

CURRICULUM Ph. D.

Centre for Education

Session 2016-2017

Scheme

Course Code	Course Title	Credit Distribution			
		L	T	P	Total
EDU 701	Research Process in Education	3	2	0	4
EDU702	Computer Applications, Testing and Statistical Techniques	3	0	2	4
EDU703	Theory, Practices and Issues in Education	2	2	0	3
EDU704	Futuristic Education	2	2	0	3
EDU705	Thematic Paper	0	0	6	3
EDU706	Research Competencies	1	0	4	3
	Total	11	6	12	20

Course Title: Research Process in Education
Paper Code: EDU 701

L	T	P	Credits
3	2	0	4

Learning Outcomes

The students will be able to:

- Understand the application of quantitative, qualitative and mixed approaches of research.
- conduct a literature search and develop a research proposal
- select an appropriate sampling design for a research study
- understand the procedure for tool construction
- understand documentation and dissemination of research in education

Course Content

Unit I

16 Hours

1. Research approaches: logical positivism, phenomenology, ethnography, and triangulation, quantitative, qualitative; types of research and their application: according to purpose and method
2. Historical research: primary and secondary sources of information, external and internal criticism of the source
3. Descriptive research: assessment studies, evaluation studies, ex-post facto studies, replication and meta-analysis.
4. Experimental research: types of experimental research designs: designing and developing appropriate experimental designs for research problems.

Unit II**14 Hours**

1. Process to select a problem and review of related literature
2. Sampling design: selecting appropriate probability and non-probability sampling techniques for qualitative and quantitative research problems

Unit III**14 Hours**

1. Tools for quantitative research: types and criteria for selecting appropriate tools
2. Tools for qualitative research: types and criteria for selection of appropriate tools
3. Ethical issues in research.

Unit IV**16 Hours**

1. Qualitative Methods: selection, types and application
2. Quantitative Methods: selection, types and application
3. Mixed Method: meaning and characteristics, designs and their application

Suggested Readings

- Aggarwal, Y.P (2004). Statistical Methods: Concepts, Application and Computation, Sterling Publishers Pvt. Ltd.
- Andy Tolmie, Erica Mc Ateer, Daniel Muijs, (2012). Quantitative Methods in Educational and Social Research Using SPSS Open University Press
- Bogdon, Robertic, Biklon, SariKnopp (2008), Qualitative Research for Education :An Introduction to Theories and Practice, PHI learning
- Christensen, L. (2007). Experimental Methodology. Boston: Allyn & Bacon.
- Clive Opie (2004). Doing Educational Research- Guide for First time researchers. New Delhi: Vistar Publications.
- Creswell J.W. (2013). Qualitative inquiry & Research Design: Choosing among five approaches, Sage Publications
- Creswell, J. W. (2012). Educational Research: Planning, Conducting and Evaluating Quantitative and qualitative Research(4th Edition), Pearson, Boston
- Fraenkel, J.R., Wallen, N.E. (1996). How to Design and Evaluate Research in Education. New York: McGraw Hill.
- Jill Porter & Penny Lacey (2005). Researching Learning Difficulties- A Guide for Practitioners. Paul Chapman Publishing.
- Joy Egbert, Sherry Sanden (2013), Foundations of Education Research Understanding Theoretical Components, Routledge
- Kerlinger, F.N. (1986). Foundations of Behavioural Research. Fort Worth, TX: Harcourt Bmce Jovanovich.
- Kilkpatrick, D.L. (2005). Evaluating training Programmes: The four Levels. San Francisco: Brrett - Kochler.
- L.R.Gay (1999). Educational Research: Competencies for Analysis and applications (10th Edition), Pearson Education.

