

STEAM MISSION STATEMENT

Wythe County Schools STEAM Program strives to inspire joy at the idea of discovery, to create a culture that fosters innovation, and to prepare our students for effective involvement in an increasingly technological society. We engage our students with interdisciplinary courses that incorporate advanced technology-integrated projects, as well as encourage inquiry, integrity, collaboration, creativity, problem-solving, and critical reasoning. Through challenging experiences in the program, students will:

- Demonstrate critical thinking, curiosity, adaptability, and initiative in order to be both contributors to and influential in a technological society;
- Exhibit an appreciation for the skills and imagination needed to design, create, and utilize advanced technologies;
- Engage in and explore the interconnectedness of the fields of Science, Technology, Engineering, Design Arts, and Mathematics;
- Practice and master the skills necessary to successfully pursue a higher degree in one of the disciplines of Science, Technology, Engineering, and Mathematics;
- Develop as leaders and support one another through collaboration and team building;
- Develop strong Problem solving skills;
- Develop solutions to given sets of problems.



Fort Chiswell Middle School

Principal: Mr. Brett Booher
Guidance Counselor: Ms. Martha Luper
(276) 637-4400
fms.wythe.k12.va.us

Rural Retreat Middle School

Principal: Mrs. Shannon Vaught
Guidance Counselor: Ms. Esther Hale
(276) 686-5200
rms.wythe.k12.va.us

Scott Memorial Middle School

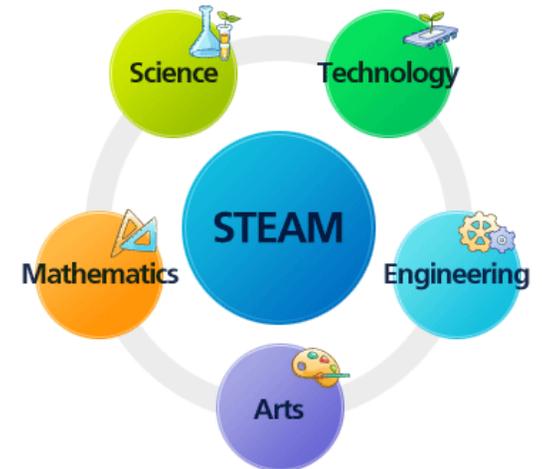
Principal: Mr. Brad Haga
Guidance Counselor: Mrs. Judy Willis
(276) 228-2851
scoe.wythe.k12.va.us



Wythe County Public Schools



Middle School



Exploratory

*Educating Students for Success
in the 21st Century*

*Please contact your child's school for more
information about the STEAM program.*

MIDDLE SCHOOL STEAM EXPLORATORY

Why make changes to the middle school curriculum?

Educating students for success in the 21st century has long been a guiding principle of Wythe County Public Schools. The drive to continuously improve educational offerings and boost student achievement has produced several initiatives in the past few years. The STEAM program joins this list of enhancements:

Our *Vision* is to provide:

- ◆ activities that engage students
- ◆ thought provoking – open ended inquiry, problem solving approaches to learning
- ◆ opportunities for inquiry and reflection
- ◆ a global awareness of STEAM needs
- ◆ prepares students for STEAM based careers
- ◆ creativity that provides richer experiences for middle school students
- ◆ opportunities to build knowledge and skills across grade levels.



Science



Middle school students should develop an awareness of the relationships between agriculture and science. Major concepts covered in this course include awareness of agriculture, the world of work, agribusiness careers, human relations, information and communication, manufacturing, environment and scientific principles applied in agriculture.

Technology



Students are introduced to the world of business using the computer as a problem-solving tool. Emphasis is placed on using basic touch keyboarding skills to complete a variety of projects incorporating word processing, database, presentation, and spreadsheet software. Basic Internet safety and computer maintenance issues are important components of this course. Digital Input Technologies introduces new and emerging input devices (e.g., speech and handwriting-recognition software, tablets, cloud computing software applications, headsets/microphones, digital cameras, digital video cameras, mobile devices, keyboards, mice, animation, and gaming) to prepare students for using tools that are becoming standard in the workplace and everyday life.

Engineering



An introduction to engineering that will inspire, engage and educate! Students will explore numerous areas of engineering and participate in a variety of hands on activities and projects. Engineering areas of interest will include but are not limited to: structural, mechanical, biomedical, aerospace and robotics. Using the design process students will learn to relate the impact of engineering on society and how it affects our future.

Art



Art is another area that students will explore as part of the STEAM program. The primary goal is for students to develop an awareness and appreciation of the visual experience and limitless possibilities for making things of beauty and delight. Learning is based largely on visual experiences and the development of seeing, upon which, eventually, to realize one's own visual language and visual value judgments. The students will explore and express themselves through art as they explore all areas of STEAM.

Math



Math is another key component in the STEAM program. Students will utilize comprehensive math skills throughout all their Exploratory classes by applying them towards real-world application STEAM projects.

Middle School Students will rotate STEAM Exploratory classes throughout the school year.