

**Ambedkar University Delhi**

**Course Outline**

**Winter Semester (Jan-May 2018)**

**Course Code:** SES 201 313

**Title:** Introductory Statistics in Education (workshop)

**Type of Course:** Compulsory: yes      Cohort : All students enrolled in the programme

**Cohort for which it is compulsory:** MA Education & MA ECCE

**Cohort for which it is elective:** None

**No of Credits:** 1

**Semester and Year Offered:** 5<sup>th</sup> Semester (Monsoon Semester 2015)

**Course Coordinator and Team:** Vikas Baniwal

**Email of course coordinator:** vbaniwal@aud.ac.in

**Pre-requisites:** The course is compulsory for all students of the programme

**Aim:** The objective of the introductory workshop is to initiate students in basic education statistics and to enable them to become better readers of educational research. Along with developing the ability to conceptually understand and manually apply basic statistical techniques, an attempt will be made to equip students with basic skills of working with MS Excel or an advanced software package for data analysis in social sciences (subject to availability). In the event that computer facilities are not available as per the needs of the course, the course teachers will depend on manual transaction.

**Brief description of modules/ Main modules:**

- Collecting data/selecting a data set (from a given selection) pertaining to one question/issue
- Organization and tabulation of the data and graphical representation
- Measures of central tendency and variation (mean, median, mode, quartiles, scatterdiagrams, range, inter-quartile range, standard deviation)
- Introduction to Normal Probability Curve (concept, z-scores, t-test)
- Concept of skewness and Kurtosis
- Introduction to correlation

**Some Suggested Reference Resources: (To be decided by faculty transacting the course)**

Sources of data: DISE, Indian educational survey-NCERT, Selected educational statistics(MHRD), NSSO, ASER, PISA, NGOs/Education Initiative/IMRB/National Achievement Survey-NCERT.

Suggested textbook:

- Garrett, H. (2006). Statistics in psychology and education. Cosmos Publications.

Suggested for survey:

- EdCIL. (2011). Progress overview of research. Research, Evaluation and Studies Unit, Technical Support Group for SSA, pp. 1 – 23.
- Govinda, R. & Varghese, N.V. (1993): Quality of Primary Schooling in India: A Case Study of Madhya Pradesh, India. Paris: UNESCO International Institute for Educational Planning. (For survey)
- PROBE Team and Centre for Developmental Economics (1999). Introduction. Primary report on basic education in India. New Delhi: Oxford University Press. (and PROBE revisited)

| S.No | Assessment    | Date/period in which Assessment will take place | Weightage |
|------|---------------|---|-----------|
| 1    | Assignment-1  | End Feb   | 45%       |
| 2    | Assignment-2  | End April                                       | 45%       |
| 4    | Participation | End May   | 10%       |