

Designing an Environmental Issue Investigation Course Syllabus



Dates of the Course:

This course is set to run: **TBD**

Course Description: In this course, you will develop the framework for an environmental investigation that could then be used with students. During the first phase of the course, you will work through a ‘mock’ environmental investigation, using components of the framework. This framework will guide you as you identify the key players in an environmental issue, using survey and questioning techniques to clarify the issue, field data collection to gather information, data analysis of field data using ‘appropriate’ technology and finally, reaching consensus regarding the environmental issue at hand. Then, you will be asked to apply the technology and adapt the framework to serve an area of environmental concern that is common to your specific area (ie: river/lake pollution, prevalence of introduced species, corporate pollution, population density, epidemiology, etc..)

Course Outcomes:

- Identify the values, beliefs and interests of others as they relate to an environmental issue.
- Analyze an environmental issue from the viewpoints of a variety of interested parties.
- Gather and interpret data important to the understanding of an environmental issue through survey and experimentation.
- Participate in role plays in the context of an environmental problem.
- Learn alternative dispute resolution methods as a way to solve problems.
- Identify ways to take action on environmental issues.
- Apply new learnings (framework of environmental investigation) to develop an investigation unique to your students.

NYS Standards Addressed:

MST 4: Science

Key Idea 7. Human decisions and activities have had a profound impact on the physical and living environment.

NYS Standards Addressed, Continued:

MST 6: Interconnected Themes

Key Idea 5: Identifying patterns of change is necessary for making predictions about future behavior and conditions.

Key Idea 6: In order to arrive at the best solution that meets criteria within constraints, it is often necessary to make trade-offs.

MST 7: Interdisciplinary Problem Solving

Key Idea 1: The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.

Key Idea 2: Solving interdisciplinary problems involves a variety of skills and strategies, including effective work habits; gathering and processing information; generating and analyzing ideas; realizing ideas; making connections among the common themes of mathematics, science, and technology; and presenting results.

Also, ELA Standard 1 & 3 will be addressed

Course Contact Information: I can be reached via email at:

karen_finter@westiron.monroe.edu. In the event of a technical emergency, call me from 8-4:30 at 585-336-3144.

Prerequisite Information: Participants should have a basic understanding of science lab skills (both physical science and life science) and a working knowledge of Microsoft Office Applications. In addition, participants should know how to email and access the internet.

Course Policies:

Code of Conduct:

1. You will conduct yourselves in a professional manner. Postings will address the assignment given. All postings will be monitored by the instructor. (And **I** have the last word!)
2. You will log in at least 3 times a week to monitor assignments, engage in discussion and to read feedback.
3. This course is meant to enrich your content and curriculum and to assist you and your students in meeting (and exceeding) the standards in an engaging, meaningful way! **You** determine what you will take from this experience!
4. Your work is your own. Plagiarism will not be tolerated and will result in no credit for that assignment.

Assignments & Grading:

1. In order to receive full credit for the course, you must complete all of the assignments and actively participate in discussions.
2. All assignments must be completed and submitted by 11:59:00pm on the due date to receive full credit. Late assignments will receive a

percentage of credit. Assignments posted later than one week past the due date will not receive credit.

3. Group assignments will receive two grades; One grade will be determined by a peer evaluation, the other grade will be determined by the quality and timeliness of the submission. These grades will be averaged to determine amount of credit received for that assignment.

Nuts and Bolts:

1. You must use Microsoft Office (Word, PowerPoint, etc..).
2. Feel free to ask questions! You may email questions directly or post questions in the appropriate thread pertaining to the assignment at hand.

Inservice Credit: Inservice credit will be recommended if all assignments are completed to a satisfactory level and if the participant meets all participation requirements.