

University of Jordan
Faculty of Agriculture
Dept. of Land, Water and Environment
Preservation of Soil Environment
Course No.: 0644421
Spring Semester: 2011

Course outlines: -

- 1- Soil properties and qualities important to evaluate:**
 - A- Soil degradation
 - B- Soil conservation and management
- 2- Soil degradation: Concepts, kinds, and processes, ideal soils.**
 - A- Erosion by water:**
 - 1- Causes: type, prediction, Universal Soil Loss Equation (USLE).
 - 2- Conservation measures.
 - B- Erosion by wind:**
 - 1- Factors causing wind erosion, prediction.
 - 2- Conservation measures.
 - C- Erosion and pollution, impact on environment**
 - D- Desertification: Concept, causes, processes, combat of desertification**
 - E- Management of arid land**
 - F- Resource management, integrated resources management, watershed management**
 - G- Management of:**
 - 1- Calcareous soils: Definition, properties, and management.
 - 2- Salt affected soils: Definition, properties, and management.
 - 3- Alkali soils: Definition, properties, and management.
- 3-Modern approaches in soil conservation and management: -**
 - a- Soil survey interpretation.
 - b- Soil Vs land: Soil Vs land
 - c- Land use: Soil classification, and land classification as a base for soil conservation.
 - d- Land classification: Concept, kinds, general and specific land classification.
 - e- Data interpretation as related to land use and management

Text books

- 1- Soil conservation, Stalling.**
- 2- Soil and Water Conservation for Production and Environmental Protection. Frederick. R. Troeh et al. 1980.**
- 3- A Provisional Methodology for Soil Degradation Assessment, FAO.1979.**
- 4- Provisional Methodology for Assessment and Mapping of Desertification. FAO**
- 5- Selected handouts**