



SOUTH CAROLINA GOVERNOR'S SCHOOL for Science & Mathematics

SCHOOL PROFILE 2016–2017

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ENROLLMENT

TOTAL: **282**

MALE: **49%**

FEMALE: **51%**

STUDENTS OF COLOR: **33%**

(Asian: 16%, Black 13%, Hispanic 2%,
American Indian <1%)

CLASS OF 2018 APPLIED: **343**

CLASS OF 2018 ENROLLED: **149**

CLASS OF 2017 ENROLLED: **133**

FINANCIAL AID

2016-2017 PERCENT OF STUDENTS
ELIGIBLE FOR FREE LUNCH PROGRAM:
20%

FACULTY

FULL TIME: **29**

PERCENT WITH ADVANCED DEGREES:
100%

PERCENT WITH A DOCTORATE: **86%**

The South Carolina Governor's School for Science & Mathematics (GSSM) is a public, residential high school for academically talented juniors and seniors from across the state. Established in 1988, GSSM provides opportunities for intellectual development beyond the scope of a traditional high school. Rising juniors apply for admission through a rigorous selection process, including an essay, standardized test scores and interviews, as well as external and internal application reviews.

- GSSM is an educational leader enabling and nurturing future STEM leaders for South Carolina and beyond
- GSSM aims to learn, to change, to share, to innovate, to inspire, to lead
- GSSM builds character through the purposeful integration of the moral and intellectual virtues within a community of learners

GSSM is a member and represented on the Board of Directors of the National Consortium of Secondary STEM Schools (NCSSSS) and is a member of the National Association for College Admission Counseling (NACAC).

ACADEMICS

By combining rigorous STEM, humanities and social sciences courses, extended field trips, intensive 2–3 hour science labs and mentored research (year-long and/or summer), GSSM fosters a student's ability to think critically, to apply theory and to develop ideas independently. The small faculty-student ratio allows GSSM instructors to provide individualized attention to encourage students to reach their full potential. GSSM's schedule mirrors that of a traditional college. The students are held to high standards with classes being taught at a college level. GSSM also subscribes to a rigorous grading system. Many of our students exhaust AP offerings and elect to take courses that are taught above the AP level. In our STEM departments, 21 out of the 47 courses (45%) are considered above AP, which means they require an AP course as a prerequisite or there is no AP course sanctioned by College Board in that area.

GSSM has memorandums of understanding with Clemson University, College of Charleston and the University of South Carolina to grant college credit for university approved GSSM courses that are closely aligned with the university's courses.

SUMMER PROGRAM FOR RESEARCH INTERNS

The Summer Program for Research Interns and the Research Experience Scholars Program are two of the most distinctive learning experiences for GSSM students. Students are embedded in research groups for six weeks during the summer following their junior year. The student research experience is guided by professional researchers in innovative laboratories, field sites, and industry research facilities regionally, nationally, and internationally. Some of these sites include SC's three major research universities, MIT, Washington University in St. Louis, The German Cancer Research Center, The German Research Center for Artificial Intelligence, The Fraunhofer Institute for Experimental Software, and the Korea Advanced Institute of Technology. Students gain a unique and direct experience with the scientific process, which develops their understanding of the scientific method, the methods of discovery, subject matter expertise, critical thinking skills, data analysis and quantitative skills, creativity, and communication skills. During their senior year, students work with a GSSM faculty advisor to develop an academic research paper and oral presentation describing their research findings at the GSSM Annual Research Colloquium and South Carolina Junior Academy of Sciences. GSSM students have the opportunity to present their research in academic journals or at professional conferences in conjunction with their summer research mentor.

JANUARY INTERIM

For three weeks before the second semester begins, students at GSSM participate in a "mini-mester," or January Interim, during which they focus on one experiential course. Interim classes provide a wide variety of course offerings that allow students to tap into undiscovered talents and explore new hobbies. Several courses include travel and field experiences, and there are typically two or more international and one or more in-country trips offered. In years past, groups have visited places like Silicon Valley and the Galapagos Islands. Course topics are diverse and include science, technology, art, music and drama.

GRADING SCALE

All high schools in South Carolina are required to utilize the South Carolina Uniform Grading Scale. Only grades of C or higher are given credit at GSSM. Additional weighting is given for grades earned in Honors, AP, Dual Enrollment and Above AP courses. The GPAs provided include all courses listed on the transcript, including courses posted from 8TH grade.

