

AG-202: STRATIGRAPHY OF PAKISTAN

(03 Credit hrs)

Prerequisite: AG-101

Learning Outcomes

This course is designed to acquire the knowledge about the various stratigraphic successions formed during different geologic time. This will help the student to understand the stratigraphic set up of various regions, especially Pakistan.

Course Contents

Principles of stratigraphy; laws of superposition and faunal succession. Classification and nomenclature of stratigraphic units: lithostratigraphic unit, biostratigraphic unit and chronostratigraphic unit. Geological time scale. Stratigraphic Code of Pakistan. General Stratigraphic correlation.

Outline of regional geology of Pakistan. Study of Stratigraphic type sections of Khewra gorge, Nammal gorge, Chichali gorge, Murree Brewery gorge and Bara nala. Type sections of Rawalpindi Group and Siwaliks.

Lab.

Preparation of Stratigraphic columns and their correlation.

TEACHING – LEARNING STRATEGIES

- Lecture based examination
- Presentation/seminars
- Class discussion
- Quizzes

ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- classroom participation,
- attendance, assignments and presentation,
- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

ASSESSMENT AND EXAMINATIONS

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
2.	Formative Assessment	25%	It is continuous assessment. It includes: classroom participation, attendance, assignments and presentation, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

Books Recommended

1. Principles of stratigraphy by Weller, J.M., 1962, Harper Brothers.
2. Stratigraphy of Pakistan by Shah, S.I. 1977, Geological Survey of Pakistan.
3. Principles of Sedimentology and Stratigraphy by Boggs, S., 20001, Prentice Hall.
4. Stratigraphic Code of Pakistan, () Geological Survey of Pakistan.