# Course Information

<table>
<thead>
<tr>
<th>Course Title</th>
<th>CE 422</th>
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<tbody>
<tr>
<td>Meeting Time(s)</td>
<td>TBA</td>
</tr>
<tr>
<td>Meeting Location(s)</td>
<td>To be decided by scheduling</td>
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## Instructor Information

<table>
<thead>
<tr>
<th>Instructor Name</th>
<th>VIjay K Puri</th>
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<tbody>
<tr>
<td>e-mail</td>
<td><a href="mailto:puri@engr.siu.edu">puri@engr.siu.edu</a></td>
</tr>
<tr>
<td>Office Hours</td>
<td>6/ week, decided when course is offered</td>
</tr>
<tr>
<td>Office Location</td>
<td>B-28</td>
</tr>
<tr>
<td>Office Telephone</td>
<td>(618) 453-7818</td>
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## Course Goals and Topics

Brief Summary of Course Goals and Topics

To provide understanding about Geotechnical aspects of land disposal of solid waste and remediation, soil contamination due to leachate flow, design of clay liners, synthetic liners, slope stability and settlement considerations, use of Geo-synthetics.

## Textbooks and Materials

### Required Textbook(s)


### Required Materials and Equipment

### Recommended Textbook(s)

"Geo-Environmental Engineering", by Hari D. Sharma and K.R. Reddy, Wiley

### Recommended Materials and Equipment

03/2013
ASSIGNMENTS AND EVALUATIONS

Type and Number of Planned Assignments

<table>
<thead>
<tr>
<th>Home work assignments 8 to 10.</th>
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<tbody>
<tr>
<td>Term paper</td>
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Methods of Evaluation

- Exams: 2
- Home Work
- Term paper and presentation

COURSE SCHEDULE OVERVIEW

General Outline of Course Topics

- Introduction to Environmental Geotechnical Engineering
- Review of Relevant Soil Mechanics Concepts
- Soil-Waste-Interaction and Engineering
- Properties of Wastes Including Unit Weights, Hydraulics, Shear strength, Compressibility
- Contaminant Transport in saturated Porous Media
- Site Investigations
- Site Selection
- Ground modification
- Clay and Synthetic Liners
- Leachate Generation and collection
- Caps
- Gas Management