

SEMESTER-III

GEOG. 664:

QUANTITATIVE METHODS

3(2-1)

Course Objectives

To familiarize students with basic statistical concepts, tools and their applications.

Learning Outcomes

The students will be able to apply statistical tools in their research for data analysis through use of statistical models for drawing conclusions and findings.

Course Outline

1. Introduction

- Nature and scope of statistics
- Role in geographical research

2. Organization and Description of Data

- Types of data
- Sources of data
- Methods of data presentation (tabulation, Graphs, Display, and Mapping).

3. Summary Techniques

- Measures of Central Tendency
- Measures of Dispersion

4. Functional Relationships

- Correlation, Multiple Correlation and Coefficient measures,
- Simple Regression
- Multiple Regression
- Rank Correlation
- Curve fitting by least cast approach

5. Computer Software Packages

- Introduction and use of Statistical Package for Social Sciences (SPSS)
- Use of Excel

Recommended Books

1. Larry O'Brien (2005) "Introducing Quantitative Geography", Routledge
2. Clark (2001) "Statistics: Principles and Methods" John Willy & Sons.
3. Khan N. (1998) "Quantitative Methods in Geographical Research", Dorling, India
4. J.F. Healy (1996) "Statistics: A Tool for Social Research", Wad worth Publ. USA.
5. Peter J. Taylor (1987) "Quantitative Methods in Geography", Routledge
6. Clark (1986) "Statistical Methods for Geographers" Willy & Sons.
7. Thomas R (1981) "Statistical Methods for Planners" MIT Cambridge, UK.