

School of Education Central University of Himachal Pradesh (Established under Central Universities Act 2009) PO BOX: 21, DHARAMSHALA, DISTRICT KANGRA – 176215, HIMACHAL PRADESH www.cuhimachal.ac.in; Phone: 01892 237285-2237289, 229330; Fax: 01892 237286

Course Code: TTR - 470

Credits: 04

Course Name: STATISTICS IN EDUCATIONAL RESEARCH

Credits Equivalent: (One credit is equivalent to 10 hours of lectures / organized classroom activity / contact hours; 5 hours of laboratory work / practical / field work / Tutorial / teacher-led activity and 15 hours of other workload such as independent individual/ group work; obligatory/ optional work placement; literature survey/ library work; data collection/ field work; writing of papers/ projects/dissertation/thesis; seminars, etc.)

Course Objectives:

To enable the learners to;

- Understand the concept and nature of educational data.
- Understand and apply various statistical techniques to field-based educational data.
- Apply the procedural steps of conducting descriptive statistics
- Apply the procedural steps of conducting inferential statistics
- Understand the concept of Normal Probability Curve and its application
- Distinguish both parametric and non-parametric measures

Attendance Requirements:

Students are expected to attend all lectures in order to be able to fully benefit from the course. A minimum of 75% attendance is a must failing which a student may not be permitted to appear in examination.

Evaluation Criteria:

- 1. Mid Term Examination: 25%
- 2. End Term Examination: 50%
- 3. Continuous Internal Assessment: 25% i.e. This 25% will distribute as
 - Attendance/Participation: 20%
 - Seminar: 40%
 - Assignments: 40%

Course Content

Unit I- Basics of Descriptive Statistics (8 Hours)

Types of data (Continuous and Discrete Data), Frequency Distribution and its Graphic Representation (Histogram, Frequency Polygon, Line Graph, Ogive, Pie Chart). Measures of Central Tendencies and Variability (Range, Quartile Deviation, Mean deviation, Standard Deviation), Percentile and Percentile Ranks.

Unit II- Descriptive Statistics: Correlation and Regression (9 Hours)

Concept of Correlation, Product Moment, Partial and multiple correlation Uses and Significance of Correlation Coefficient.

Concept of Regression, Types of Regression., Scope of Regression in Educational Research, Regression and Prediction, Concept of regression between variables, Use of Regression Equation.

Unit III- Normal Probability Curve and its Applications & Standard Scores (7 Hours)

Meaning and Importance of Normal Distribution Curve (NPC), Properties of NPC, Applications of NPC, Skewness and Kurtosis. Standardized Scores (z-Scores, T-Scores, C-score and Stanine Score) and their calculations.

Unit IV- Basics of Inferential Statistics (9 Hours)

Scales of Measurement, Variables and its Types (Independent, Dependent and Intervening). Difference between Parametric and Non Parametric Statistics and rationale for using them in the analysis of data, Type-I and Type-II Errors. Concept of Degrees of Freedom, Levels of Significance and their Use in Interpretation of Results.

Unit V- Inferential Statistics: Parametric and Non-Parametric Tests (9 Hours)

Parametric Tests: Assumptions of t-test and Analysis of Variance (ANOVA), One-tailed and Two-tailed Tests of Significance, t-test and Significance of Difference between Means (for small and large samples, correlated and uncorrelated groups). ANOVA for equal and unequal groups. Non-Parametric Tests: Chi-Square Test (Assumptions and Uses).

Suggested Reading:

- Best, John W. (1995) Research in Education. New Delhi: Prentice Hall.
- Cohen, Louis; Manion, Lawrence and Morrison, Keith. Research Methods in Education (7th Ed.). London: Routledge.
- Garrette, Henry E.,(1966) Statistics in Psychology and Education. Bombay: Vakils, Feffer and Simons Ltd.
- Guilford, J P (1965) Fundamental Statistics in Psychology and Education ,New York: McGraw Hill Book Co.
- George, Darren and Mallery, Paul, SPSS for Windows: Step by Step. New Delhi:Pearson. Gupta, S. P. Statistical Methods.: New Delhi: Sultan Chand and Sons
- Koul, Lokesh, Methodology of Educational Research (4th Edition, 2013). New Delhi: Vikas Publishing House Pvt. Ltd.
- Siegal, Sidney. (1956). Non-Parametric Statistics for the Behavioural Sciences, New York:McGraw Hill.



