

CENTRAL UNIVERSITY OF PUNJAB, BATHINDA



M.Sc. Geology

Session - 2019-21

Department of Geography and Geology

Comprehensive Geosciences:

This course will be conducted as tutorial classes. In this course student will solve geological questions from all the courses studied during his/her M.Sc. program in time bound manner. Different case study will be discussed in the classes. Problems will cover all the aspects of geosciences. Past question papers of national level exams will be discussed in the classes.

Evaluation Criteria- Full mark 100

End semester exam (70%), Assignment based evaluation (15%), Surprise test (15%)

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Course Code: EGS 504

Course Title: Introduction to geological Mapping

Total hours: 15

Learning Outcome: Upon successful completion of this course, the student will be able to

- Understand the processes and practices of geological mapping.
- Understanding the processes of sampling techniques.

Unit I

3 Hours

Geological mapping procedures: Geological mapping of igneous terrains, geological mapping of sedimentary terrains.

Unit II

4 Hours

Geological mapping of metamorphic terrains and recording of structural information, preparation of Geological Cross-section.

Unit III

4 Hours

Techniques for sample collection: Sampling and oriented sampling, its significance; sampling for isotopic, geochronological and geochemical studies and its significance.

Unit IV

4 Hours

Sampling strategies for micropalaeontological and biostratigraphic studies and recording of palaeontological informations.

Transactional Modes: Lecture, Demonstration, Lecture cum demonstration, Field visit, Brain storming.

Suggested readings:

1. Geological field techniques by Angela L. C. 2010, Blackwell Publishing Ltd.
2. Basic Geological Mapping (Geological Field Guide) by Lisle, R. J., Brabham, P. and Barnes, J. W., 5th edition, 2011, Wiley-Blackwell.
3. Guide to Field Geology by Mathur, S.M., 2001, PHI Learning Private Limited- New Delhi.
4. Field geology (Illustrated) by Maley, T.S., 1994, Mineral Land Publications.
5. Field geology by Lahee, F. H., 6th edition, 1961, McGraw-Hill.

Course code: EGS 599**Course title: Project work**

L	T	P	Cr
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Each candidate required to submit a dissertation/ project report based on his/her research work carried out towards the fulfillment of his/her M.Sc. dissertation/ Project work.

It will have following components:

- a. Origin of the research problem and literature review
- b. Objective of the research work
- c. Methodology of the work, field observations (if any) and data recorded by the candidate,
- d. Details of laboratory investigation (if any) carried out by the candidate,
- e. Synthesis of results and interpretation
- f. Concluding remarks and future direction

Total Marks: As Satisfactory

The teacher who supervised the respective student will award the 60 % of the marks. A board of examiners will conduct viva-voce, and would consist of the supervisor, faculty member(s) of the department, and other faculty members appointed by the competent authority. The committee will award the rest 40% of the marks including those of presentation and viva-voce. A candidate who does not submit the project report or fails to get pass marks in it will appear again in viva-voce examination of the same class M.Sc. II year in a subsequent year as per university rule.