

CENTRAL UNIVERSITY OF PUNJAB, BATHINDA



**Ph.D. Education
(International Mentorship)**

Session - 2019-20

Department of Education

Course Structure of the Programme

Course Code	Course Title	Course Type	Credit Distribution			
			L	T	P	Total
EDU706	Research Process in Education	Core Course	4	0	0	4
EDU707	Computer Applications and Digital Technology	Skill Based Practical	0	0	4	2
EDU708	Research Competencies	Skill Based Practical	0	0	4	2
EDU709	Thematic Paper	Skill Based Practical	0	0	2	1
EDU710	Extension Project	Skill Based Project	0	0	12	6
EDU711	International Mentoring	Value added course	0	0	0	1*
	Total		4	0	22	16

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***International mentoring will be of total 15 hours duration through online sessions with international mentors**

Programme Learning Outcome

The Programme will enable the research scholars to;

- Analyse the usage of different ICT tools and platforms for research purpose
- Reflect on the recent trends in educational research
- Apply the knowledge and skills of computer applications in research
- Review research studies on a relevant area of their research study
- Develop a thematic paper on a selected research area
- Conduct a project on any contemporary area of education
- Interact with International mentors on various area of research

Course Title: RESEARCH PROCESS IN EDUCATION
Course Code: EDU706

L	T	P	Credits
4	0	0	4

Learning Outcomes

After completion of the course the students will be able to

- Explore the different approaches to research
- Review the related literature

- Develop a research proposal
- Select an appropriate sampling design for a research study
- Construct tools for different types of research
- Document and disseminate research findings in education
- Explain the significance of intellectual property rights in the field of research

Course Content

Unit I

16 hours

1. Research approaches: Logical positivism, phenomenology, ethnography, and triangulation, quantitative, qualitative; types of research and their applications: 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

12 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

16 hours

1. Quantitative research methods and tools: Selection, types and application
2. Qualitative research methods and tools: Selection, types and application
3. Mixed Method: Meaning and characteristics, designs and their application

Unit IV

16 hours

1. Data analysis in quantitative & qualitative research: Content analysis, inductive, logical
2. Ethical issues in research
3. Intellectual Property, intellectual property protection (IPP) and intellectual property rights (IPR), WTO (World Trade Organization), WIPO (World Intellectual Property Organization), GATT (General Agreement on Tariff and Trade), TRIPs (Trade Related Intellectual Property Rights), TRIMS (Trade Related Investment Measures) and GATS (General Agreement on Trades in Services), Nuts and Bolts of Patenting, Technology Development/Transfer Commercialization Related Aspects, Ethics and Values in IP.

Suggested Readings

- Best J.W. (1999). *Research in Education*. New Delhi: Prentice Hall of India Pvt. Ltd.
- Bogdon, R., & Biklen, S. K. (2008). *Qualitative Research for Education: An Introduction to Theories and Practice*. New Delhi: PHI learning

