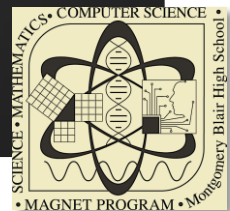


Science, Mathematics and Computer Science Magnet Program

MONTGOMERY BLAIR HIGH SCHOOL



Application Timeline

- ▶ November 1 Applications Due
- ▶ December 7: Testing
 - ▶ December 8: Special Needs/Make-Up Testing
 - ▶ Snow Dates one week later
- ▶ December 6: Teacher Recs Due
- ▶ Early February: Notification Letters Mailed

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

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

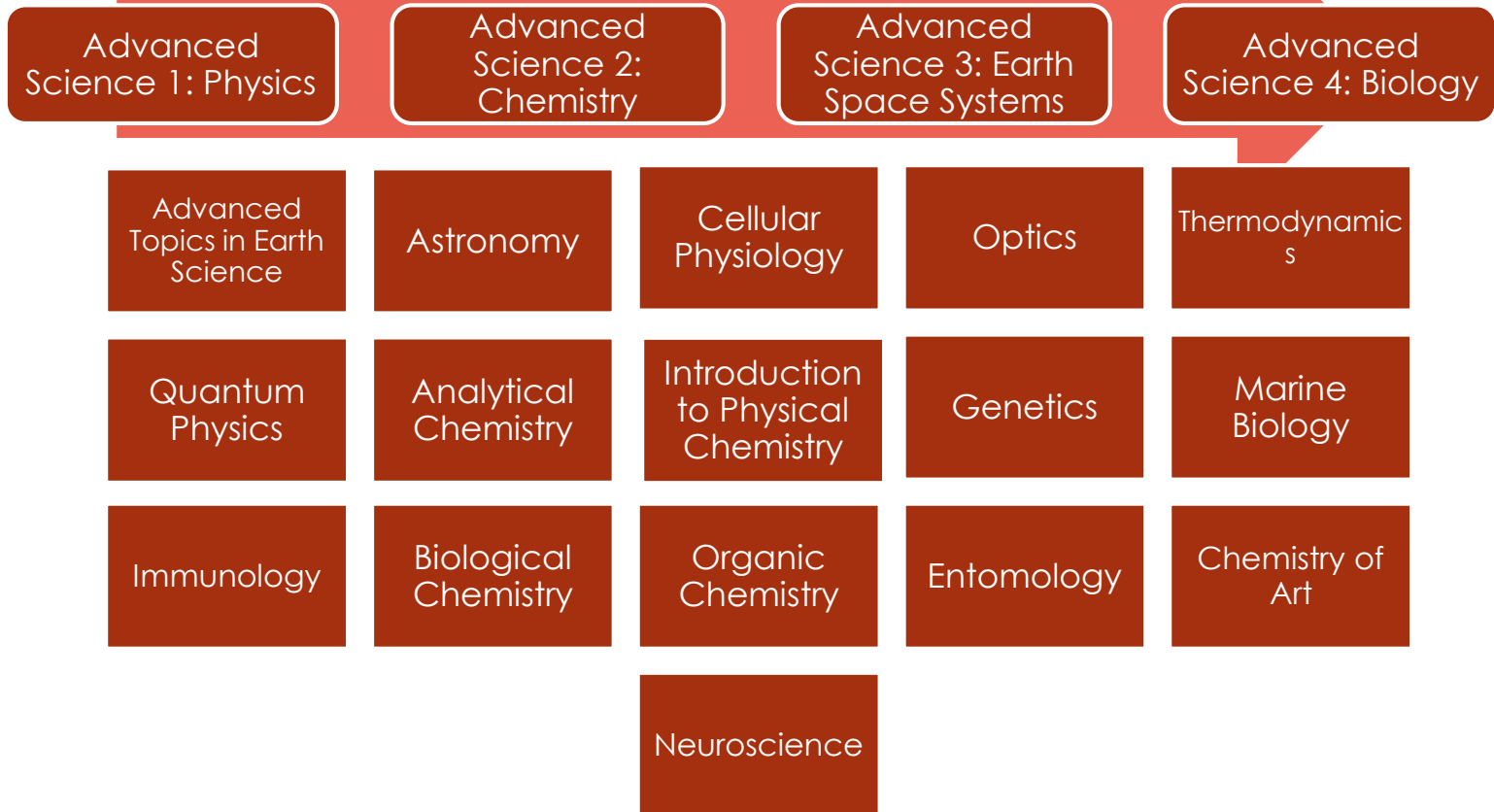
Discrete
Mathematics

Complex
Analysis

Logic

Senior Seminar
in Statistical
Research

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 / LISP

Cyber Security

Computational Methods

Interdisciplinary: Required Courses and Electives

Research and
Experimentation 1 A/B

Principles of
Engineering A (Grade
10)

