

SENIOR PRACTICUM

- A. ENV 480 - Senior Practicum
- B. Offered by Department of Environmental Science and Geography
- C. Prepared by: R. J. McCallum, Assoc. Prof. - Env. Science
- D. Credit Hours: 3 credits: 2 x 75 min. = 150 min.
- E. Intended Audience: Required course for all Environmental Science Majors
- F. Prerequisites: ENV 380 - Junior Seminar
- G. Course Description:

This course is the capstone course of the Environmental Science Program. The course involves the establishment of a semester long class project initiated in conjunction with a local community. The students in the class are expected to select a project with significant environmental consequences for a local community, for a study/research team, and do an in-depth study of the project selected. Past projects have included:

- 1) The drafting of a natural resource inventory for the Borough of Oakland in Bergen County
- 2) The formulation of alternative management strategies for a small lake in the Borough of Bloomingdale in Passaic County
- 3) An impact analysis of alternative development proposals on a small stream in West Milford in Passaic County
- 4) The study of solid waste disposal in West Milford
- 5) The development of a recycling program for the Borough of Pompton Lakes in Passaic County

Students will have individual roles within the overall project. Students and the instructor will seek, to the maximum extent possible, to simulate the working conditions of a professional team engaged in a practical project. Students will submit a final written report and give a formal oral presentation in the targeted community.

#### H. Course Objectives:

To enable the students to apply their learning in environmental science to a practical project through which their study and insights can have meaningful results; to allow the students an opportunity to form an interdisciplinary team, learning the benefits and difficulties of cooperative endeavor, approximating "real-life" work experiences in the field of Environmental Science.

The course provides the student with the opportunity to give an oral and graphic presentation in a formal, non-college environment and to prepare a formal report in preparation for a professional career in Environmental Science. Students will be expected to prepare text documents, graphs, charts, etc., using a personal computer and integrated software packages.

The course also provides a service for local communities and provides needed exposure within the participating communities for the Environmental Science Program and the College.

#### I. Course Content:

Course content will vary according to the study project selected (see part "G" above for examples of projects).

#### J. Teaching Methods:

- 1) Field trips for on-site inspection, analysis, and discussion of the study project selected
- 2) Individualized research to gather, assimilate, interpret, and communicate data
- 3) Presentations by effected officials and professionals of the appropriate expertise
- 4) Class discussion, critiques and progress reports
- 5) Computer lab - preparation of pertinent reports, graphs, charts, etc.
- 6) Presentation in written, graphic, and oral form of the final report. The oral and graphic presentations are usually at an open meeting of the effected community's Borough Council, Environmental Commission, Planning Board, or similar committee

## K. Evaluation:

- 20% - Overall contribution to team effort and class participation
- 20% - Preliminary oral, graphic and written reports
- 30% - Final oral and graphic report - in the past, evaluation has also been made by other WPUNJ faculty members of the Environmental Studies Program and in other courses of study, and by other citizens attending the presentation
- 30% - Final written report

## L. Textbook:

None

## M. Pertinent References:

Numerous maps, documents, studies and reports pertinent to study subject.