Prior to Fall 2016

A = 93 – 100
B = 85 – 92
C = 77 – 84
D = 70 – 76

Fall 2016 and later

A = 90 – 100
B = 80 – 89
C = 70 – 79
D = Below 70

GSSM is on the semester system with Interim courses offered in January each year and mentored research completed during the summer between junior and senior year.

Total graduation requirement for a State of SC and GSSM diploma: **26 credits**. Our Course Catalog can be found on our website: www.scgssm.org/residential/academics/course-catalog-and-faqs

Our typical course load is six courses each semester; seven courses is an overload.

| | | | |
|---------------------------------|----------|-------------------------|----------|
| Mathematics | 5 | Social Studies..... | 3 |
| Laboratory Science..... | 3 | Foreign Language..... | 3 |
| Computer Science | 1 | Mentored Research | 1 |
| STEM or Economics Electives ... | 2 | Interim Course | 1 |
| English | 4 | General Electives..... | 3 |

RANKING POLICY

GSSM does not rank its students; we enroll students from across South Carolina, many ranked first in their 10TH grade class. The grade distribution junior year chart provides a context for our students' transcripts.

NATIONAL MERIT RECOGNITION

Class of 2016 National Merit Finalists **18**

SAT CLASS OF 2016: MIDDLE 50% RANGES AND MEANS

| | GSSM MEAN N = 113 | GSSM MIDDLE 50% RANGE | SOUTH CAROLINA COLLEGE- BOUND SENIOR MEAN | ALL COLLEGE-BOUND SENIOR MEAN |
|------------------|----------------------|-----------------------|--|----------------------------------|
| Critical Reading | 653 | 600 – 710 | 488 | 495 |
| Math | 680 | 630 – 730 | 487 | 511 |
| Writing | 635 | 580 – 670 | 467 | 484 |

ACT CLASS OF 2016: MIDDLE 50% RANGES AND MEANS

| | GSSM MEAN N = 121 | GSSM MIDDLE 50% RANGE | SOUTH CAROLINA COLLEGE-BOUND SENIOR MEAN | ALL COLLEGE-BOUND SENIOR MEAN |
|-----------|----------------------|--------------------------|--|-------------------------------------|
| Composite | 29.9 | 28 – 33 | 20.4 | 21 |

ACT CLASS OF 2017, SPRING JUNIOR YEAR: MIDDLE 50% RANGES AND MEANS

| | GSSM MEAN N = 137 | GSSM MIDDLE 50% RANGE |
|-----------|----------------------|--------------------------|
| Composite | 29.7 | 27 – 33 |

SELECTED ADVANCED PLACEMENT (AP) EXAMINATIONS FOR THE 2015-2016 YEAR

| EXAMINATIONS | BIOLOGY | CALCULUS BC | CHEMISTRY | COMPUTER SCIENCE | ENGLISH LANGUAGE | PHYSICS C: E&M | PHYSICS C: MECH | STATISTICS |
|----------------------|---------|-------------|-----------|---------------------|---------------------|----------------|--------------------|------------|
| # of Students Tested | 66 | 28 | 56 | 17 | 68 | 16 | 19 | 9 |
| Average Score | 3.42 | 3.39 | 3.04 | 3.82 | 3.62 | 3.44 | 4.11 | 4.44 |

GRADE DISTRIBUTION JUNIOR YEAR, CLASS OF 2017

| | A (93-100) | B (85-92) | C (77-84) | D (70-76) |
|---|------------|-----------|-----------|-----------|
| Math | | | | |
| Math Analysis 102 | 30 | 12 | 2 | 0 |
| Math Analysis 103 | 25 | 17 | 1 | 0 |
| Math Analysis 111 | 30 | 24 | 7 | 0 |
| Math Analysis 112 | 26 | 26 | 5 | 0 |
| AP Calculus AB 201 | 8 | 18 | 6 | 0 |
| AP Calculus AB 202 | 8 | 9 | 14 | 0 |
| AP Calculus BC (year-long course) | 3 | 3 | 0 | 0 |
| Science | | | | |
| AP Biology 201 | 25 | 54 | 13 | 0 |
| AP Biology 202 | 37 | 43 | 12 | 1 |
| Principles of Chemistry (year-long course) | 6 | 11 | 18 | 3 |
| AP Chemistry 201 | 31 | 42 | 15 | 0 |
| AP Chemistry 202 | 30 | 41 | 16 | 0 |
| Fundamentals of Physics 101 | 3 | 11 | 3 | 0 |
| Fundamentals of Physics 102 | 5 | 9 | 4 | 0 |
| AP Physics 1-A | 11 | 9 | 1 | 0 |
| AP Physics 1-B | 6 | 12 | 1 | 0 |
| AP Physics: C:M | 3 | 5 | 1 | 0 |
| AP Physics C:EM | 2 | 4 | 2 | 0 |
| Computer Science | | | | |
| AP Computer Science | 29 | 17 | 7 | 0 |
| English | | | | |
| AP English Language (year-long course) | 54 | 78 | 7 | 0 |
| Social Science | | | | |
| AP U.S. History (year-long course) | 50 | 55 | 18 | 0 |

