

Reynoldsburg High School STEM Academy

What:

The first of five academically themed programs planned within Reynoldsburg High School, the STEM Academy emphasizes science, technology, engineering and math, with a special focus on environmental science.

Who:

The STEM Academy is open to students of all abilities. It will appeal to those who want to explore a future in the STEM fields, but the skills students learn here will propel them in virtually any area of study or work.

Why:

The mission of the STEM Academy is to create a challenging learning community where students experience science, technology, engineering and math through a variety of disciplines and are engaged in innovative thinking and problem solving, while examining the environmental and social issues of current and future generations.

Fast Facts:

- Opens Fall 2010 for 9th and 10th graders, with complete implementation (9th – 12th) by Fall 2012.
- 100 students at each grade level
- Student selection will be made through a lottery system
- Member of the Ohio STEM Learning Network
- Recipient of the STEM Schools Grant

Special Features

Student Advisory – Every student will be assigned to a staff member to help them set and meet academic goals leading to future choices.

Capstone Experience – Every student will be required to complete a culminating project in their senior year.

Potential Courses

(Required coursework in **BOLD**)

Science (4 credits minimum)

- **Science I (Physical)**
- **Science II (Life)**
- Chemistry
- Flora & Fauna
- Environmental Science
- Environmental Forensics
- Environmental Physiology
- Physics
- Agriculture Science
- Biotechnology
- Population Genetics

Math (4 credits minimum)

- **Geometric Algebra**
(Alg. I & II & Geo)
- **Pre-Calculus**
- **Calculus**
- Integrated Statistics
- Reasoning & Proof
- Statistics
- Trigonometry

English/Social Studies (4 credits ea.)

- **Anthropological Perspectives 1: 1500-1900**
- **Anthro. Perspectives 2: 1900-1980**
- **Anthro. Perspectives 3: 1980 – present**
- **Ethics and Rhetoric**

Art/Design (2credits)*

- **Engineering Design**

* Arts integrated in core courses will be worth 1 art credit.

Foreign Language

Physical Education/Health (.5 credit ea.)

Reynoldsburg's STEM Academy will be different from a typical high school in a variety of ways. Here are just a few:

Our business, university and community

partnerships: Partners have donated more than 500 hours sharing their expertise and experience.

Partners will continue to act as mentors and resources for both students and teachers.

Our "inquiry-based" instruction: Students will learn by finding answers rather than memorizing them. They will develop life-long skills for problem-solving and thinking critically.

Our internships: Students will be mentored by professionals in science, technology, engineering and math and gain real experiences in those fields.

Our integrated design: Like scientists, engineers and artists, students will rely on a design process (hypothesize, test, improve, report) in all subjects.

STEM ACADEMY PARTNERS

- Battelle Memorial Institute
- City of Reynoldsburg
- DELL, Inc.
- Dynalab
- Five Seasons Landscape Design and Maintenance
- Granville Studio of Visual Arts
- KnowledgeWorks Foundation
- MAD Scientists
- Mechanical Innovations, Inc.
- Ohio Dept. of Agriculture
- Ohio Dominican University
- Ohio EPA
- Otterbein University
- Reynoldsburg Area Chamber of Commerce

“It is today we must
create the world
of the future.”

Eleanor Roosevelt



Want to learn more about the STEM movement in Ohio education?

Check out: <http://www.osln.org>

For more information about the Reynoldsburg High School STEM Academy, contact:

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