- Laursen, B., Little, T. D., & Card, N. A. (2012). *Developmental Research Methods*. New York: The Guilford Press.
- Michael Quinn Patton (2001). *Qualitative Research and Evaluation Methods*, Sage Publications
- Miller, S. A. (2007). *Developmental Research Methods*. New Delhi: Sage Publications.
- Patton. M.Q. (2002). *Qualitative Research and Evaluation Methods*. Thousand Oaks: C.A: Sage.
- Robert E. Slavin (2007). *Educational Research in an Age of Accountability*, Pearson Allyn and Bacon,
- Ronald C. Martella, J. Ron Nelson, Robert L. Morgan, Nancy E. Marchand-Martella (2013). *Understanding and Interpreting Educational Research*, Second Edition Routledge Guilford Press
- Sara EfratEfron, Ruth Ravid, (2013). *Action Research in Education A Practical Guide* Routledge
- Sarangapani Padma, M, (2003). *An ethnography of Learning in an Indian Village* Sage Publications
- Scott, David & Usher, Robin (1996). *Understanding Educational Research*. New York: Rout ledge.
- Seigel. S. & Castel Ian N.J (1988). *Non-parametric statistics for the Behavioural science*, McGraw- Hill Book Co
- Tricia Kress (2013). *Using Critical Research for Educational and Social Change*, Routledge
- Wiersma William (2009). *Research Methods in Education*, Pearson Education India,
- Will Curtis, Mark Murphy, Sam Shields (2013), *Research and Education*, Routledge
- Yaakov Petscher, Christopher Schact Schneider, Donald L. Compton (2013) *Applied Quantitative Analysis in Education and the Social Sciences*, Routledge
- Y.P. Aggarwal, (2010). *The Science of Educational Research Source Book*, Sterling Publication.

Course Title: Testing, Statistical Techniques and Computer Applications

Paper Code: EDU 702

L	T	P	Credits
3	2	0	4

Learning Outcomes

The students will be able to:

- apply characteristics of a set of data in tabular and graphical forms and its computation
- test hypotheses of a research problem
- use appropriate procedures to analyse quantitative and qualitative data
- develop competence in the use of statistical packages for analysis of data
- develop and standardize tools for qualitative or quantitative analysis

Course Content**Unit I****16 Hours**

1. Testing and evaluation: purpose of testing: assessment, measurement and evaluation: concept, types, difference & uses
2. Class room assessment techniques (CAT), innovation and application
3. Evaluation: qualitative and quantitative methods of classroom evaluation; continuous and comprehensive evaluation: summative and formative.
4. Preparation of check list for observation, constructing schedule for interview, evaluating a scale, constructing test items of very short, short answer, essay and multiple choice questions.
5. Data analysis in qualitative research: content analysis, inductive, phenomenological-analytical

Unit II**14 Hours**

1. construction of a test: understanding the construct and operationalization, preparing the item content, selection of item format, difficulty level, discriminating index, item analysis,
2. Reliability & validity: its determination and application.

Unit III**14 Hours**

1. Statistical Inferences- Theoretical understanding and applications of Parametric and Non Parametric tests
2. Approximation and Errors in research

Unit IV**16 Hours**

1. Internet as a source social sciences research- for literature review, data collection and analysis
2. Selecting appropriate statistical techniques for analysing different types of hypotheses
3. Quantitative data analysis using software packages - Excel, SPSS, and e Views.
4. Interpretation of results of statistical analysis

Suggested Readings

- Aggarwal, Y.P. (2014). *Statistical Methods: Concepts, Application and Computation*, Sterling Publishers Pvt. Ltd.
- Ferguson, G. (1981). *A Statistical Analysis in Psychology and Education*, New York: McGraw Hill.
- Garrett, H.E. (1973): *Statistics in Education and Psychology*, Bombay, Vakils Felter and Simons, Reprint version 2016.

- Glan, G.V., & Hopkins, K.D. (1996). *Statistical Methods in Education and Psychology, (3rd edition)*. Boston: Allyn & Bacon.
- Guilford, J.P., and B. Fruchter. (1987). *Fundamental Statistics in Education and Psychology*. Tokyo: McGraw Hill (Student-Sixth edition).
- Henry, G.T. (1995). *Graphing data: Techniques for display and analysis*. Thousand oaks, CA: Sage.
- Howell, D.C. (1997). *Statistical Methods for Psychology*. Belmont, CA: Duxbury Press.
- Huck, S.W. (2007). *Reading Statistics and research*. Boston: Allyn & Bacon.
- L.R. Gay (2002). *Educational Research: Competencies for Analysis and Applications (10th Edition)*, Pearson Education.
- Medhi, J. (2014). *Statistical Methods*, New Age International (P) Limited Publishers, New Delhi- 110002.
- Miles, M.B., & Huberman, A.M. (1994). *Qualitative Data Analysis: An expanded Sourcebook*. Thousand Oaks, CA: Sage.
- Siegal, S. (1998). *Non-parametric Statistics for Behavioural Science*, New York: McGraw Hill.

