COURSE OUTLINE

Website: http://web.njit.edu/~washd   Email: washd@adm.njit.edu

Main Text: BASIC ENVIRONMENTAL TECHNOLOGY – WATER SUPPLY, WASTE MANAGEMENT, AND POLLUTION CONTROL BY JERRY R. NATHANSON (Fifth Edition)

NOTE: ONE PAGE SUMMARY REQUIRED FOR ALL INDUSTRIAL SPEAKERS AND TRIPS

Field Trip: Nutley Park (Based on Availability)

Labs: Fluids Lab, Geoenvironmental Lab (Based on Availability)

Course Description: An introduction to construction-related environmental science topics, including basic environmental chemistry, geology, ground water hydrology, basic air quality, surface water run-off, erosion and sedimentation control, indoor air quality, and vibration analysis. Case studies cover various construction activities with respect to their effect on the environment and the manner in which they can be controlled.

FIELD TRIP AND GUEST LECTURERS: TO BE ANNOUNCED

Concepts and Skills Developed:
1. Producing and utilizing design of hydrologic systems
2. Applying hydraulics and fluids mechanics to construction systems

SESSION 1.(Tues 1/22) Introduction to Course and Overview of Environmental Technology

SESSION 2.(Thurs 1/24) Hydraulics

SESSION 3.(Tues 1/29) Hydraulics

SESSION 4.(Thurs 1/31) Hydrology

SESSION 5.(Tues 2/5) Hydrology

SESSION 6.(Thurs 2/7) Hydrology

SESSION 7.(Tues 2/12) Water Quality

SESSION 8.(Thurs 2/14) Test#1

SESSION 9.(Tues 2/19) Water Pollution

SESSION 10.(Thurs 2/21) Water Pollution
COURSE OUTLINE (CONTINUED)

SESSION 11. (Tues 2/26) Water Pollution
SESSION 12. (Thurs 2/28) Drinking Water Purification
SESSION 13. (Tues 3/4) Drinking Water Purification
SESSION 14. (Thurs 3/6) Test #2
SESSION 15. (Tues 3/11) Water Distribution Systems

SESSION 16. (Thurs 3/13) Sanitary Sewer Systems
Spring Break - No Classes Scheduled - March 17th - March 23rd, 2008
SESSION 17. (Tues 3/25) Sanitary Sewer Systems
SESSION 18. (Thurs 3/27) Sanitary Sewer Systems
(LAST DAY OF WITHDRAWAL 3-31-08)
SESSION 19. (Tues 4/1) Stormwater Management
SESSION 20. (Thurs 4/3) Stormwater Management
SESSION 21. (Tues. 4/8) Test#3
SESSION 22. (Thurs 4/10) Wastewater Treatment and Disposal
SESSION 23. (Tues 4/15) Wastewater Treatment and Disposal
SESSION 24. (Thurs. 4/17) Municipal Solid Waste
SESSION 25. (Tues. 4/22) Hazardous Waste Management
SESSION 26. (Thurs. 4/24) Miscellaneous Topics Not Covered
SESSION 27. (Tues. 4/29) Class Presentations
SESSION 28. (Thurs. 5/1) Presentations/Special Lecture/ Review
FINAL EXAM - TBA
Homeworks and Reports:

All homeworks are due ONE week after it has been assigned. No homework or lab will be accepted one week after its due date or after it has been reviewed in class. All homeworks will be graded on the basis of the students' attempt to understand the concept presented in the text or class. Reports must follow the outline or format as directed in class.

Class sample problems are attempted with the teacher in class and are checked off at the end of class. The final submission is due by the class following the next exam. No credit will be given after this date.

All submissions will be kept by the instructor for the purpose of ABET and for assessment purposes. It is the responsibility of each student to copy their work for their own study purposes.

Attendance:

The student is responsible for those materials covered in class and any materials assigned as readings as noted by instructor. A student who misses a class is still responsible for submitting materials in on time or give adequate notice of any late submittals to the professor before the due date.

Final Grades:

The final grade for the course will be determined by weighing the student's effort as follows:

- Homework /Sample Problems/labs: 20%
- Tests: 25%
- Field Trip/ Papers/ Projects: 25%
- Final Exam: 30%

Makeup examinations will not be given. Therefore, if any student has a valid reason for missing an exam, they should discuss with the instructor an alternate method of weighing the final grade.

Exams and Quizzes:

All exams are cumulative unless otherwise noted by the instructor.

All exams are closed book and closed notes. Two formula sheet sides per exam are permitted. For example, on the second exam you are permitted four sides. [\# of exams x 2 sides]

The final letter grade will be determined by the total number of points received during the course. Any variations to any of the above requirements are at the sole discretion of the instructor.

Office Hours/ Consultation:

Hours for advisement and consultation can be arranged with the Instructor at a mutually convenient time.

Please send emails and/or notify instructor before coming to office.