

Alabama School of Mathematics and Science

1255 Dauphin St., Mobile, AL 36604 • (251) 441-2100 • www.asms.net

2018-2019

School Code: 011793



PRESIDENT

John Hoyle, Ph.D.

SCHOOL BOARD CHAIR

Jo Bonner

DIR. OF STUDENT AFFAIRS

Kara Whitney

COUNSELORS

Julie Hoffmeyer

jhoffmeyer@asms.net or (251) 441-3202

Katrina Thompson

kthompson@asms.net or (251) 441-2111

SCHOOL ENROLLMENT

Total Students (2017-2018) 247

Seniors:	80
Juniors:	87
Sophomores:	80

FACULTY

All faculty have a Ph.D. or Master's Degree and nearly 100% have taught at the college level.

MISSION

The Alabama School of Mathematics and Science's mission is to provide academically motivated Alabama students with exceptional preparation in the fields of math and science, empowering them to improve their community, state, and nation.

ACCREDITATION

ASMS is accredited by the Southern Association of Colleges and Schools and is a member of the National Consortium for Specialized Secondary Schools of Mathematics, Science, and Technology.

SCHOOL PROFILE

The Alabama School of Mathematics and Science (ASMS) is the state of Alabama's only fully public residential high school for highly motivated sophomores, juniors, and seniors seeking advanced studies in math, science, and the humanities. The Alabama State Legislature founded ASMS in 1989 to "better prepare Alabama's future leaders" for STEM (science, technology, engineering, and math) careers. Furthermore, ASMS was established to meet the challenge of providing a world-class education to top students from across Alabama who do not have local access to a challenging education.

COMMUNITY

ASMS is located in Mobile, a diverse city found in the southwest corner of Alabama with a population of just under 200,000. The recruitment of candidates encompasses the state's 67 counties.

ACHIEVEMENTS OF THE CLASS OF 2018

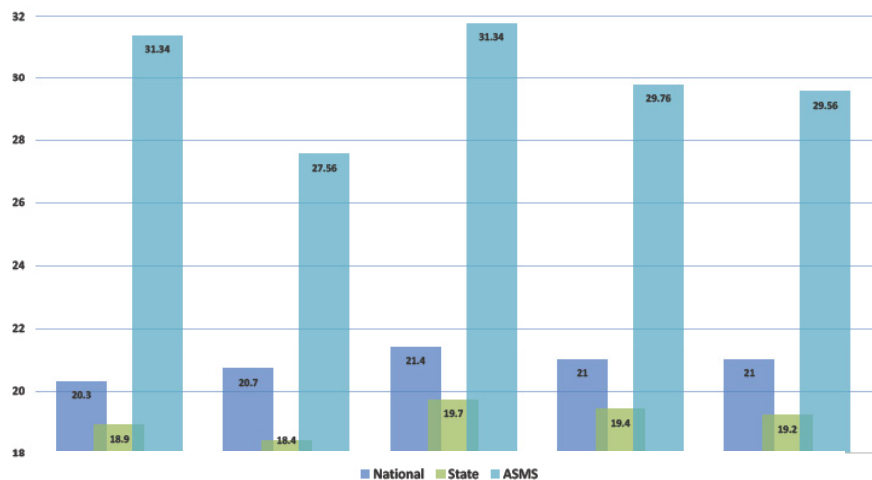
100%	College Bound
\$10M	Earned in Scholarships
99%	Received Merit-Based Scholarships
35	National Honor Society Members
29.8	ACT Average Composite Score

POST HIGH SCHOOL: 100% of the graduates matriculated on to institutions of higher education.

4-year college:	100%
2-year college:	0%

COMMUNITY SERVICE: During the 2017-2018 school year, students performed 2,400 hours of community service. Please note, community service is not a requirement for ASMS students.

CLASS OF 2017 ACT COMPARISON



MINIMUM GRADUATION REQUIREMENTS

Students are expected to complete a minimum of 27 Carnegie Units to satisfy the school's graduation requirement. Additionally, students must maintain a minimum of five academic courses per term and complete the following breakdown of courses:

Subject	# of Credits
Biology	1.5 c.u.
Chemistry	1.5 c.u.
Computer Science	0.5 c.u.
English	4.5 c.u.
Foreign Language	2.0 c.u.
History	4.0 c.u.
Mathematics	4.0 c.u.
Physics	1.5 c.u.

AP COURSES

ASMS offers Advanced Placement courses in Biology, Chemistry, Computer Science A, Environmental Science, Physics B, Physics C, Studio Art, English Literature, U.S. History and English Composition. Students are encouraged to take AP exams to receive college credit and students may opt to take an exam in a subject area even though ASMS does not offer a designated AP course. Recent examples include Calculus AB and BC, Spanish Language, French Language, German Language, Macroeconomics, and Psychology. In 2018, 179 students took 225 exams with 66% of the scores at 3 or above.

CLASS OF 2018 SAT (N=22)

Mean Evidence Based Reading & Writing	655
Mean Mathematics	652
Total	1307

NATIONAL MERIT

Classes of 2013-2018

19 Commended Scholars and 13 Finalists

GRADING

A unweighted cumulative gpa is reported, which includes transfer coursework from the freshman and possibly sophomore years. As all students have transfer credit, it is school policy not to rank our students. All ASMS academic courses are taught at the Honors level or above, and all students are required to maintain an academic gpa of 2.5. A final course grade of "C" or higher is required for course credit and awarding of quality points. Our grading scale is as follows: 90-100 A; 80-89 B; 70-79 C; 60-69 D; 59-below F; repeated course R.

