

**DETAILED SYLLABUS of M. A. (EDUCATION)  
SECOND SEMESTER****MAEduE-212 STATISTICS FOR EDUCATIONAL RESEARCH****COURSE OBJECTIVES:**

The students will be able to:-

- understand the meaning and importance of educational statistics.
- calculate measures of central tendency
- understand about measurement of dispersion
- understand types of hypothesis and error in hypothesis testing
- identify various statistical methods for hypothesis testing

UNIT	COURSE CONTENT	Credit
<b>1</b>	<b>Fundamentals of Educational Statistics</b>	<b>1</b>
1.1	Educational Statistics- Meaning and importance	
1.2	Statistical Terminologies	
1.3	Frequency Distribution	
1.4	Cumulative Frequency	
<b>2</b>	<b>Measures of Central Tendency</b>	<b>1</b>
2.1	Measures of Central Tendency- Meaning and characteristics	
2.2	Mean : Meaning and Calculation for Row score and the frequency score (by any method)	
2.3	Median : Meaning and Calculation for Row score and the frequency score (by any method)	
2.4	Mode : Meaning and Calculation	
<b>3</b>	<b>Measures of Dispersion (by any Method)</b>	<b>1</b>
3.1	Measures of Dispersion :- Meaning	
3.2	Range :- Application and Calculation	
3.3	Standard Deviation : Definition and calculation	
3.4	Quartile :- Definition and calculation	
<b>4</b>	<b>Statistics for Hypothesis testing</b>	<b>1</b>
4.1	Null Hypothesis : Meaning and relation with alternative hypothesis	
4.2	Level of significance, Type 1 and Type 2 Error , One tailed and two Tailed test	
4.3	t test( Critical ration) :- Concept	
4.4	Chi Square test : Concept, Conditions for Chi Square test, Degree of freedom and use	

**References:**

1. [C R Kothari](#). Research Methodology: Methods and Techniques. New Age international publishers.
2. [Panneerselvam R](#) Research Methodology Paperback – Abridged, Audiobook, Box set
3. [Carter V. Good](#) :*How to do Research in Education* (Education Handbook Series)(Cosmo publications)



4. **John W. Best, James U. Kahn :*Research in Education - Tenth Edition*,  
*PhiLearning Private limited*, New Delhi - 110001**
5. **Muniruddin Qureshi:*Educational Research*, (Anmol Publication Pvt. Ltd.).**