



Science, Research, and Technology II – Syllabus

Teachers: Mr. Evans and Mr. Davis

Webpage: <http://www.scienceandmathacademy.com/academics/srt2> (Homework assignments, projects, and other useful information)

Grades: Edline

Classrooms: B310

Email addresses: mark.evans@hcps.org and Gareth.DavisJr@hcps.org

Course Description:

In this course you will be learning many of the tools and processes used by scientist and engineers to conduct research. The course will coordinate with your mathematics and science courses throughout your four years at the SMA. For this second year, the class will meet 90 minutes every other day. SRT will be a project based course and will focus on problem solving. The state required course of Foundations of Technology is fulfilled by completing this course.

Course Content Outline:

The following outline will give you a general idea about the topics to be covered in SRT II. The list is by no means final and topics may be added or deleted as the year progresses.

- Excel and Visual Basic for Applications (VBA)
- Visual Basic (VB)
- Principles and applications of technology project
- Mathematica[®]
- Aerial photos
- Robotics w/ Boe-Bots[®] & Lego Mindstorms
- Propeller research
- Hovercrafts
- Request for proposal/Design/Google Sketchup
- Student directed lab/research
- Statistics
- Technical writing

Required Materials:

There will be no textbook, but you will be expected to bring binder/folder, calculator, scientific notebook, flash drive and writing utensils.

Homework/Classwork Policies:

Homework/classwork will be assigned throughout the year. You will have a specified amount of time to complete the homework. **Late homework will not be accepted!** Most of the homework assignments will be used in class to further discussions and/or activities.

There will also be individual/group projects assigned. You will be notified in advance of the project details and due dates. **Late projects will not be accepted!** Remember to ask any questions before starting the project if you are confused about something and do not wait until the last minute to start! Also, if you are allowed to choose your group member... choose them wisely!

Grading Policy:

All quarter grades will be determined by total points. There are not many grades per quarter. When something is graded it will be on Edline.

Classroom Expectations:

1. If you have an excused absence, you will be given the appropriate number of days to complete any work missed, according to Board of Education policy. Make up any missed work promptly! Do not let yourself fall behind! Due to the nature of the course, it may not be possible to make up some assignments.
2. All assignments are expected to be submitted on time.
3. Behavior which causes a disruption to the classroom process and behavior that is disrespectful to the teacher or other students will not be tolerated in this class.
4. Students may only use computers when directed by a teacher.