

**Geog. 104**

**Map Reading and Map Work**

**Cr. Hours (2+1)**

**BS Geography 4 Years Programme, University of the Punjab, Lahore**

- **Maps**
- **Types of maps**
- **Map Design**
  - General Design problems

BS Geography w.e.f. Academic Session 2018-2022 and onward

- Principles of Cartographic design
- Design of map symbols
- **Basic Procedure and Designing of the following Maps**
  - Thematic
  - Topographic
  - Climatic
  - Economic
  - Population
  - Settlements
  - Urban Morphology
- **Principles of map making, reading, reproduction**
  - A study of the Ordnance Survey map of Pakistan and other countries under the following heads: Scale: Types and their use, Grid Reference and Indexation, Physical and Cultural feature (to be described and interpreted).
- **Exercises in Air Photo Interpretation**

**Recommended Books:**

1. Bygot, J. (revised by Money); 1960 An Introduction to Map Work & Practical Geography, , Tutorial Press London.
2. Debenham, F. Exercises in Cartography, Black Blackie & Sons London.
3. Garnet, A.; 1935 Geographical Interpretation of Topographical Maps, London.
4. Kraak, M.J. & Ormelling, F.J.; 1996 Cartography: Visualization of Spatial Data Longman, Harlow.
5. Keats, J.S.; 1973 Cartographic Design and Production Longman, London.
6. Lawrence, G.R.P.; 1971 Cartographic Methods, Methuen & Co., London.
7. Monkhouse F.J. & Wilkinson, H.R. Maps and Diagrams, Methuen London.
8. Riasz Erwin General Cartography, McGraw Hill New York.
9. Robinson, A. N. Elements of Cartography, John Wiley New York.
10. Steers, J.A. An Introduction to the Study of Map Projections, London, University of Press London.
11. Threlfall, H.; 1946 A Text-Book on Surveying and Leveling-Map Charles, Riffin London.
12. Usil, G.W. & Hearn G.; 1947 Practical Surveying, Technical Press London.