

## Freedom Area High School Gifted Enrichment Services/Programs

Freedom Area High School students in grades 9-12 may select from a variety of options in the curriculum to meet their educational needs. These selections should be based on the student's demonstrated exceptional needs and interests. The options must provide appropriate opportunities that extend beyond the regular education course work, encourage students to engage in higher level thinking skills, and require students to go more in-depth into a content area.

Students can select one or more of the following areas. Please be aware that none of the enrichment options are graded. However, a student can enroll in an online high school course for a grade and to earn a high school credit. These activities are developed and planned with the student and monitored by the Gifted Coordinator.

Independent studies provide the student with an opportunity to embark on an independent project course credit such as online high school courses.

The following enrichment options are currently available at Freedom Area High School, however, information regarding enrichment programs may be shared with the Gifted Coordinator throughout the year from a variety of outside resources.

### **Beaver Valley Intermediate Unit (BVIU)**

The following enrichment activities are offered at the BVIU, but not limited to:

- Army War College
- Forensics/Forensics Public Speaking
- Academic World Request at Duquesne University
- Engineering Day at Carnegie Science Center
- Test of Engineering Aptitude, Mathematics and Science at the BVIU
- Observations on Open Heart Surgery with AHG
- Robo Sumo Offered on 4/10/2017:

### **Freedom Area High School**

- EDx Online courses
- Online High School courses for acceleration with Edgenuity (During the School Year)
- Career Guidance/Research
- Job shadowing
- Essay Contests (i.e., Ayn Rand)
- Writing workshops
- Independent projects with teachers in interest area
- Independent Web quests

## Special Programs/Camps

- PA Governors' School (For Juniors and Sophomores)
  - Global Entrepreneurship (10<sup>th</sup> and 11<sup>th</sup>)
  - Sciences (Juniors only)
  - Engineering Program (currently redesigning program)
- Westinghouse Honors Science
- Summer Health Academy at UPMC Grades 9 & 10)
- Allegheny Intermediate Apprenticeship program
- Girls in Engineering
- HOBY (Hugh O'Brian Leadership Workshop) for Sophomores in June at Washington and Jefferson College
- West Point Bridge Project - An internet based competition that begins in January. It's a realistic introduction to engineering in which you will design a bridge using the West Point Bridge Designed Software (free download)
- Woman in Engineering at CMU
- World Affairs presentations
- PA Junior Academy of Sciences at PITT, CMU and Duquesne University
- Accounting Honors Institute at Duquesne University
- Robert Morris Outreach programs/activities in the area of STEM
- C.A.U.S.E. Challenge High School Film Festival with the Bayer Cooperation, Carnegie Science Center's Regional SciTech Initiative and Pittsburgh Filmmakers invites students (individually or in teams of up to 4) to write, project and edit video or film with a 5 minute maximum length of the theme Mutual Impact: The Environment and You. C.A.U.S.E stands for "Creating Awareness and Understanding of our Surrounding Environment. Films are usually due at the beginning of March.
- How the Brain Works with the University of Pittsburgh/Research opportunities. The research experience for high school students will include both teaching sessions and hands-on research projects. Along with the mentee, the mentor will establish at least one educational goal and measurable learning outcome the mentee should expect to gain from this learning experience. At the end of the research experience, students will make an oral or poster presentation of the results of their research projects.
- University of Pittsburgh Cancer Institute Academy Program
- Cooks Honors Program at IUP (juniors and seniors)
- Pre-College Program at CMU
- ID TECH at CMU Summer Program/At iD Tech Camps, you can code an iPhone or Android app from scratch, design your own video game with Unity, mod with Minecraft, engineer a robot with VEX, produce a viral video for YouTube, and so much more.
- pic CTF: CMU Cyber Security Competition: picoCTF is a computer security game targeted at middle and high school students. The game consists of a series of challenges centered on a unique storyline where participants must reverse

engineer, break, hack, decrypt, or do whatever it takes to solve the challenge. The challenges are all set up with the intent of being hacked, making it an excellent, legal way to get hands-on experience.

- Freddie Fu Sports Medicine Scholarship Program (seniors)
- Johns Hopkins Center for Talented Youth Summer courses Include:
  - Global Issues at Princeton (grades 10-12)
  - Civic Leadership Institute in Baltimore, Maryland (Grades 9-12)
- United States Naval Academy Summer STEM
- Engineering Exploration Program at Rensselaer in Troy, New York