INSTRUCTOR:  Nicholas T. Basta  
Professor of Soil and Environmental Science  
410C Kottman Hall, 292-6282, basta.4@osu.edu

INSTRUCTOR ASSISTANT:  
Nall I. Moonilall, 454 Kottman Hall, moonilall.1@osu.edu

COURSE DESCRIPTION:  3 semester hr. An overview of contaminant sources, transport through soil and water, and of environmental fate and impact of contaminants to human and ecosystem receptors. Topics include assessment and remediation of soil and water contaminants.

PREREQUISITES:  Chem 1110 or Chem 1210 or graduate student standing

COURSE OBJECTIVES:  After completion of this course:
You should have an understanding of:
1. sources of major environmental pollutants,
2. the relationship between environmental processes and contaminant transport and exposure,
3. pollutant transport through human and ecosystem pathways
4. approaches used to prevent or remediate environmental contamination

TEXTBOOKS:  Recommended but not required

CLASS NOTES:  
Class notes will be posted as pdf files on-line

EXAMINATIONS AND GRADING  
exams, problem sets, attendance

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<th>% OF GRADE</th>
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<tr>
<td>2 exams @ 20 each</td>
<td>40</td>
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<tr>
<td>Final Examination</td>
<td>20</td>
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<td>topical briefs</td>
<td>20</td>
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<td>Attendance and participation</td>
<td>10</td>
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<td>Preclass quizzes</td>
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Grading A 90-100; B 80-89; C 70-79; D 60-69; F < 60. Plus/minus grading applied to overlap ranges.
DISABILITY STATEMENT

Students with disabilities who need accommodations should see Dr. Basta during office or contact him by telephone (614-292-6282) or e-mail (basta.4@osu.edu) to make arrangements. Special needs must be discussed and arrangements made well in advance (preferably before the first week of class) of when arrangements to accommodate specific needs are required. Special accommodations may be arranged through the OSU Office of Disability Service, 150 Pomerene Hall, 1760 Neil Ave., Telephone 614-292-3307, http://slds.osu.edu/

TOPICS COVERED:
extent and types of pollution; environmental impact and risk; contaminant transport; surface water quality; chemistry; nutrient pollution and waste management; organic chemical pollution; emerging pollutants (pharmaceutical and personal care products, PFOS, PFOA, etc.), trace element pollution including ewaste; radionuclide pollution, shale fracking pollution, soil /groundwater remediation, beneficial reuse of industrial, agricultural, and municipal byproducts.