Course Title: Theory, Practices and Contemporary Issues in Education

L	T	P	Credits
2	2	0	3

Paper Code: EDU 703

Learning Outcomes

The students will be able to:

- understand the different paradigms of education
- analyse basic issues of philosophies of education
- reflect on the basic parameters of the processes of human development
- evaluate different issues of education from socio-cultural perspectives

Course Content

Unit I

14 Hours

1. Educational paradigms: empirical, interpretive and critical perspectives, critical appraisal of education as a discipline.
2. Epistemological, metaphysical and axiological issues in education

Unit II

14 Hours

1. Process of education and learning, pedagogy, andragogy
2. Learner's engagement in the process of knowledge construction, understanding the changing profile of the teachers/teacher educators, use of constructivism in teaching and learning.

Unit III

16 Hours

1. Perspectives of human development: Piaget, Vygotsky and constructivist perspectives.
2. Concept of holistic development, learning, thinking and problem solving in the context of school and outside school, language development and learning.

Unit IV

16 Hours

1. Analysis of curriculum: designing of curriculum in the context of changing socio-economic and cultural perspectives.
2. Equal opportunities in education, access and inequities in education, quality concerns in education, language and medium of instructions, assessment of learning and examination, peace and human rights education, policy of inclusion, education of the disadvantaged group, open and distance learning.

Suggested Readings

- Barris, K. (1979) *Education and Knowledge: The structured Misrepresentation of reality*; Routledge & Kegan Paul, London.
- Blaug, Mark (1972). *An introduction to Economics of Education*. Allen Lane, London. Penguin.
- Bodner, G.M. (1986). *Constructivism: A Theory of Knowledge*. Journal of Chemical Education. *Brain*. Prentice Hall of India.
- Bruner, J.C. (1997). *The Culture and Education*. London: Harvard University Press.
- Cole, M. (2012). *Education, equality and human rights*. New Delhi: Vikas Publishing House PVT. LTD.
- Dewey, J. (1963). *Democracy and Education*, Macmillan, New York. Reprint 2014
- Dikshit, H.P., Garg, S., Panda, S. and Vijayshri. (2007). *Access and equity: challenges for open and distance learning*. New Delhi: Kogan Page India Private Limited.
- Edqerton, Susan Huddleston (1997). *Translating the Curriculum: Multiculturalism into the Cultural Studies*. Routledge.
- Etta, R. Hollins (1996). *Transforming Curriculum for a Culturally Diverse Society*.
- Freire, P. (1970). *Cultural Action for freedom*, Penguin Education special, Ringwood, Victoria, Australia.
- Freire, P. (1973). *Pedagogy of the oppressed*, Penguin Education special, Ringwood,
- Gerald L. Gutek, (2009), *New Perspectives on Philosophy and Education* Pearson
- Howard A. Ozmon, Samuel M. Craver, (2011). *Philosophical Foundations of Education* Pearson
- Howard Ozmon, Samuel M. Craver, (2007), *Philosophical foundations of education* Pearson/Merrill Prentice Hall Lawrence Erlbaum Associates Publishers. Mahwah, New Jersey.
- Mohapatra, J.K., Mahapatra, M., & Parida, B.K. (2015). *Constructivism the new paradigm from theory to practice*. New Delhi: Atlantic Publishers & Distributors (P) LTD.
- Mujibul Hasan Siddiqui (2009), *Philosophical And Sociological Foundations Of Education*, APH Publishing
- Newman, P.H., & Newman, B.M. (2015). *Theories of human development*. New York: Psychology Press.

- Sahoo, P.K,D.Yadav and B.C. Das (eds) (2012),Quality in higher education: Issues and Processes, Uppal publishers
- Tilak, Jandhyala B.G. (2003). *Education, Society and Development*. New Delhi: APH publishing Corporation for NUEPA.
- Vashist, S.R. (2005). *Curriculum Construction*. New Delhi: Anmol Publications PVT. Ltd.
- Wiles, J.W. &Boondi, J.C. (2015). *Curriculum development: guide to practice*. USA: Pearson.
- Wiles, Jon (2004). *Curriculum Essentials- A Resource for Educators*. Allyn & Bacon.