SAT CLASS OF 2017, SPRING JUNIOR YEAR: MIDDLE 50% RANGES AND MEANS (NEW SAT)

| | GSSM MEAN N = 98 | GSSM MIDDLE 50% RANGE |
|-----------------------------------|---------------------|--------------------------|
| Evidenced Based Reading & Writing | 680 | 630 – 700 |
| Math | 670 | 640 – 710 |

| MATHEMATICS CORE COURSES | MATHEMATICS ELECTIVES (ABOVE AP) |
|----------------------------|--|
| Math Analysis | Linear Algebra (offered on alternate years) |
| Calculus with Applications | Multivariate Calculus (offered on alternate years) |
| AP Calculus AB | Ordinary Differential Equations (offered on alternate years) |
| AP Calculus BC | Discrete Structures (offered on alternate years) |
| | Abstract Algebra (offered on alternate years) |
| | Number Theory |
| | AP Statistics |
| | Regression Analysis |

| COMPUTER SCIENCE CORE COURSES | COMPUTER SCIENCE ELECTIVES (ABOVE AP) |
|-------------------------------|---|
| AP Computer Science | Python Programming |
| | Data Structures |
| | Application Design and Implementation using C++ and Linux |
| | Programming Interaction and Visual Design |
| | Robotics |
| | Introduction to Artificial Intelligence |
| | Game Design, Prototyping and Production |

| SCIENCE CORE COURSES | BIOLOGY ELECTIVES (ABOVE AP) | CHEMISTRY ELECTIVES (ABOVE AP) | PHYSICS ELECTIVES (ABOVE AP) |
|-------------------------|------------------------------|--------------------------------|-----------------------------------|
| AP Biology | Molecular Biology | Organic Chemistry | Modern Physics |
| Principles of Chemistry | Human Anatomy and Physiology | Analytical Chemistry | Fluids, Thermodynamics and Optics |
| AP Chemistry | Neuroscience | Biochemistry | Astronomy |
| Fundamentals of Physics | Advanced Genetics | AP Environmental Science | |
| AP Physics 1 | Biological Evolution | | |
| AP Physics C:M | Vertebrate Biology | | |
| AP Physics C:EM | Botany | | |

| ECONOMICS & FINANCE CORE COURSES | ECONOMICS ELECTIVES |
|----------------------------------|---------------------------------|
| | Technology Ventures |
| | AP Microeconomics |
| | AP Macroeconomics |
| | Quantitative Financial Analysis |

| ENGINEERING CORE COURSES | ENGINEERING ELECTIVES |
|--------------------------|------------------------------------|
| | Introduction to Engineering Design |
| | Engineering Mechanics: Statics |
| | Engineering: Electronics |
| | Engineering: SolidWorks |
| | Engineering: Project Design |

| RESEARCH CORE COURSES | RESEARCH ELECTIVES |
|--------------------------|-----------------------------|
| Summer Mentored Research | Scientific Investigation I |
| | Scientific Investigation II |

| ENGLISH CORE COURSES | ENGLISH ELECTIVES |
|-----------------------|-------------------------------------|
| AP English Language | Introduction to Creative Writing |
| AP English Literature | Studies in Creative Writing: Poetry |
| | Drama |
| | Introduction to Film |
| | Introduction to Philosophy |
| | Christian Literature |
| | Topics in Science Fiction |
| | Natural History and Science Writing |
| | Shakespeare's Plays |

| SOCIAL SCIENCE CORE COURSES | SOCIAL SCIENCE ELECTIVES |
|-----------------------------|------------------------------|
| AP U.S. History | Irish History |
| | World War II |
| | Civil War and Reconstruction |
| | Medieval History |
| | AP Psychology |
| Government and Economics | AP U.S. Government |

