

AG-102: PALEONTOLOGY

(03 Credit hrs)

Prerequisite: F.Sc or Equivalent

Learning Outcomes

This course is designed to acquire the knowledge about the various types of fossils and their significance. This will help the students to understand various morphological features of fossils; their classification, identification and distribution in geologic time.

Course Contents

Fossils and their significance; modes of fossilization. Study of morphology, range and broad classification of major invertebrate phyla viz. coelenterate, branchiopoda, mollusca, arthropoda (trilobite) and echinodermata (echinoidea). Introduction to micro fossils. Introduction to paleobotany. Evolution and classification of vertebrates.

Lab.

Megascopic identification and description of fossils related to phyla studied in GEOL 102 Paleontology.

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. Invertebrate Fossils by Moore, R.C., Lalicker, C.G. & Fischer, A.G., 1952, McGraw Hill
2. Principles of Paleontology by Raup, D.M. & Stanley, S.M., 1985, W.H. Freeman & Co.
3. Vertebrate Paleontology by Romer, A.S., 1966, University Chicago Press.