GRADE POINT AVERAGE DISTRIBUTION

	4.00-3.75	3.74-3.50	3.49-3.00	< 3.00
Class of 2015	37	24	22	0
Class of 2016	42	19	11	0
Class of 2017	43	29	10	0
Class of 2018	45	28	7	0
Class of 2019*	51	17	11	1

*Class of 2019 Based on Junior Year

CONCENTRATIONS

Students who complete three additional courses in a particular area of study may earn a Concentration in that area. Students who complete a concentration have the option of taking three additional courses of advanced study in the same area (a total of six courses) to earn a Concentration with Distinction. All Concentration coursework must be completed with a grade of "B" or higher.

2017-2018 ASMS ACADEMIC COURSE OFFERINGS

MATHEMATICS

Geometry
Intermediate Algebra
Accelerated Algebra
Trigonometry
Precalculus
AP Calculus Review
AP Statistics Review
Differential Calculus
Integral Calculus
BC Calculus
Introduction to Statistics
Visual Mathematics
Number Theory
Multivariable Calculus I & II
Differential Equations
Linear Algebra
Counting and Probability I & II
Topology
Problem Solving
History of Mathematics
Introductory Real Analysis I & II

BIOLOGY

Honors Biology
AP Biology
Anatomy & Physiology
Biological Diversity and Change
Ecology
AP Environmental Science
Zoology: Vertebrate, Invertebrate
Classical Genetics
Molecular Genetics and Genomics
Intro to Microbiology
Marine Biology

CHEMISTRY

Introductory Chemistry
General Chemistry
Organic Chemistry
AP Chemistry
Introduction to Organic Chemistry
Biochemistry
Inorganic Chemistry
Environmental Chemistry

PHYSICS

Introduction to Physics
Flight Studies
Astronomy
Honors Physics
AP Physics 1 & 2 (AP Physics B)
Robotics

Intro to Mechanical Engineering
AP Physics C
Mechatronics I & II
Nuclear Engineering
Intro 3D Printing

COMPUTER AND INFORMATION SCIENCE

Computer Science: Principles
Programming w/Alice
AP Computer Science
Database Design & SQL
Programming w/ Python
Java I, II, III
C#
HTML/CSS
App Inventor for Android
Computer Ethics

ENGLISH

AP English Language
Sophomore English
American Literature 19th Century
American Literature 20th Century
Brave New Worlds
AP English Literature
British Literature I & II
Speech Communication
Journalism, Media Literacy & Mass Comm.
Creative Writing
Gothic Studies
Shakespeare on Stage
Victorian Women's Studies
Satire Writing

HISTORY

Intro to Western Thought
Advanced American Studies I & II
Economics
Adv. American Government
American Minority Relations
American Pop Culture: Rock-n-Roll
American Pop Culture: Superheroes
Crusades
Revolutions
World War I & II
Egyptology
Church History
Modern China
America 1950's
AP US History
American West
Women of Renaissance

Studies in Empire: Britain & America
New South
The Romantic Era
Western Thought II
Terrorism & Violence
Modern Middle East
Early Middle Ages
Post 1945
America 1960's
America at War
Civil War

FINE ARTS/GENERAL ELECTIVES

AP Studio Art
Graphic Design
Survey of the Arts: Music
Survey of the Arts: Visual Art
Health
Debate
Linguistics
Intro Music Theory
Advanced Music Theory I-III
Jazz & the American Musical Theater
Theater Arts/Production
Advanced Art 1-3
Sight Singing & Ear Training
Intro to Sociology
Intro to Meteorology

FOREIGN LANGUAGE

Beginning Latin
Intermediate Latin
Advanced Latin
Readings in Latin
Beginning French
Intermediate French
Advanced French
French IV & V
Readings in French
Beginning German
Intermediate German
Advanced German
German IV & V
Readings in German
Beginning Spanish
Intermediate Spanish
Intermediate Conversational Spanish
Advanced Conversational Spanish
Adv. Spanish Reading & Writing
Program Abroad: Germany & Spain
Spanish Grammar & Comp. I & II
Spanish Conver. & Phonetics I & II
Hispanic Literature & Culture I & II

FIVE-YEAR COLLEGE MATRICULATION

Agnes Scott College
Alabama A & M University
Alabama State University
Amherst College
Auburn University
Baylor University
Belmont University
Birmingham Southern
Brandies University
Brigham Young University
Brown University
Case Western University
Centre College
Colorado State University
Columbia University
Cornell University
Davidson College
Embry-Riddle Aeronautical University
Emory University
Florida A & M University
Florida Institute of Technology
Florida Southern College
George Washington University
Georgia Institute of Technology
Hendrix College

Howard University
Illinois Institute of Technology
Indiana University
Jacksonville State University
Johns Hopkins University
Kenyon College
Lake Erie College
Lehigh University
Louisiana State University
Macalester College
Marion Military Institute
Millsaps College
Mississippi State University
New York University
Northwestern University
Oglethorpe University
Oxford College of Emory University
Pomona College
Rice University
Samford University
Shippensburg University
Spring Hill College
Stanford University
Sweet Briar College
Texas A & M University

Trevecca Nazarene University
Trinity University
Tulane University
Tuskegee University
United States Merchant Marine
United States Military Academy
United States Naval Academy
University of Alabama
University of Alabama Birmingham
University of Alabama Huntsville
University of Mississippi
University of North Carolina at Chapel Hill
University of North Carolina at Charlotte
University of Notre Dame
University of Oklahoma
University of Pittsburgh
University of Rochester
University of the South
University of South Alabama
University of Southern California
University of Texas at El Paso
University of Texas at Austin
University of West Florida
Vanderbilt University
Xavier University