

## STEMM Technical Middle College Field Trips/Guest Speakers

### Tuesday, May 13

Type of Activity – Guest Speaker HCC Location – CPB 213 6:00 pm-8:00 pm

- ➤ Kieran Lee (guest speaker)
- Volvo Group Trucks Technology
- Performance Application Engineer (Consultant)
- Virginia Tech, Class of 2012
- Bachelor of Science in Mechanical Engineering (Minors in Green Engineering and Industrial Design)

#### Presentation

Forward Motion

Objective of Presentation

The Basics of Generating Forward Motion in an Automotive Application

## Presentation Summary

A review of some concepts of physics that will lead to an introductory look at internal combustion engines.

## Saturday, June 7

Type of Activity – Guest Speaker

HCC Location – TBA

10:00 am-12:00 pm

- ➤ Philip Betterly (guest speaker)
- Massanutten Military Academy (Teacher Algebra 1/Geometry)
- Shenandoah University (Assistant Baseball Coach)
- Methodist University, Class of 2009
  - Bachelor of Science in Physical Education
- Frostburg State University
  - Master of Education in Administration and Supervision

#### Presentation

Analytical Approach to Baseball Statistics

## Objective of Presentation

To understand the in-depth analysis of baseball statistics and how players are evaluated Presentation Summary

Baseball statistics are analyzed more today than ever. There are many ways to interpret them. Each coach or team may value some statistics more than others. This presentation will discuss the analysis of baseball statistics, how they are used to evaluate player performance and how to put the best product on the field.

## Saturday, June 14

Type of Activity – Guest Speaker

HCC Location – TBA

We will need to provide "working" lunch to the participants.

10:00 am-1:00 pm

- ➤ Andrew Davis (guest speaker)
- Timber Ridge Fruit Farm
- Production Supervisor
- West Virginia University
  - Bachelor of Science in Journalism with focus on Advertising

#### Presentation

The Application of Mathematics and Technology in the Orchard/Fresh Fruit Industry Objective of Presentation

To provide an insight into planning, planting and harvesting of a fresh fruit orchard <u>Presentation Summary</u>

The presentation will demonstrate the need for accurate spacing, maximizing production per square acre and the efficient utilization of space. To accomplish these needs an orchardist may use a GPS to pinpoint corners and to provide a guideline for row placement. The discussion will include the challenge of flat terrain vs terrain with significant contour, crop management and the production of packed fresh fruit (apples). In conclusion there will be a demonstration of basic math skills and number management as applied to inventory, storage, and analyzing consumption and bushels per hour.

# Thursday, June 26 (rain date: Thursday, July 24)

Type of Activity – Guest Speaker and Field Trip

This will be a great parent-child activity!!!

HCC Location – TBA

9:00 am-1:30 pm

- ➤ Tony Valente (HCC faculty speaker)
- Carlos Fernandez-Bueno, MD
- Potomac Wind Energy (potomacwindenergy.com)
- President/Owner

#### Presentation

**Exploring Alternative Energy Sources** 

Objective of Presentation

To learn about alternative energy sources and view wind/solar examples

### Presentation Summary

This presentation would be a great parent and child activity. The presentation will include an introductory discussion with Tony Valente, a field trip to Potomac Wind Energy with a tour lead by Carlos Fernandez-Bueno followed by a drive-by of the First Solar, Inc. and finishing the day with a question/answer session at HCC.