Course Title: Futuristic Education

Paper Code: EDU 704

L	T	P	Credits
2	2	0	3

Learning Outcomes

The students will be able to

- Understand the concept and approaches of futuristic education in the context of change in the field of education.
- Predict the futuristic issues of education in the context of social-economic and political changes of the society.
- Critically examine the nature of social, scientific, technological and value based changes towards 21st Century and its impact on the goals of futuristic education.

Course Content

Unit I

Future studies: meaning, nature, scope and importance, various technological, social, cultural, political and economic perspectives of change and future education, future studies vis-à-vis futuristic education.

Unit II

1. Approaches of futuristic planning: intra educational extrapolation, demographic projection, school Mapping, human resource development, social demand approach, rate of return approach social justice approach and duration based approaches.
2. Learning; ubiquitous, social, blended, emotional, service, and situated: concept and process, concept and creation of self-organized learning environment (SOLE)

Unit III

1. Smart goals in education: concept, setting up goals at elementary & secondary Level.
2. Technology in classroom, educational apps, programmed based website & data bases for school and higher education.

3. Digital library, Virtual classroom and virtual laboratories: concept, process of use, challenges

Unit IV

1. Future of science and technology and its impact on the goals of future education
2. Future of values vis-à-vis science and education
3. Professional ethics: change in present scenario and factors influencing ethical decision making

Suggested Readings

- Ashton, D. And Taylor, B. (1969) *Technology Forecasting and Corporate Strategy*. Bradford University Press.
- Bell Danial, (1974) *The Post Industrial Society*, New Delhi: Arnold Heinemann Publishers.
- Capra, F. (1982) *The Turning Point*. London: Flamingo.
- Chandra, R (2010). *Education and Futurology*, Shree Publishers and Distributors.
- Clarke, A.C. (1973) *Profiles of the Future*. Harper & Row.
- Davey, G. (2014). *Applied psychology*. UK: British Publishing Society & Blackwell Publishing Ltd.
- David Price (2013). *Open: How we'll work, live and learn in Future*, Crux Publishing.
- Jain, V. (2011). *Search engines: utility and efficiency*. New Delhi: Shree Publishers & Distributors.
- Orozco, G. L., Lee, W. M., Blando, J. A., Shooshani, B. (2014). *Introduction to multicultural counseling for helping professionals*. NY: Routledge.
- Ruhela, S.P. (2000) *.Futurology of Education: The Indian Context*, Kanishka Publishers.
- Singh, B. K., Keshawani, K. K., & Thapa, N. (2016). *Librarianship in digital environment*. New Delhi: Uppal Publishing House.
- Singh, P., & Singh, G. (2014). *Living successfully: Human values, professional ethics & skills*. Ludhiana: Vikas Publishers.
- Subramanian, R. (2015). *Professional ethics*. New Delhi: Oxford University Press.
- Vozzola, E. C. (2014). *Moral development: theory and applications*. New York and London: Routledge.

Course Title: Thematic Paper

L	T	P	Credit
0	0	6	3

Paper Code: EDU 705

The students will select an area of their choice with the direction of their supervisor within first two weeks from the start of the semester. They will write a theme paper selecting few variables from that area. There will be two presentations on the theme selected.

First presentation will be held during 6-7 week of the semester. Two examiners from the Centre will evaluate it on the following criteria.

- Content
- Significance of the area
- Presentation
- Response to questions asked by examiners

Presentation will be of 30-45 min. duration. First evaluation will consist of 20 marks. Second presentation will be held during 12-13 weeks of the semester and will consist of 30 Marks. The criteria of evaluation and duration of presentation will be same as mentioned above.

Course Title: Research Competencies

Paper Code: EDU 706

L	T	P	Credit
1	0	4	3

The students in this paper will have to conduct activities on all the below mentioned aspects and it will be evaluated by two examiners from the Centre. The first two activities will be completed between 12-16 weeks and the other two will be completed between 20-24 weeks of the semester.

- Tool Construction
- Conducting Action Research
- Writing of Research Articles
- Writing of References

The Course will be assessed by giving 50 marks for Assignments (20 for tool construction, 20 for Action research and 10 for research articles and references/bibliography), 25 for practical exam and 25 for Viva Voce, which will be a total of 100 marks