CE 754 Groundwater & Seepage

DEPARTMENT OF CIVIL & ENVIRONMENTAL ENGINEERING
WEST VIRGINIA UNIVERSITY, SPRING 2012

Instructor: John Quaranta, Ph.D., P.E.
Office: Engineering Sciences Building, Room 645
Phone: 304-293-9942
Office Hours: Wednesday 2 – 5 pm and other times by appointment.
Course Location: ESB Room 201; Tuesdays and Thursdays 5:00 pm to 6:15 pm

SYLABUS

SCOPE
The objective of CE 754 is to introduce the subject of groundwater movement and seepage in soils; and discuss its evaluation and control in engineering problems. In this course the student will be instructed on the following:

• Engineering aspects of soils with regards to seepage phenomena
• Discussions of groundwater conditions and soil / water interactions
• Types of seepage related problems and their control
• Theoretical and practical methods for seepage and groundwater analysis and control
• Selection criteria for groundwater and seepage computational models
• Computer methods for analysis

GRADING
Grading for the course is outlined below:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Homework</td>
<td>60</td>
</tr>
<tr>
<td>Mid-term exam</td>
<td>20</td>
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<tr>
<td>Final exam</td>
<td>20</td>
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<td>Total</td>
<td>100</td>
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HOMEWORK
Homework problems will be assigned on a regular basis and will be due when specified. The submission of all assigned homework is required for a credit in this course.

ATTENDANCE
Attendance is critical to performing well in the class.

TEXTBOOK
The textbook for this class is:

Seepage in Soils, Principles and Applications, by Lakshmi N. Reddi

REFERENCES
Supplementary reading in the form of journal articles and design manuals will be assigned.