

**Al-Al Bayt University**  
**Institute of Earth and Environment Sciences**

**Course Title :**Structural Geology

**Course Number :**801243

**Credit Hours :**2

**Pre requisite :**801109

**Placement :**

**Instructor:** adiabat ,

**Course Description :**

Structural geology deals with deformed rocks: how they become deformed, why they deform, and what their record of deformation says about the larger geologic picture.

Upon successfully completing the course, students should explain and apply the following knowledge:

- ? Concepts of stress, strain, deformation, and rheological behaviors
- ? Effects of time, strain rate, temperature, and pressure on deformation
- ? Significance of brittle, ductile deformations and elastic, plastic behavior and their products
- ? Origin and mechanisms of formation of fractures (faults, joints and veins), and folds
- ? Processes and fabric that occur in shear zones

**General objectives :**

Upon successfully completing the course, students should explain and apply the following knowledge:

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- ? Processes and fabric that occur in shear zones

**Course outline :**

**Chapter 1: Introduction**

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**Chapter 3: Stress**

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**Chapter 4: Strain**

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**Chapter 5: Rheology**

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**Chapter 7: Joints and veins**

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**Chapter 8: Faults**

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**Chapter 10: Folds**

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**Evaluation methodology :**

**References :**

\*Earth Structure: An Introduction to Structural Geology and Tectonics,2nd Edition , W.W.NORTON &COMPANY, NEW ,van der Pluijm and Marshak

**Course Schedule :**

**Topic**\_\_\_\_\_ **Hours**

No Information Available...