

## Course Description Form Principles of Geology

<b>1. Course Name:</b>					
Principles of Geology					
<b>2. Course Code:</b>					
PRIG116					
<b>3. Semester / Year:</b>					
3. Second semester / first stage					
<b>4. Description Preparation Date:</b>					
4/2/2025					
<b>5. Available Attendance Forms:</b>					
presence					
<b>6. Number of Credit Hours (Total) / Number of Units (Total)</b>					
5 hours (2 hours theoretical and 3 hours practical per week) for 15 weeks number of units 3.5 units					
<b>7. Course administrator's name (mention all, if more than one name)</b>					
Name: Dr.Osama Ghazi Ismaeel Email : osamaghaze@uodiyala.edu.iq					
<b>8. Course Objectives</b>					
Course Objectives			<ul style="list-style-type: none"> <li>1- Definition of geology ,its branches and history</li> <li>2- Geological phenomena</li> <li>3-Study of Minerals types</li> <li>4- Study of Rocks types</li> <li>5- relationship of Geology, agriculture and soil</li> <li>6- The Water cycle: Surface Water and Groundwater.</li> </ul>		
<b>9. Teaching and Learning Strategies</b>					
<b>Strategy</b>		In-person lectures for 15 weeks, including two monthly exams, daily exams, and scientific reports			
<b>10. Course Structure</b>					
<b>Theoretical part</b>					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Introduction to Geology and its branches	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports

۲	۲	Geological phenomena	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
۳	۲	Minerals	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
۴	۲	Classification of Minerals	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
۵	۲	Weathering	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
۶	۲	weathering	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
۷	۲	Rocks	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
۸	۲	Igneous Rocks	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
۹	۲	Sedimentary Rocks	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
۱۰	۲	Metamorphic Rocks	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
۱۱	۲	The Water cycle: Surface Water	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
۱۲	۲	Groundwater	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
۱۳	۲	Natural resources	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
۱۴	۲	The relationship of Geology agriculture and soil	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports

١٥	٢	deserts	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
<b>practical part</b>					
١	٣	The relationship of Geology soil	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
٢	٣	minerals: characteristics and classification	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
٣	٣	minerals: characteristics and classification	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
٤	٣	minerals: characteristics and classification	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
٥	٣	minerals: characteristics and classification	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
٦	٣	Rocks : characteristics and classification	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
٧	٣	Rocks : characteristics and classification	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
٨	٣	Rocks : characteristics and classification	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
٩	٣	Rocks : characteristics and classification	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
١٠	٣	Minerals and Natural Rocks in Iraq	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
١١	٣	Minerals and Natural Rocks in Iraq	Principles of Geology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports

١٢	٣	Minerals and Natural Rocks in Iraq	Principles of Geology	<b>Lecture Dialogue &amp; discussion Brainstorming</b>	<b>Daily, monthly and final exams and daily reports</b>
١٣	٣	Geological formation and Natural phenomena in Iraq	Principles of Geology	<b>Lecture Dialogue &amp; discussion Brainstorming</b>	<b>Daily, monthly and final exams and daily reports</b>
١٤	٣	Geological formation and Natural phenomena in Iraq	Principles of Geology	<b>Lecture Dialogue &amp; discussion Brainstorming</b>	<b>Daily, monthly and final exams and daily reports</b>
١٥	٣	Collecting Rocks Sample from Iraq	Principles of Geology	<b>Lecture Dialogue &amp; discussion Brainstorming</b>	<b>Daily, monthly and final exams and daily reports</b>

### 11. Course Evaluation

Examination Monthly & daily exams with discussion questions inside the lecture.

The degree of participation in the questions related to the subject.

### 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	Iraqi academic scientific journals
Electronic References, Websites	Soil Science Society of America Library Genesis