

SCIENCE COURSES

Cell Biology
Microbiology
Anatomy and Physiology
Genetics
Molecular Biology
Ecology of Environmental Problems
Human Infectious Diseases
Special Topics in Biology
Introduction to Biochemistry (Seniors)
Chemistry (Juniors)
Advanced Topics in Chemistry
AP Chemistry
Organic Chemistry (Seniors)
Analytical Chemistry (Seniors)
Special Topics in Chemistry (Seniors)
Mechanics
Waves, Electricity, and Magnetism
University Advanced Mechanics
Adv. Waves, Electricity, and Magnetism
Calculus-Based Mechanics
Calculus-Based Electricity and Magnetism
Modern Physics
Astronomy/Astrophysics
Electronics
Special topics in Physics

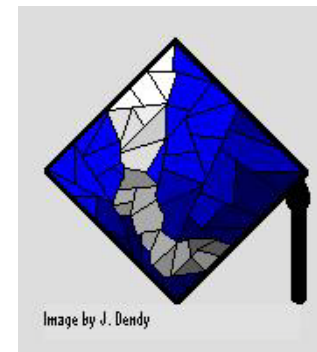
MSMS also offers its students the opportunity to earn up to 2 credits in professional mentorship and up to 2 credits in laboratory-based research under the guidance of professors at Mississippi State University and other Mississippi research institutions.

MATHEMATICS COURSES

Accelerated Algebra I (Juniors)
Trigonometry
Foundations for Higher Math (Juniors)
Math Modeling (Juniors)
University Calculus I
Differential Calculus
University Calculus II
Integral Calculus
Calculus III
Differential Equations
Investigations in Geometry
Explorations in Mathematical Art
History of Mathematics
Logic and Game Theory
University Statistics I
Statistics I
Statistics II
Number Sense
Discrete Mathematics

Mississippi School for Mathematics & Science

1100 College Street
Columbus, MS 39701
Phone (800) 553-6459
Fax (662) 329-7687
www.msms.k12.ms.us



Meeting the Needs of Academically Gifted Students

*Mississippi School
for Mathematics and Science*

**Mississippi's Only Residential
High School for Academically
Talented Students**

THE CHALLENGE

Mississippi has outstanding high schools staffed with dedicated teachers who work diligently to ensure that their students are prepared for whatever the future may hold.

However, even the best schools have a difficult time meeting the needs of many gifted students whose very giftedness presents unique challenges to both the students and the faculty who work with them. When their educational and socio-emotional needs are not met, the resulting boredom, frustration, and loss of interest puts many of those students at risk of becoming dropouts and failing to achieve their potential.

THE RESPONSE

To help address the special needs of “Mississippi’s best and brightest,” the legislature created the Mississippi School for Mathematics and Science in 1987 as a place where academically talented students from across the state could be given the attention they need in a residential setting that would meet their unique academic, emotional and social needs.

At MSMS, these students find the opportunity to be involved in educational experiences that are challenging and appropriate to their needs and achievement levels. They are presented with a learning environment in which they can fully develop their abilities while also acquiring a sense of community with like-minded peers.

WHAT RESEARCH TELLS US

- Gifted students are, by definition, “unusual” when compared with their same-age peers, at least in terms of cognitive abilities, and require different educational experiences.
- Since gifted students often do not conform, their challenge of traditions, rituals, roles, or expectations frequently prompts discomfort and negative responses from others.

“When gifted students are put together in an appropriate learning environment, they are more productive, motivated and meet higher achievement levels.”

Scott Hunsaker, president of Utah Association for Gifted Children

- Gifted students require different and more flexible educational experiences.
- Academically gifted students need a curriculum that is deeper, broader, and faster-paced than that delivered to other students.
- Gifted students are often considered “loners” and may find the conflict between fitting in and being an individual to be stressful.
- Gifted students may need several peer groups because their interests are so varied.
- The more time gifted students get to spend with others like themselves, the better.
- Many gifted students feel lonely, left-out, or different and need to fill this “emotional vacuum,” with intellectual and emotional peers.
- Parents of gifted students typically have few opportunities to talk with other parents of gifted students.

HOW WE MEET THOSE NEEDS

When you talk with MSMS students and alumni about the school, one of the first things you hear is, “For the first time in my life, I found a group of other people like me, people who cared about the same things I cared about.” You also hear them talk about the “MSMS family” and the connection they feel with each other.

At MSMS, learning is viewed as a continuous process that extends beyond the classroom. Our students are viewed as whole people with many needs and interests. Residence Life staff seek to integrate programs that will encourage, engage, and enhance students’ full personal growth, while providing opportunities, tools, and resources for academic success, community involvement, leadership, and freedom of thought in the spirit of mutual respect.

The academic program is rigorous, and students have the opportunity to progress to their utmost in their academic pursuits. Faculty go to great lengths to ensure that students achieve academic success. MSMS follows a collegiate-type class schedule with students taking six or seven classes per semester. The academic day begins at 8 a.m. and ends at 4 p.m.

“When school is in session at MSMS, our campus is the most diverse square mile in the state of Mississippi. We have students of all ethnicities, religions, and interests...and they all get along and know how to work together.”

Charles Brown,
MSMS Executive Director