



The Intersection of Life and Land

July 12-16, 2010

8:30am - 4:00pm

Mary Baldwin College
IN634 Course Syllabus



This course is designed as a model of the environment-based learning process. Students will participate in investigations of local environmental issues, focusing on the integrated relationship of environment to people and culture. Students will explore area history, related books/literature/articles, basic ecological/scientific principles (including math), and cultural connections to conduct a detailed investigation of an issue. Participants will explore issues of land use (i.e. land development, farming) to the impacts on the watershed and water quality (i.e. environment, culture, economy, etc.). The course will involve field trips for cultural and scientific investigations. The course will also include strategies to help K-12 students identify local problems and develop plans for problem solving/implementation.

Instructor:

Dr. Tamra Willis

Mary Baldwin College, Assistant Professor
Graduate Teacher Education/ Environment-based Learning

Tentative Course Schedule:

Monday July 12

- Topic: Environmental impacts on culture
- Field Experience: Archeological Site Study - Learning from the Past
- K-5 Investigations: From schoolyard to community
- 6-12 Investigations: Connections across the watershed

Tuesday July 13

- Topic: Cultural impacts on environment.
- Field Experience: Forests to Farms to Urban Development: A Watershed Study

Wednesday July 14

- Topic: Watershed-based Investigations- Exploring the Issues
- Field Experience: NOAA Buoy Projects Observation and River Trip including chemical testing and macro-testing, GPS and Probe Ware technology.

Thursday July 15

- Topic: Issue-driven Investigations and Student Problem Solving
- Student Projects: Shenandoah Valley Governor's School
- Discussion and reflection of experiences.

Friday July 16

- Implementation planning and idea sharing
- Research project development
- Closing details: Assignments and Using BB

Summer – Complete course assignments and participate in discussions via Blackboard.

Required Course Texts:

Lambros, A. (2002). *Problem-Based Learning in K-8 Classrooms: A Teacher's Guide to Implementation*. Thousand Oaks, CA: Corwin.

Or

Lambros, A. (2004). *Problem-Based Learning in Middle and High School Classrooms: A Teacher's Guide to Implementation*. Thousand Oaks, CA: Corwin.

(Choose one based on your situation/interests)

Sobel, D. (2005). *Place-based education: Connecting classrooms and communities*. Barrington, MA: Orion Society.

Suggested:

Bardwell, L.V., Monroe, M.C. & Tudor, M.T. (Eds.). (1994). *Environmental Problem Solving: Theory, Practice, and Possibilities in Environmental Education*. Troy, OH: NAAEE.

Nagel, N. G. ((1996). *Learning through real-world problem solving*. Thousand Oaks, CA: Corwin.

Tentative Assignments:

- **Class Participation:** Students are expected to attend class and participate in class discussions, including Blackboard Class Discussions. 15pts.
- **Reflective Journals:** Students will submit journals via Blackboard to discuss course readings and present reflections on issues/concepts/field trips. 20pts.
- **Research Project:** Work with partners to write a research report of the community or natural area issue/problem under study (50 pts. total). The project will include:
 1. Overview of a problem- including connections to standards, content integration and related readings. 15pts.
 2. Research report including environmental problems, history, social issues, science, etc. 20pts.
 3. PowerPoint presentation of study to share (on-line) with class (15pts).
- **Lesson Plan:** Develop a lesson plan based on a real-community issue/problem. The plan will include K-12 student involvement in exploring the issue and in developing strategies for problem-solving. 15pts.

Note: You will submit all assignments via blackboard. We may work on them during the week in class, but they will not be due until the end of summer session II.

Course Details:

1. Wear comfortable clothing and walking shoes. Bring a hat, rain coat and one pair of shoes that you do not mind getting dirty or wet. We will go outside and get into a stream. Bring sunscreen and bug repellent. Note: the inside classroom is air-conditioned (∴).
2. Please bring a reusable water bottle and coffee mug if possible. We are trying to “practice what we preach!”
3. Please bring a copy of grade-level standards for something you teach. Also, if applicable, bring your year-long calendar/pacing guide for your subject(s) of interest.
4. If possible, bring a digital camera to record ideas on these trips and binoculars.
5. Lunches and snacks will be provided most days during class.

Please review the MBC Honor Code- located in your student manual.

Grading Scale 95-100A 94A- 93B+ 88-92B 87B- 86C+ 81-85C 80C-