

# A Unique Academic-Year Governor's School

- ※ Approximately 150 junior and senior students from 14 different high schools participate in the program.
- ※ Students attend the Governor's School for half of the day.
- ※ Students take math, science, technology, research, study skills, and career education classes at SWVGS.
- ※ Attendance at SWVGS is an excellent way to prepare for college.



- ※ All courses are dual-enrolled through New River Community College or Radford University.
- ※ Students have the opportunity to earn a minimum of 45 and a maximum of 53 credits in their two years at SWVGS.
- ※ SWVGS is funded by the Virginia Department of Education and by participating school divisions.



- ※ SWVGS provides challenges to bright and gifted students while cultivating intellectual growth, fostering dedication to academic discipline, and developing skills in scientific research.

## Southwest Virginia Governor's School

100 Northwood Drive  
Pulaski VA, 24301

(540) 440-5502

[www.swvgs.us](http://www.swvgs.us)



# Learning Opportunities

- ※ Hands on learning allows for engagement and deeper understanding.
- ※ Students have opportunities to attend national meetings.



- ※ Academically challenging courses give students a competitive edge when applying for college.
- ※ Internships provide students with exposure to career options.
- ※ Students take classes with similarly motivated and talented peers, which encourages greater individual and collective growth.



# Research

- ※ The SWVGS research course allows students to develop skills necessary in advanced scientific research.
- ※ Science projects are an integral part of the junior and senior SWVGS experience.



- ※ Students select, design, and conduct a research project of high merit.



- ※ SWVGS students are very competitive at science and engineering fairs.



# SWVGS Courses and College Credits

## Science

The science curricula are designed to build a strong foundation in the basic sciences, while also providing students with the knowledge necessary to conduct research investigations and to understand and appreciate the connections among different fields of science as well as the interdisciplinary nature of advanced scientific explorations.

Life Sciences		Physical Sciences		Integrated Sciences	
General College Biology I/II	8	General College Algebra Physics I/II	8	Basic Environmental Science	3
Human Anatomy & Physiology I/II	8	General University Calculus Physics I/II	10	Forensic Science & Biotech. Concepts	3
		Inorganic College Chemistry I/II	8	Planetary and Galactic Astronomy I/II	6

## Mathematics

The study of mathematics is highly differentiated to meet the varied needs and interests of the students served. An exhaustive range of courses is offered and instructors focus on ensuring that students develop strong math skills, independent of a calculator, so that they are able to complete required calculations in a given field of science or research.

Foundation Courses		Calculus		Analysis and Application	
College Algebra w/ Intro Precalculus	3	Analytic (Vector) Geometry	2	Cryptography	3
College Trigonometry	3	Applied Calculus I/II	6	Differential Equations	4
Introductory Linear Algebra	2	Calculus of One Variable I/II	6	Finite Mathematics I/II	6
Precalculus with Trigonometry	5	Vector Calculus (Multivariable)	4	Problem Solving	3
				Statistics I/II	6

## Career Development

Students develop skills in active learning, consistent study practices, and time-management to maximize their success. They also shadow someone in an occupation that interests them during the eight week junior internship program. This opportunity assists students in finalizing college major choices and, for many, cements their decision to pursue a science and math related career.

Student Development		Research	
Career Education	1	Arctic Geophysics	3
Study Skills	2	Junior Science & Technology Seminar and Project	3
		Senior Science & Technology Seminar and Project	3

## Computer Science

Many students design fully functional electronic devices incorporating skills in engineering, electronics, design, and programming. Laser alarm clocks, automatic sheet music advancers, and an electrocardiogram monitor are examples of equipment students created using skills acquired in Governor's School courses.

Software Engineering	
Computer Science for Life Science Animations	2
Java Programming I	4
Software Design	3

Numbers listed in columns beside course names represent college credits earned upon successful completion of the dual-enrolled course.

# Summary

- ※ Experienced in serving gifted science and math students since 1990.
- ※ The accelerated, differentiated, and enriched science and mathematics learning environment allows students to earn more than 45 college credits at no cost to students or families.
- ※ Prepares students for future academic competition in college, shortens time to undergraduate degree completion, and prepares students for math and science careers.

# SWVGS Student Outcomes

- ※ 100% of Governor's School graduates enroll in college.
- ※ Historically, 60% or more seniors select Tier 1 colleges and universities.
- ※ SWVGS students typically score more than 100 points higher than the national and state averages on each individual SAT section.
- ※ National Merit Scholars are among our graduates.



# Participating School Systems