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Course Code: TTR 419

Course Name: Advanced Educational Psychology

Credits Equivalent: 4 Credits (One credit is equivalent to 10 hours of lectures / organized classroom activity / contact hours; 5 hours of laboratory work / practical / field work / Tutorial / teacher-led activity and 15 hours of other workload such as independent individual/ group work; obligatory/ optional work placement; literature survey/ library work; data collection/ field work; writing of papers/ projects/dissertation/thesis; seminars, etc.)

Course Objectives: On completion of the course, the students will be able to:

- Understand the concept intelligence.
- Understand various theories and assessment of intelligence.
- Identify and utilize existing resources for promoting inclusive practice.
- Explain the interrelationship among adjustment and mental health.
- Understand the various learning styles.
- Suggest measures for fostering good mental health among students.
- Develop the advanced concepts of memory- remembering and forgetting.

Attendance Requirements:

Students are expected to attend all lectures in order to be able to fully benefit from the course. A minimum of 75% attendance is a must failing which a student may not be permitted to appear in examination.

Evaluation Criteria:

- 4. Mid Term Examination: 25%
- 5. End Term Examination: 50%
- 6. Continuous Internal Assessment: 25% i.e. 25 marks out of 100
 - Attendance/Participation: 5 marks
 - Seminar: 10 marks
 - Assignments: 15 marks

Unit I Intelligence (08 hrs)

- > Intelligence– Neuroscience of Intelligence Theories of Intelligence.
- Assessment of Intelligence- Individual Verbal, Individual Performance, Group Verbal and Group Non-verbal intelligence Tests
- Sardner's Multiple Intelligence Theory & Goleman's Emotional Intelligence Theory

- Development and Measurement of Emotional Intelligence
- Social Intelligence and Spiritual Intelligence

Unit II Understanding differences in individual learners to facilitate learning (08 hrs)

- Conceptual framework of understanding dimensions of differences in individual learners (with reference to individual attributes and socio cultural contexts).
- > Differences in learners based on predominant learning styles.
- Understanding differences based on cognitive abilities in children: such as giftedness, creativity, learning disability, low intellectual functioning (slow learner).
- Understanding and Management of Learners with Emotional and Behavioural Disorders: Attention deficit disorder with or without hyperactivity, Autism, Conduct disorder, Depression, Anxiety Disorders

Unit III- Memory- Remembering and Forgetting (8 hours)

- Memory- Mechanism of the process of memorization- Remembering and Memory-Models of Memory (Storage and Transfer Model)
- Types of Memory (Sensory, Short-term, Long Term, episodic and semantic, photographic and paranormal))- Training in Memory
- Forgetting- Ebbinghaus's Curve of Forgetting- Types of Forgetting- Theories of Forgetting (Trace Decay theory, Interference and Repression Theory)

Unit IV- Motivation and Creativity (08 hrs)

- Role of motivation in learning: Meaning of motivation, various approaches to motivation (humanistic approach; cognitive approach, attribution theory-Weiner); Strategies for motivating learner - Intrinsic and extrinsic motivation.
- Defining creativity
- Nature of Creativity-Stages in Creative Process- theories of creativity Identification of Creative Individuals

Unit V Adjustment and mental health (08 hours)

- > Concept and types of adjustment-Concept and characteristics of good mental health
- Defence mechanisms mechanism of denial, mechanisms of escape, mechanism of substitution-Maladjustment: neurotism and psychotism
- Principles of mental hygiene: preventive, constructive and curative measures for mental health of students, teachers and school personnel.

