<table>
<thead>
<tr>
<th>Course Name</th>
<th>Code</th>
<th>Regular Semester</th>
<th>Credit</th>
<th>Lecture</th>
<th>Recitation</th>
<th>Laboratory (Hour/Week)</th>
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<tbody>
<tr>
<td>Drainage and Land Reclamation</td>
<td>ZMD 4504</td>
<td>Spring</td>
<td>2.0</td>
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**Language**  
Turkish

**Type**  
Compulsory

**Prerequisite Courses**  
ZMD 2901; ZMD 4503

**Coordinator**  
Prof. Dr. Ali Osman DEMIR

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**Course Description**  
Agricultural drainage concept and definition, some soil properties in terms of drainage and soil water, agricultural drainage principles, procedures in drainage surveys and investigations, hydraulic conductivity measurements, surface field drainage systems, design principles of open drainage canals, subsurface field drainage systems, materials for pipe drainage, testing of drain pipes, subsurface drainage installation machinery and methods, quality assurance and control of pipe drainage systems, diagnosis and reclamation of barren (saline, sodic, boron, and acidic) soils.

**Objectives**  
- To train students on importance of drainage in agriculture and to give them the definition of agricultural drainage,
- To train students in understanding of some soil properties in terms of drainage and the basic laws concerning with soil water movement,
- To give knowledge on drainage survey and investigation procedures, and of course on measuring methods of hydraulic conductivity,
- To explain surface drainage systems and to get practices done on designing of open drainage canals,
- To give knowledge on designing principles of subsurface drainage systems and to get practices done in this subject,
- To train students in diagnosis and reclamation of barren soils and to introduce some special applications.