Principles of
Engineering B (Grade
11)

Senior
Research
Project

Robotics

Material
Science

Origins of
Science

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

Application

- ▶ Due November 1
- ▶ Application Packet – Online through MyMCPS Parent Portal
 - ▶ Biographical Information
 - ▶ Student Activities
 - ▶ Signature
 - ▶ Student Essay (<200 words)
- ▶ Teacher Recommendations

Testing

- ▶ CogAT
- ▶ December 7, 8:00-11:00 (Snow Date December 14)
- ▶ Computer based exam with a handful of modules
- ▶ Above grade level exam aimed at reasoning and problem solving ability
- ▶ Writing exam

Special Needs or Make-up Testing

- Special Needs Testing December 8, 8:00 – 11:00 @ Richard Montgomery HS (Snow date December 15)
- Special Needs Documentation

Selection Process

- ▶ Student Information
- ▶ Selection Committee
- ▶ Decision Letters
- ▶ Appeals

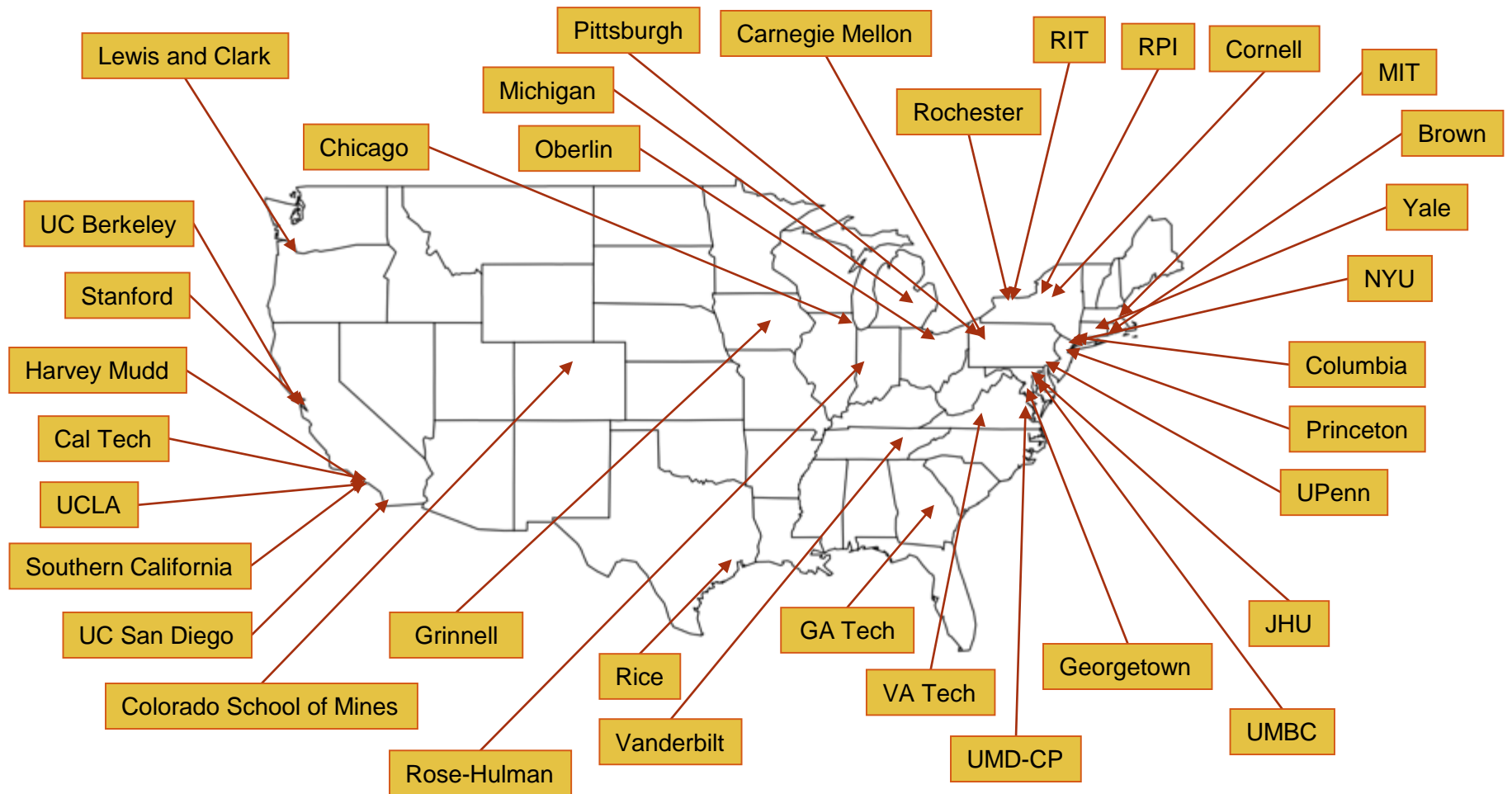
Student Population

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

Recent Accomplishments

- ▶ 36 National Merit Scholarship Semifinalists in Blair class of 2019
- ▶ 2012, 2014, 2016, 2018 & 2019 - Davidson Fellowship Winners
- ▶ 2010, 2011, 2012, 2014 & 2018 US Presidential Scholar Winners
- ▶ Eight 2019 Regeneron Scholars, Three finalists
- ▶ 2011, 2013, 2014, 2015 & 2018 Gold or Silver Medalists, International Physics Olympiad
- ▶ Student member of US Team placing 1st at 2019 International Mathematical Olympiad
- ▶ 2012 – 2018 Top Ten finish at American Regions Mathematics League
- ▶ 2017-2019 It's Academic Champion
- ▶ Top student in the UMD Mathematics Competition 2015-2018
- ▶ 2018 2nd place, 2017 1st place & 2016 3rd place at NYU Tandon School of Engineering cybersecurity competition

Blair...Then Where?



Class of 2019 College Acceptances

- ▶ Arizona State University
- ▶ Barnard College
- ▶ Baylor University
- ▶ Boston College
- ▶ Boston University
- ▶ Brandeis University
- ▶ Brown University
- ▶ UC Berkeley
- ▶ UCLA
- ▶ UC San Diego
- ▶ UC Santa Barbara
- ▶ UC Santa Cruz
- ▶ Cal Poly