Essential Readings

- Santrock, John. W. (2006). Educational Psychology, Tata McGraw Hill Publishing Company Limited, New Delhi.
- Woolfolk, A. et.al. (2012). Fundamentals of Educational Psychology Pearson Education, New Delhi.
- Baron, R.A. (2001) Psychology, Pearson Education Inc., New Delhi.
- Dandapani, S.,(2010). A Textbook of Advanced Educational Psychology 4th edition. Anmol Publications Pvt. Ltd New Delhi.
- Position Paper National Focus Group on Education of Children with special Needs. NCERT

Suggested Readings

- 1. Gardner, H. (1983) frames of Mind: The theory of multiple intelligence. New York: Basic Book
- 2. Ainscow, M., Booth. T (2003): *The Index for Inclusion: Developing Learning and Participation in Schools*. Bristol: Center for Studies in Inclusive Education.
- 3. Mangal, S.K. (2006): Advanced Educational Psychology, New Delhi : Prentice-Hall of India.
- 4. Aleinkov, A.G. (1999). Human Creativity. Encyclopedia of Creativity, Vol.I London: Academic Press.
- 5. Guilford, J.P. (1967). Nature of Human Intelligence, New York: McGraw Hill.



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Course Code: TTR 432

Course Name: Theories of Knowledge and Education

Credits Equivalent: 04 Credits (One credit is equivalent to 10 hours of lectures / organized classroom activity / contact hours; 5 hours of laboratory work / practical / field work / Tutorial / teacher-led activity and 15 hours of other workload such as independent individual/ group work; obligatory/ optional work placement; literature survey/ library work; data collection/ field work; writing of papers/ projects/dissertation/thesis; seminars, etc.)

Course Objectives: on completion of the course, the student will be able to:

- To develop capability and capacity to reflect upon Education Theory and Praxis philosophically.
- To perceive the Inter relationship amongst Teaching, Learning, Knowledge and Pedagogy
- To understand how class room processes and contemporary concerns influence educational theorization
- To develop capability and capacity to reflect upon Education
- To Work for "Initiation" and Preparation for "Conversation" of the Learners into the Discourse and Discipline of Education.

Attendance Requirements:

Students are expected to attend all lectures in order to be able to fully benefit from the course. A minimum of 75% attendance is a must failing which a student may not be permitted to appear in examination.

Evaluation Criteria:

- 7. Mid Term Examination: 25%
- 8. End Term Examination: 50%
- 9. Continuous Internal Assessment: 25% i.e. 25 marks out of 100
 - Seminar: 10 marks
 - Assignments: 15 marks

Course Contents:

Unit 1 Education and Philosophy of:

- a. Problems, Scope and Logic
- b. Introduction to Philosophy of Education
- c. Thinking Philosophy

Unit 2 Epistemology:

- a. Knowledge JTB and its alternatives
- b. Knowing Method; Reason, Experience, Authority and Revelation
- c. Discipline and Epistemology

Unit 3 Sociological Functions of Knowledge:

- a. Knowledge, Truth and Education
- b. Introduction
- c. In equalities and Education

Unit 4 Knowledge, Textbooks and Critical Pedagogy:

- a. Reproduction Theory
- b. Nationalism and Communalism
- c. Transformative and Equity Pedagogy

Unit 5 Education for Goodness and Change:

- a. Moral Education
- b. The Educated Man
- c. Social Change and Social Mobility

Prescribed Texts

Barrow and Woods, (1988), An Introduction to Philosophy of Education, London, Routledge and Kegan Paul.

Carr, D. (Ed.)(1998), Education, Knowledge and Truth, London, Routledge and Kegan Paul. Carr. D. (Ed.)(1998), Education, Knowledge and Truth, Routledge, London.

Curren, Randall, (1998), Education Philosophy of, in E. Craig (Ed.) Routledge Encyclopaedia of Philosophy, Routledge, London.

Dewey, John, (1916), Democracy and Education, New York, MacMillan

Friere, Paulo, (1970), Pedagogy of the Oppressed, Penguin Books, England

Kumar and Shukla, (1985), Sociological Perspectives in Education; New Delhi, Chanakya Publications.

