*Senior Seminar
in Statistical
Research*

*Origins of
Math*

Science: Required Courses and Electives



Computer Science: Required Courses and Electives

Fundamentals of
Computer Science A/B

Algorithms and Data
Structures A/B

Fundamentals of
Computer Science A

Algorithms and Data
Structures A/B

Analysis of Algorithms

Analysis of
Algorithms

Computer
Graphics

Software Design

Modeling and
Simulation

AI / Machine
Learning

Cyber Security

Computational
Methods

Interdisciplinary: Required Courses and Electives

Research and
Experimentation 1 A/B

Foundations of Engineering
Technology A (Grade 10)

Foundations of Engineering
Technology B (Grade 11)

Senior
Research
Project

Robotics

Material
Science

Origins of
Science

Analysis of
Equity and
Identity in STEM

Humanities & Electives

- ▶ *Blair Course Bulletin -*
<https://sites.google.com/mcpsmd.net/mbhscoursebulletin/>
- ▶ *AP Courses*
- ▶ *Specialty Electives*
 - ▶ *English*
 - ▶ *Social Sciences*
 - ▶ *World Languages*
 - ▶ *Fine Arts*
 - ▶ *Physical Education*

Magnet Schedule

- ▶ *8 Classes – 3:20 dismissal*
- ▶ *5 Classes per day*
- ▶ *Core courses blocked in 9th grade*
- ▶ *Extracurricular activities*
- ▶ *Afternoon buses at 3:20 (M-F) and 4:45 (T-Th)*

Student Support

- ▶ *Academic Peers*
- ▶ *Study Hall*
- ▶ *Lunch Support*
- ▶ *Counseling & Career Center*
- ▶ *Academic Support*
- ▶ *College Admissions*

Extracurricular Activities

ABC Club
Africa Club
Art & Science Club
Astronomy Club
Bible Fellowship Club
Biology Club
Bio-Science Club
Blair Bowling
Blair Crew
Blair Sports Academy
Blair Network
Communications
Board Games Club
Ceramics Club
Chemistry Club
Chess Club
Computer Club
Cyber Security Club
Economics Club
Envirothon
Film Club
Flag Squad
Forensics/Public Speaking
Gay/Straight Alliance
Global Culture Club

Green Club
Hip-Hop Club
Hispanic Club
I Care
Indian Club
International Cancer Alliance
International Club
InToneNation
Intramural Field Hockey
Intramural Floor Hockey
It's Academic
Japanese Club
Jewish Culture Club
Key Club
Korean Club
Learn a Language Club
Lego Mindsorm Club
Latin Club
Linguistics Club
Marching Band
Martial Arts Club
Math Team
Minority Scholars Program
Mock Trial
Model United Nations

Montgomery Blair Players
Mu Alpha Theta (Math Honor)
Muggle Quidditch
Muslim Student Association
National Arts Honor Society
National French Honor Society
National Honor Society
National Science Honor Soc.
National Spanish Honor Soc.
No Labels Diversity Workshop
Ocean Science Bowl
One Act Plays
Peer Tutors
Philosophy Club
Photography Club
Physics Team
Pit Orchestra
Red Cross Club
Robotics Team
Rubik's Cube Club
Science Bowl
Science Olympiad
Shakespeare Club
Sign Language Club
Silver Chips

Silver Quill
Smart Snacks Club
Stage Crew
STEM Club
Step Club
Student Government
Association
Students for Global
Responsibility
Super Leaders
Theater Productions
Thespians Club
Tri-M
Ultimate Frisbee Club
Vietnamese Club
WEB Dubois Honor Society
Weight Training Club
Women's Advocacy
Yearbook
Yoga Club
Youth Ambassadors
Youth and Government
Youth for Music