- ▶ Cal Tech
- ▶ Carnegie Mellon
- ▶ Case Western Reserve
- ▶ Catholic University
- ▶ University of Chicago
- ▶ University of Cincinnati
- ▶ Colby College
- ▶ Colorado School of Mines
- ▶ Columbia University
- ▶ University of Connecticut
- ▶ Cornell University
- ▶ University of Delaware
- ▶ Drexel University
- ▶ Duke University
- ▶ Florida Institute of Technology
- ▶ Fordham University
- ▶ Georgetown University
- ▶ Georgia Tech
- ▶ Grinnell College
- ▶ Harvard University
- ▶ Harvey Mudd College
- ▶ Howard University
- ▶ University of Illinois
- ▶ Johns Hopkins University
- ▶ Lewis & Clark College
- ▶ UMBC
- ▶ UMD College Park
- ▶ MIT
- ▶ University of Michigan
- ▶ Michigan State University
- ▶ University of Minnesota
- ▶ University of Missouri - Kansas City
- ▶ Mount Holyoke College
- ▶ New York University
- ▶ UNC Chapel Hill
- ▶ North Carolina State University
- ▶ Northeastern University
- ▶ Northwestern University
- ▶ Oberlin College
- ▶ Occidental College
- ▶ Ohio State University
- ▶ Olin College
- ▶ University of Pennsylvania
- ▶ Penn State
- ▶ University of Pittsburgh
- ▶ Pomona College
- ▶ Princeton University
- ▶ Purdue University
- ▶ Rensselaer Polytechnic
- ▶ Rice University
- ▶ University of Richmond
- ▶ University of Rochester
- ▶ Rochester Institute of Technology
- ▶ Rose-Hulman Institute of Technology
- ▶ Rutgers University
- ▶ University of South Alabama
- ▶ University of South Carolina
- ▶ University of Southern California
- ▶ Stanford University
- ▶ Stony Brook University
- ▶ Temple University
- ▶ University of Texas
- ▶ Tufts University
- ▶ Vanderbilt University
- ▶ University of Virginia
- ▶ Virginia Commonwealth University
- ▶ Virginia Tech
- ▶ Wake Forest University
- ▶ University of Washington
- ▶ Washington University in St. Louis
- ▶ George Washington University
- ▶ College of William and Mary
- ▶ University of Wisconsin
- ▶ Worcester Polytechnic Institute
- ▶ 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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