## The Mississippi School for Mathematics \& Science (MSMS) 2002-2003



| Overview \& Mission |  |
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| Overview | *Public, residential, co-educational high school for academically talented juniors and seniors. Created by legislative enactment on July 1, 1987. <br> *Located on the campus of the Mississippi University for Women in Columbus, Mississippi. <br> *First class graduated in 1990. <br> *Created to enhance the future of Mississippi by providing innovative learning experiences in a residential environment to meet individual needs of gifted and talented students and by providing quality educational leadership and aggressive outreach programs. |
| Legislation | Created by legislative enactment on July 1, 1987. |
| Student Selection |  |
| Process | *Students are selected from across the state of Mississippi through a competitive process that culminates during April of the tenth-grade year. *The applicant's interest in mathematics, science, and technology is considered as well as past academic performance, standardized test scores, extracurricular interests, and accomplishments. <br> *Recommendations from the home school, student essays, and personal interviews are also used to develop as accurate a picture as possible. |
| Residence Life |  |
| Housing | *Students are housed in residence halls supervised by professional staff and resident advisors. <br> *Comprehensive Residential Life program focuses on student development. |


| Activities | *Student government, sports, academic competition teams, approximately 15 clubs, and 3 student publications. <br> * Field trips are planned regularly to take advantage of cultural and recreational events. <br> *All students are required to participate in regular activities that promote physical well-being. <br> *Fully-equipped gymnasium with professional staff and a broad program of intramural sports. <br> *Member of the Mississippi High School Athletic Association competing in soccer, swimming, tennis, golf, basketball. |
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| Work Service Program | *Student participation required. <br> *Students do custodial work and assist in science laboratories, academic or administrative offices, and the MUW library and post office. <br> *Promotes a sense of community and responsibility and allows students to make a return investment for the opportunity to attend MSMS. |
| Faculty |  |
| Average teaching experience | 16.2 years. |
| Percent with advanced degree | Approximately 35\% hold the doctorate degree. |
| Academic Program |  |
| Academic level | *Courses taught at the Honors level. <br> *Collegiate-type schedule with most courses meeting 3 hours per week and labs meeting 1.5 hours per week. Some advanced courses meet 4.5 hours with a extra lab for science courses. |
| Average class size | 18 students. |
| Number of academic units | *Usually a minimum of 6.5 units per year. <br> *Juniors average 6-6.5 units; seniors average 7-7.5 per year. |
| Evaluation of Student Progress | *Quarterly evaluations with averages computed by semester and/or year. <br> Grading scale: $90-100=\mathrm{A}, 80-89=\mathrm{B}, 70-79=\mathrm{C}$, <br> $0-69=$ NC (No Credit Given). <br> *Other marks listed on transcripts may include WP (Withdrawn Passing) and WF (Withdrawn Failing). <br> *MSMS does not compute grade-point average or class rank. |
| Dual Enrollment | Seniors with a composite ACT of 25 or higher may be concurrently enrolled at MUW in two programs, University English and the AP Calculus curriculum. Each course also provides appropriate preparation for the AP examination. |
| Special Study Options | During spring of the junior year, students may apply to enroll in Research. Students are placed either with an MSMS instructor or at nearby MSU. Students earning $1 / 2$ credit in Research work about 4 hours per week. Summer opportunities are also available. MSMS students are involved in research in many disciplines including engineering, chemistry, veterinary medicine, physics, computer science, and mathematics. |
| Mentorship | Available to selected students during the senior year. Minimum of three hours per week spent with a professional in the community who works in an area that the student is considering as a career choice. |
| Graduation Requirements |  |
| Credits | 23 credits are required for graduation. Of these, a minimum of 13 units must be earned at MSMS. |

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\begin{array}{|l|l|}\hline \text { MSMS units required } & \begin{array}{l}\text { English - taken each year for a total of } 2 \text { units. } \\
\text { Mathematics - minimum of two credits in mathematics and successful } \\
\text { completion of either AP Calculus I or AP Statistics I. } \\
\text { Science - minimum of three credits in science: one credit each in biology (must } \\
\text { include Cell Biology), chemistry, and physics ( } 1 / 2 \text { credit must be earned in a } \\
\text { mechanics course). } \\
\text { Mathematics/Science Elective - an additional unit of either mathematics, } \\
\text { science, or an approved interdisciplinary course is required. } \\
\text { Computer Science - In lieu of a computer applications course, students must } \\
\text { be able to demonstrate computer proficiency. } \\
\text { *Students taking any required courses prior to enrolling at MSMS will add } \\
\text { elective units to make up the required total of } 13 \text { credits at MSMS. }\end{array} \\
\hline \text { Other units required } & \begin{array}{l}\text { Social Studies - A total of } 3.5 \text { units are required for graduation: } \\
1 \text { unit of United States History - } 1877 \text { to Present; } 1 / 2 \text { unit of Mississippi Studies; }\end{array}
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1 / 2 unit of American Government; 1 unit of World History; and 1 / 2 unit of\end{array}\right\}\)| Economics or Geography. |
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| Foreign Languages - Two units are required. |
| The Arts - One unit is required in music, art, and/or drama. A maximum of |
| one unit of the Arts may be applied toward the required 13 units at MSMS. |
| Electives - Students will enroll in a sufficient number so that the total number |
| of credits earned at MSMS is at least 13 units. |

## MSMS Outreach Survey Summer Programs

## 2001:

(3) Empowering Teachers With Technology
(2) Establishing A Presence With HyperPresence
(3) Summer Life Science Camps

Institute for African American Males
Mathematics Success Skills Program
Making Mathematics Meaningful
Vernier/Texas Instruments Physics Workshop
(2) Teaching Algebra \& Geometry with Technology

2002:
(3) Math Links
(2) Empowering Teachers With Technology Institute for African American Males
(2) Summer Life Science

The Math Connection
2003:
Mathematics in Context
JAVITS

## Number of Students Benefitting from Workshops

| $\mathbf{1 9 9 1}$ | 7,800 | $\mathbf{1 9 9 7}$ | 17,539 |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{1 9 9 2}$ | 17,021 | $\mathbf{1 9 9 8}$ | 9,552 |  |  |
| $\mathbf{1 9 9 3}$ | 17,390 | $\mathbf{1 9 9 9}$ | 9,553 |  |  |
| $\mathbf{1 9 9 4}$ | 22,317 | $\mathbf{2 0 0 0}$ | 14,020 |  |  |
| $\mathbf{1 9 9 5}$ | 13,254 | $\mathbf{2 0 0 1}$ | 19,768 |  |  |
| $\mathbf{1 9 9 6}$ | 10,127 | $\mathbf{2 0 0 2}$ | 6,561 |  |  |
|  |  | $\mathbf{2 0 0 3}$ | 3,600 | TOTAL | $\mathbf{1 6 8 , 5 0 2}$ |