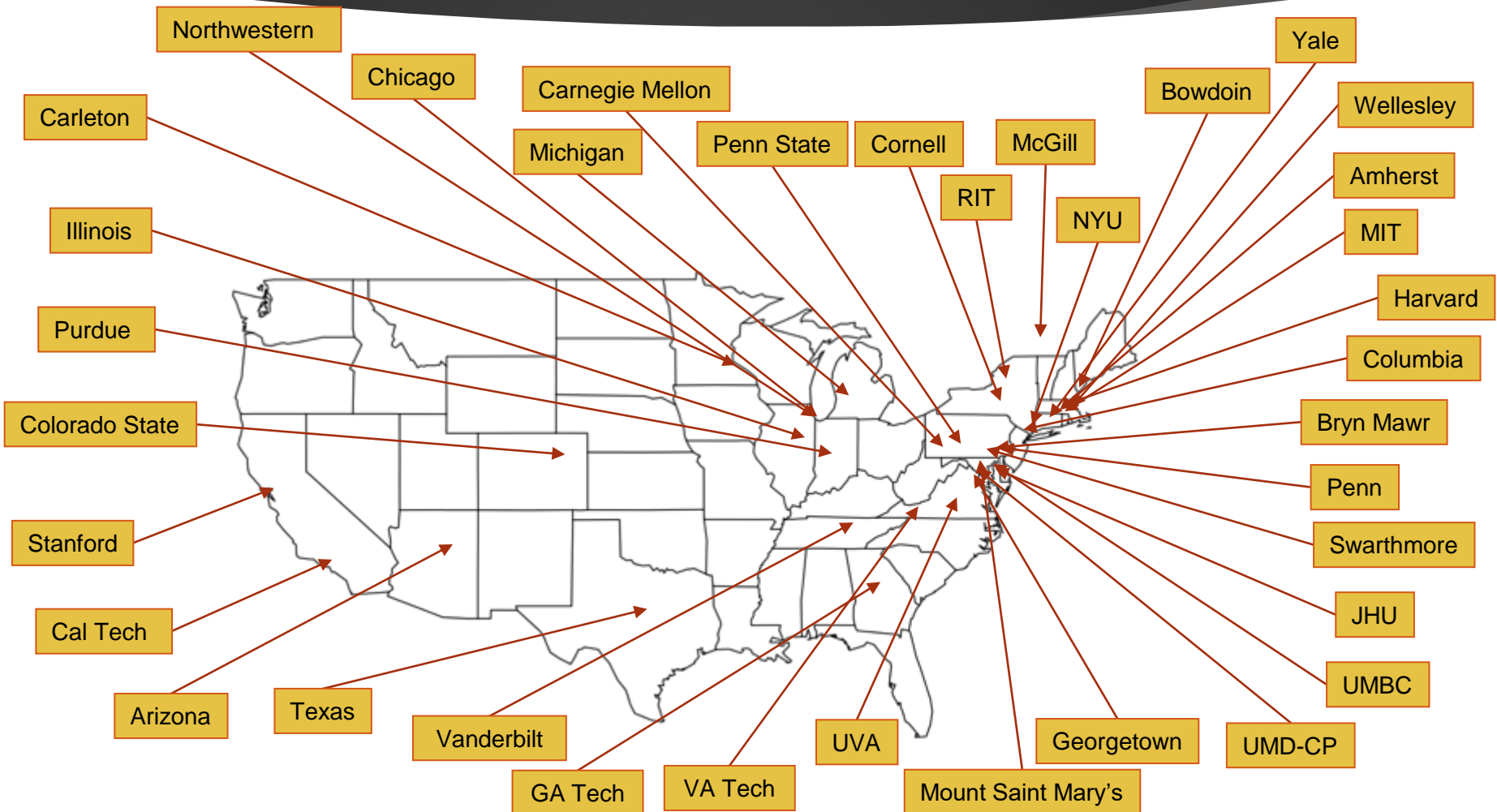
Student Population

- ▶ *About 100 students per grade level*
- ▶ *Students from over 30 middle schools*
- ▶ *Students from about 15 different countries*

Recent Accomplishments

- ▶ 223 National Merit Scholarship Semifinalists from last five years
- ▶ 2012, 2014, 2016, 2018, 2019 & 2021 - Davidson Fellowship Winners
- ▶ 2010, 2011, 2012, 2014, 2018 & 2022 US Presidential Scholar Winners
- ▶ Forty-three Regeneron Scholars, 2017-present
- ▶ 2011, 2013, 2014, 2015 & 2018 Gold or Silver Medalists, International Physics Olympiad (two USAPHO qualifiers in 2022)
- ▶ 2021 Gold Medalist, European Girls Olympiad in Informatics
- ▶ 2021 Putnam Fellow
- ▶ 2017-2019 It's Academic Champion
- ▶ Top student in the UMD Mathematics Competition 2015-2022

Blair...Then Where?