- Borg, W.R., & Gall, M.D. (1983). *Educational Research – An Introduction*. New York: Longman, Inc.
- Chandra, S. S., & Sharma, R.K. (2010). *Research in education*. New Delhi: Atlantic Publishers and Distributers (P) LTD.
- Christensen, L. (2007). *Experimental Methodology*. Boston: Allyn& Bacon.
- Creswell, J. W. (2015). *Educational Research: Planning, Conducting and Evaluating Quantitative and qualitative Research*. Boston: Pearson Publications.
- Curtis, W., Murphy, M., & Shields, S. (2013). *Research and Education*. New York & London: Routledge
- EfratEfron, S., & Ravid, R. (2013). *Action Research in Education: A Practical Guide*, New York: Routledge
- Egbert, J., & Sanden, S. (2013). *Foundations of Education Research: Understanding Theoretical Components*. New York: Routledge.
- Fraenkel, J.R., & Wallen, N.E. (1996). *How to Design and Evaluate Research in Education*. New York: McGraw Hill.
- Gordon, P. (1996). *A Guide to Educational Research*. New York: Routledge
- Kaul, L. (1984). *Methodology of Educational Research*. New Delhi: Vikas Publications.
- Kilkpatrick, D.L. (2005). *Evaluating training Programmes: The four Levels*. San Francisco: Brett-Kochler.
- Kress, T. (2013). *Using Critical Research for Educational and Social Change*. New York & London: Routledge.
- Lauren, B., Little, T. D., & Card, N. A. (2012). *Developmental Research Methods*. New York: The Guilford Press.
- Martella, R. C., Nelson, J. R., Morgan, R. L., & Martella, N. E. (2013). *Understanding and Interpreting Educational Research*, New York: Routledge Guilford Press
- Maykut, P., & Morehouse, R. (1994). *Beginning Qualitative Research- A Philosophic and Practical Guide*. London: The Falmer Press.
- Miller, S. A. (2007). *Developmental Research Methods*. New Delhi: Sage Publications.
- Opie, C. (2004). *Doing Educational Research: A Guide for First time researchers*. New Delhi: Vistar Publications.
- Patton, M.Q. (2002). *Qualitative Research and Evaluation Methods*. C.A: Sage Publications.
- Petscher, Y., Schatschneider, C., & Compton, D. L. (2013). *Applied Quantitative Analysis in Education and the Social Sciences*. New York & London: Routledge
- Reason, P., & Bradbury, H. (Eds) (2006). *Handbook of action research: Concise paperback edition*. CA: Sage Publications.
- Scott, D., & Usher, R. (1996). *Understanding Educational Research*. New York: Routledge.
- Tolmie, A., McAteer, E., & Muijs, D. (2012). *Quantitative Methods in Educational and Social Research Using SPSS*. Maidenhead: Open University Press
- Wellington, J. (2015). *Educational Research*. New Delhi: Bloomsbury Academic.
- Weirisma, W., & Stephen G. (2009). *Research methods in Education*. New York: Pearson Education

Course Title: COMPUTER APPLICATIONS AND DIGITAL TECHNOLOGY**Course Code: EDU707**

L	T	P	Credits
0	0	4	2

Learning Outcomes

After completion of the course the students will be able to

- Explore the recent innovations and future perspectives of education technology
- Familiarize themselves with the working of MS-Word, MS-Excel and Power Point
- Develop basic skills in using the application software for creating documents, database, presentation and other media applications.
- Develop competence in the use of MS-Excel for analysis of data
- Use e- learning tools in teaching learning, training and research
- Share information and ideas through the Blogs and Chatting groups.
- Explore the research studies available on different on-line platforms.
- Develop competence in the use of statistical packages for analysis of data
- Apply appropriate techniques to analyse quantitative and qualitative data
- Analyse the social, ethical, and legal issues related to technology.

Course Content**UNIT I****16 hours**

1. MS- Word: Word Processing, Editing a Document, Previewing documents, Printing documents; MS-Excel: Worksheet basics, Working with single and multiple workbook; MS- PowerPoint: Creating presentation, Inserting objects using Clip Art's pictures and charts, Custom Animation, slide transition effects
2. Knowledge, Organization and sharing tools: social bookmarking, reading online, databases, journals, encyclopaedia, browser, sharing/storage (Google drive, drop box etc.), presentations (slide share, TED talks etc.)

UNIT II**14 hours**

1. Organizer tools: calendars, group manager, task manager, planner, mapping/mind mapping (google maps, navigators, mind master etc.)
2. Free websites and apps: Group me- discussion boards, voice thread groups to collaborate around any type of multimedia

UNIT III**16 hours**

1. Animoto create collage, Jing screen capture, Google Ed apps, Bigmarker web conferencing etc.
2. Security concerns related to interactive content: Computer Hacking, Cyber Bullying and Cybercrimes
3. Blogs, skype, curriki, teacher tube, Picasa, Merlot, Edmodo, Kiddom, Khan Academy, i - pad etc.

UNIT IV**14 hours**

1. Use of ICT tools: TED talks, Vimeo, Teacher tube, Google photos, You tube, EDED in education.
2. Social networking systems: Facebook, Instagram, academia, flicker and Role of Social networking sites in Education
3. Application of SPSS in Educational Statistics

