

GI642 AP Institute: Science Vertical Teams
GI642 Syllabus

I. Catalog Description and Credit Hours of Course:

An institute designed to prepare middle school, junior high and high school science teachers to form vertical teams and develop and implement an aligned curriculum that will prepare their students to take Advanced Placement Courses in science. 3 credit hours.

II. Prerequisites:

Permission of Instructor

III. Purpose or Objectives:

- A. Familiarize the participants with the AP Vertical Team concept.
- B. Review the level of expectations for success in the current AP Courses.
- C. Evaluate the participants' available school and system resources.
- D. Develop an effective aligned science curriculum, that meets state standards (e.g. Show Me Standards and Missouri Curriculum Framework), based upon those expectations and resources, that will enhance the science education of all science students.

IV. Expectations of Participants

- A. Active participation in course discussion and activities.
- B. Participants will understand the concept of AP Vertical Teams and the relationship of those teams to their schools and systems.
- C. Participants will develop an aligned science curriculum for their school or system.

V. Course Content

- A. Development of the concept of the Science Vertical Team (3 hours).
- B. Analysis of present science AP Exams with emphasis on the skills and concepts required for success on those exams, and relation to state standards (10 hours).
- C. Discussion of strategies to implement Science Vertical Teams in the participants' schools (3 hours).

D. Development of curriculum and implementation plan for participants' schools (24 hours).

E. Presentations by students (5 hours).

VI. Course Materials

AP Teacher's Guides and Released Exams in Biology, Environmental Science, Chemistry and Physics.

VII. Basis for Student Evaluation

A. Active participation in class discussion and activities.

B. Presentation of curriculum and implementation plan including systems resource review.

1. Written action plan submitted to instructors.

2. Verbal presentation to class.