Class of 2023 College Acceptances

- ▶ University of Alabama
- ▶ Alaska Pacific University
- ▶ Amherst College
- ▶ University of Arizona
- ▶ Arizona State University
- ▶ Bates College
- ▶ Baylor University
- ▶ Boston College
- ▶ Boston University
- ▶ Bowdoin College
- ▶ Bryn Mawr College
- ▶ UC Berkeley
- ▶ UC Davis
- ▶ UC Irvine
- ▶ UCLA
- ▶ UC San Diego
- ▶ UC Santa Barbara
- ▶ UC Santa Cruz
- ▶ Cal Tech
- ▶ Carleton College
- ▶ Carnegie Mellon
- ▶ Case Western Reserve
- ▶ University of Chicago
- ▶ University of Colorado
- ▶ Colorado College
- ▶ Colorado State University
- ▶ Columbia University
- ▶ Connecticut College
- ▶ Cornell University
- ▶ Dickenson College
- ▶ Drexel University
- ▶ Duke University
- ▶ University of Florida
- ▶ Florida International University
- ▶ Fordham University
- ▶ Georgetown University
- ▶ Georgia Tech
- ▶ Hamilton College
- ▶ Harvard University
- ▶ Hofstra University
- ▶ Hood College
- ▶ Howard University
- ▶ University of Illinois – UIUC
- ▶ Indiana University
- ▶ Iowa State University
- ▶ Johns Hopkins University
- ▶ Loyola University (MD)
- ▶ UMBC
- ▶ UMD College Park
- ▶ UMD Eastern Shore
- ▶ George Mason University
- ▶ UMASS Amherst
- ▶ MIT
- ▶ McGill University
- ▶ University of Michigan
- ▶ Michigan State University
- ▶ University of Minnesota
- ▶ Mount St. Mary's University
- ▶ New York University
- ▶ UNC Chapel Hill
- ▶ Northeastern University
- ▶ Northwestern University
- ▶ Oberlin College
- ▶ Ohio State University
- ▶ Park Point University
- ▶ University of Pennsylvania
- ▶ Penn State University
- ▶ University of Pittsburgh
- ▶ Princeton University
- ▶ Purdue University
- ▶ Rensselaer Polytechnic Institute
- ▶ Rhode Island School of Design
- ▶ Rice University
- ▶ University of Rochester
- ▶ Rochester Institute of Technology
- ▶ Rutgers University
- ▶ Skidmore College
- ▶ University of South Carolina
- ▶ University of Southern California
- ▶ Stanford University
- ▶ Stevens Institute of Technology
- ▶ Swarthmore College
- ▶ University of Texas – Austin
- ▶ Towson University
- ▶ Tufts University
- ▶ Vanderbilt University
- ▶ University of Virginia
- ▶ Virginia Commonwealth University
- ▶ Virginia Tech
- ▶ University of Washington
- ▶ Washington University in St. Louis
- ▶ George Washington University
- ▶ Wellesley College
- ▶ University of West Virginia
- ▶ College of William and Mary
- ▶ Williams College
- ▶ University of Wisconsin
- ▶ Worcester Polytechnic University
- ▶ University of Wyoming
- ▶ Yale University



Does your child...

*... not only know the
answers, but asks the
questions?*



Does your child...

... have not just good ideas, but wild and silly ones?



Does your child...

*... answer questions
with detail and
elaboration?*



Does your child...

*... construct
abstractions and
draw inferences?*



Does your child...

*... initiate projects
and create new
designs?*



Does your child...

... critique himself or herself?

Contact Information

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- ▶ *www.mbhs.edu*
- ▶ *@blairmagnet*