| MUSIC CORE COURSES | MUSIC ELECTIVES |
|--------------------|-----------------|
| | AP Music Theory |

| FOREIGN LANGUAGE CORE COURSES | FOREIGN LANGUAGE ELECTIVES |
|---|----------------------------|
| French I | French IV |
| French II | French V |
| French III | AP French |
| Spanish II | Spanish IV |
| Spanish III | Spanish V |
| | AP Spanish |
| Introduction to Chinese I (Dual Enrollment) | |
| Introduction to Chinese II (Dual Enrollment) | |
| Introduction to Chinese III (Dual Enrollment) | |
| Introduction to Chinese IV (Dual Enrollment) | |

DISCIPLINARY REPORTING POLICY

Adhering to NACAC's Statement of Principles of Good Practice, it is GSSM's policy for the Office of College Counseling and Advising to disclose all infractions that result in suspension, expulsion, withdrawal pending disciplinary action, or any other probation status to the colleges to which a student applies. Whether the offense occurred before or after the time of application, or if a student has received an offer of admission, will not preclude an infraction from being reported.

RESIDENTIAL COMMUNITY

All GSSM students are required to live on campus. The residential living program is based on a House System where each of the six floors in the residence hall represents a House. Rooted in the centuries-old model of British boarding schools and designed by a student-led committee, the GSSM House System aims to:

- assist students in developing community values;
- instill a sense of belonging; and
- promote school spirit through healthy competition

Our Civitas (community) values are accountability, commitment, compassion, fairness, honesty, respect, responsibility, safety, trust and wellness.

COMMUNITY ENGAGEMENT

GSSM views engagement as essential to the holistic experience of all students. Be it through leadership, club participation, or service, it is expected that all students will be involved to some degree in the life of the school beyond their academic pursuits. As a response to the State for this opportunity, the local community for their gracious support of the school, and each other as a demonstration of citizenship, students are encouraged to support the campus, local, and South Carolina communities to encourage institutional values.

Over the years, students have been encouraged to design and develop projects related to their personal interests, passions and community needs. Some of them include:

VARSITY ATHLETICS

Participation in athletics is one of the ways GSSM students engage beyond the classroom. Approximately 70% of our student body participates in varsity interscholastic sports. Many of these individuals have never participated on an athletic team prior to coming to the Governor's School. Despite the novice status of many of our athletes, GSSM has won numerous competitions. Varsity offerings include:

- Basketball
- Cross Country
- Golf
- Soccer
- Swimming
- Tennis
- Track & Field
- Volleyball

- Student 2 Student – an tutoring initiative with the local Boys and Girls Club
- Tech Talk – technology workshops offered to local, mature Hartsville residents who need remedial technical training
- Connect Hartsville – program where students assist local merchants with website development and social media presence for their businesses
- The Morningside Oral History Project – GSSM students regularly visited a local nursing home, documented some residents' stories, and presented the narratives to the residents and their families
- Mental Health Walk – 5K coordinated by GSSM students to bring awareness to encourage support of those with these vulnerabilities

2013–2016 ACCEPTANCES & MATRICULATIONS

*INDICATES MATRICULATION

SOUTH CAROLINA INSTITUTIONS

Charleston Southern University
Claffin University*
Clemson University*
Coastal Carolina University*
Coker College
College of Charleston*
Converse College
The Citadel, the Military College of SC
Francis Marion University
Furman University*
Presbyterian College*
South Carolina State University
University of South Carolina, Beaufort
University of South Carolina-Columbia*
Winthrop University*
Wofford College*

DOCTORAL INSTITUTIONS

American University*
Arizona State University
Auburn University
Augusta University*
Baylor University
Binghamton University
Boston College
Boston University*
Brandeis University
Brigham Young University*
California Institute of Technology
Carnegie Mellon University*
Case Western Reserve University*
Clark Atlanta University
College of the Atlantic
College of William and Mary*
Colorado School of Mines
Colorado State University
Columbia University*
Cornell University*
Dartmouth College
Drexel University
Duke University*
East Carolina University
Emory University*
Florida Institute of Technology
Florida State University*
Fordham University*
George Mason University
Georgetown University*
Georgia Institute of Technology*
Georgia Southern University
Harvard University
Howard University*