Kumar Krishna, (1992), what is Worth Teaching, New Delhi, Oriental Longman.

Suggested Readings

Blake and et al (Ed.)(2003), The Blackwell Guide to Philosophy of Education, Blackwell, Oxford. Hirst and Peters, (1970), The Logic of Education, London, Routledge and Kegan Paul.

Hirst and White (Ed.)(1998), Philosophy and Education: Major themes in the Analytic Tradition Vol. I Kumar and Shukla, (1985), Sociological Perspectives in Education, New Delhi, Chanakya

Publications.

Kumar Krishna, (1992), What is Worth Teaching, New Delhi, Oriental Longman.

Winch. C. (1998), The Philosophy of Human Learning, Routledge and Kegan Paul, London

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Course title: History of Education Course code: TTR 466 **Course credit:** 4

Credits Equivalent: 2 Credits (One credit is equivalent to 10 hours of lectures / organized classroom activity / contact hours; 5 hours of laboratory work / practical / field work / Tutorial / teacher-led activity and 15 hours of other workload such as independent individual/ group work; obligatory/ optional work placement; literature survey/ library work; data collection/ field work; writing of papers/ projects/dissertation/thesis; seminars, etc.)

Course Objective

The course will accomplish following objectives:

- To introduce the ideological debates on colonial education in India.
- To critically examine the development of colonial education in the early nineteenth century through colonial policy documents.
- To understand the impact of swadeshi movement on Indian education.
- To know the impact of First World War on colonial policy regarding science, technology and industrialization.
- To understand the new development in Indian education with the ongoing freedom struggle.

Attendance Requirements:

Students are expected to attend all lectures in order to be able to fully benefit from the course. A minimum of 75% attendance is a must failing which a student may not be permitted to appear in examination.

Evaluation Criteria:

- 10. Mid Term Examination: 25%
- 11. End Term Examination: 50%
- 12. Continuous Internal Assessment: 25% i.e. 25 marks out of 100
 - Attendance/Participation: 5 marks
 - Seminar: 10 marks
 - Assignments: 10 marks

Course Outline

Unit 1 Themes Concern and Approaches towards Modern Education in Nineteenth Century

Missionary enterprise in education Anglicist- Orientalist discourse Medium of instruction Liberal-utilitarian education Education and colonialism

Unit 2 Education and State

Bentinck, Macaulay and the introduction of English Education in India Dalhousie, Charles Wood and the Education Dispatch of 1854 The Hunter Commission

Unit 3 Education and Swadeshi Movement

Swadeshi movement and its impact on education. Curzon university reform. The discourse on national education.

Unit 4First World War and its aftermath

Indian industrial commission and its impact on science and technology Establishment of new universities: Banaras, Aligarh, Lucknow, Dacca and Osmania. Education under diarchy

Unit 5 Education and National Movement

Institutionalization of national schools, Vidyapithas, Azad Schools and JamiaMiliaIslamia Zakir Husain Committee's Report The period (1935-50) of big science, M.N. Saba, HomiBhabha and S.S. Bhatnagar

The period (1935-50) of big science- M.N. Saha, HomiBhabha and S.S. Bhatnagar contribution to Indian science.

Suggested Readings

- BasuAparna. 1974. The Growth of Education and Political Development in India 1898-1920, Delhi.
- Ghosh S.C. 2001, Birth of a New India, Delhi, Originals.
- Kumar Krishna. 1987. Political Agenda of Education, New Delhi.
- Mukerji S.N. 1974. History of Education in India Modern India, Gandhi Nagar, Acharya Book Depot.
- Mukherjee Haridas& Mukherjee Uma, A Phase of the Swadeshi Movement (National Education 1905-10), Calcutta.
- Nurullah&Naik 1962 A Students' History of Education in India (1800-1961), Bombay, Macmillan and Co. Ltd.
- Raina&Habib, 2004. Domesticating Modern Science A Social History of Science and Culture in Colonial India, New Delhi.