

**CENTRAL UNIVERSITY OF PUNJAB, BATHINDA**



**M.Sc. Geology**

**Session - 2019-21**

**Department of Geography and Geology**

3. Principles of Writing Research Papers by Lester, James, D. and Lester Jr. J. D., 2007, Longman, New York.
4. Silicate rock analysis by P. J. Potts, 1997.
5. Recent developments in geochemical microanalysis: Chemical Geology by Reed, S. J. B., 1990, Volume. 83, PP. 1-9.
6. Handbook of Instrumental Techniques for Analytical Chemistry by Frank A. Settle, 1997, Prentice Hall, Upper Saddle River, NJ.

**Course Code: EGS 503**

**Course Title: Introduction to field accessories in geosciences**

**Total Hours: 15**

L	T	P	Cr
1	-	-	1

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

- Understand the different field accessories in geosciences.
- Handle the equipments confidently at field.

**Unit I**

**3 Hours**

Field Geology: Introduction to toposheets, Scale definition; small scale and large-scale maps; reading various components of a toposheet.

**Unit II**

**4 Hours**

Geological map-definition, various components of a geological map including scale, legend, structures and, etc. Studies of outcrop pattern, topographic law and rules of 'V'.

**Unit III**

**4 Hours**

Instruments used in geological field studies; techniques and use of geological tools during field work-use of clinometer compass, Brunton compass, GPS, altimeter.

**Unit IV**

**4 Hours**

Attitude measurements; measurement of true thickness and distance, section measurement techniques and significance.

**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., 5<sup>th</sup> 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., 6<sup>th</sup> edition, 1961, McGraw-Hill.