Iowa State University
Johns Hopkins University*
Kansas State University
Liberty University
Louisiana State University
Loyola University Chicago
Mercer University
Michigan State University
Mississippi State University
Missouri University of Science and Technology
New York University*
North Carolina A&T State University
North Carolina State University*
Northeastern University*
Nova Southeastern University*
Pennsylvania State University
Pepperdine University
Princeton University
Purdue University*
Rensselaer Polytechnic Institute
Rice University*
Rochester Institute of Technology*
Rutgers University-New Brunswick
San Francisco State University
Southern Methodist University
St. John's University - Queens Campus
Stanford University*
State University of New York at Albany
Stevens Institute of Technology
Stony Brook University
SUNY College of Enviro Science and Forestry
Syracuse University
Temple University
Tennessee Technological University
Texas A&M University
Texas Christian University
The George Washington University*
The Ohio State University*
The University of Alabama*
The University of Alabama at Birmingham
The University of Alabama in Huntsville*
The University of Arizona
The University of Georgia
The University of North Carolina at Chapel Hill*
The University of Texas, Austin*
Tufts University*
Tulane University
University of Arkansas at Little Rock
University of California, Berkeley*
University of California, Davis
University of California, Irvine
University of California, Los Angeles*

University of California, San Diego
University of California, Santa Barbara
University of Central Florida*
University of Chicago
University of Cincinnati
University of Colorado at Boulder
University of Connecticut
University of Delaware
University of Denver
University of Florida
University of Illinois at Urbana-Champaign
University of Kansas
University of Kentucky
University of Maine
University of Maryland, College Park
University of Massachusetts, Amherst
University of Massachusetts, Lowell
University of Miami
University of Michigan*
University of Minnesota, Twin Cities
University of Mississippi
University of North Carolina at Charlotte
University of North Carolina at Greensboro
University of Notre Dame*
University of Oklahoma*
University of Pennsylvania*
University of Pittsburgh*
University of Rhode Island
University of Rochester*
University of San Diego
University of Southern California*
University of Tennessee, Knoxville*
University of Vermont
University of Virginia*
University of Washington*
University of West Florida
University of Wisconsin, Madison
Utah State University
Vanderbilt University*
Villanova University
Virginia Tech
Wake Forest University*
Washington State University*
Washington University in St. Louis*
West Virginia University*
Worcester Polytechnic Institute*
Yale University*
MASTER'S INSTITUTIONS
Alaska Pacific University
Appalachian State University
Armstrong State University*
Bellarmine University*

Belmont University*
Berry College
California Polytechnic State University, San Luis Obispo*
California State Polytechnic University, Pomona
California State University, Monterey Bay
Campbell University
Champlain College
Elon University
Embry-Riddle Aeronautical University*
Florida Gulf Coast University
Hampton University*
Hawaii Pacific University
James Madison University
Kettering University
King's College
Lenoir-Rhyne University
Loyola Marymount University
Loyola University New Orleans*
Manhattan College
Marywood University
Norfolk State University
North Carolina Central University
Queens University of Charlotte
Rollins College
Rowan University
Rutgers University - Camden
Saint Peter's University
Simmons College
St. Mary's University of San Antonio
Stetson University
SUNY College at Geneseo
The College of New Jersey
The University of Tampa
Towson University*
University of Dallas
University of New England
University of North Carolina at Wilmington
University of North Florida
University of St. Francis
University of Wisconsin, La Crosse*
Wingate University*
BACCALAUREATE INSTITUTIONS
Agnes Scott College*
Alfred University
Allegheny College
Bard College
Barnard College
Belmont Abbey College
Birmingham-Southern College
Bryn Mawr College

Bucknell University
Colgate University
Colorado College
Davidson College*
Drew University
Earlham College
Eckerd College
Grinnell College*
Hamilton College
Harvey Mudd College
High Point University
Juniata College
Kenyon College*
Lafayette College
Lander University
Lees-McRae College
Macalester College
Maryville University
Middlebury College
Mount Holyoke College
New College of Florida
Newberry College
Oberlin College
Occidental College
Oglethorpe University
Reed College
Rhodes College*
Roanoke College
Sewanee: The University of the South*
Siena College
Smith College
Soka University of America
Spelman College
St. Lawrence University
The University of Maryland
The Cooper Union for the Advancement of Science & Art
Union College
United States Air Force Academy*
United States Military Academy
United States Naval Academy*
Unity College
University of North Carolina at Asheville
University of Richmond*
Vassar College*
Virginia Wesleyan College
Washington and Lee University*
Washington College
Wellesley College*
Wesleyan University
Wheaton College IL*
William Jewell College