Evaluation Criteria

Content	Marks
Skill Assessment	50
Viva Voce	20
Practical Record	30
Total	100

Suggested Readings

- Adam, D.M. (1985): *Computers and Teacher Training: A Practical guide*, The Haworth Pren, Inc., N. Y.
- Behera, S.C. (1991): *Educational Television Programmes*, Deep and Deep Publications, New Delhi.
- Coburn, P. et. al. (1985): *Practical Guide to Computers in Education*, Addison – Wesley Publishing Company, Inc.
- Das, R.C. (1993): *Educational Technology – A Basic Text*, Sterling Publishers Pvt. Ltd.
- Haas, K.B. and Packer, H.Q. (1990): *Preparation and Use of Audio Visual Aids*, 3rd Edition, Prentice Hall, Inc.
- Kumar, K.L. (2008): *Educational Technology*, New Age International Pvt. Ltd. Publishers, New Delhi (Second Revised Edition).
- Kumar, T. P. (2015). *Web based technology in education*. New Delhi: APH Publishing Corporation.
- Mukhopadhyay, M. (1990): *Educational Technology – Challenging Issues*, Sterling Publishers Pvt. Ltd., New Delhi.
- Mukhopadhyay, M. (1990): *Educational Technology – Year Book 1988*, All India Association for Educational Technology, New Delhi.

- Orey et.al.(2009). *Educational media and technology*. New York: Springer Science Business Media.
- Parmaji, S. (1994): *Distance Education*, New Delhi: Sterling Publishers.
- Purayil, A. (2015). *Educational technology*. New Delhi: APH Publishing Corporation.
- Rana, S. (1994): *Open Learning in India*, Commonwealth Publishers, New Delhi.
- Sankhala, D. P. (2014). *Educational technology*. New Delhi: Adhyayan Publishers and Distributors.

Suggested links

- <http://www.encyclopedia.com/doc/1G2-3401801216.html>
- <http://www.k2bindia.com/educational-benefits-of-social-networking-sites/>
- <http://www.k2bindia.com/educational-benefits-of-social-networking-sites/>
- <http://www.k2bindia.com/educational-benefits-of-social-networking-sites/>
- http://home.mcafee.com/advicecenter/?id=ad_ost_htpycavawa&ctst=1

Course Title: RESEARCH COMPETENCIES

Course Code: EDU708

Learning outcomes:

After completion of the course the students will be able to

- Identify research gaps on a selected research area
- Summarize the findings of different research studies
- Formulate research questions, objectives and hypothesis
- Select appropriate approach and design for different research topics
- Develop tools for research and standardise them
- Check plagiarism using software
- Write references and webliography using APA format
- Conduct action research

Evaluation Criteria

Content	Marks
Practical Record	30
Skill Assessment (Analysis of articles, abstract writing, preparing test items etc.)	50
Viva Voce	20
Total	100

L	T	P	Credit
0	0	4	2

Evaluation will be done by course coordinator and two members from the department, nominated by HOD

Suggested Readings

- Anastasi, A. & Urbina, S. (2014). *Psychological Testing*. New Delhi: PHI learning Pvt. Ltd.
- Gregory, R.J. (2014). *Psychological Testing: History, Principles and Applications*. New Delhi: Dorling Kindersley Pvt. Ltd.
- Kline, P. (2015). *A Handbook of Test Construction: Introduction to Psychometric Design*. NY: Routledge.
- Miller, Lovler., & McIntire. (2013). *Psychological Testing: A Practical Approach*. New Delhi: SAGE Publication India Pvt. Ltd.
- Bel, J. (2004). *Doing Your Research Project*. Open University Press: Berkshire

Course Title: THEMATIC PAPER

Course Code: EDU709

L	T	P	Credit
0	0	2	1

Learning outcomes:

After completion of the course the students will be able to

- Select a research area of their interest
- Identify variables relevant to the selected research area
- Summarize the findings of different research studies
- Write a thematic paper on any contemporary issue
- Present thematic paper
- Write references and webliography using APA format

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 department 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: EXTENSION PROJECT
Course Code: EDU710

L	T	P	Credit
0	0	12	6

The course aims at identifying local needs and issues involving research to solve problems for making a contribution to the local community.

Learning Outcomes

After completion of the course the students will be able to

- Establish a link between the community and profession
- Identify community needs, issues and aspirations
- Analyse and suggest solutions to problems of community
- Apply contribution of their professional learning to the society

Course Content

1. Identification of problem (within 4 weeks)
2. Submission of research proposal (5th -8th week)
3. Submission of research report (last week of semester)
4. Presentation of work
5. Submission of Paper for Publication

Evaluation Criteria

Content	Marks
Project proposal	20
Project work report	50
Submission of paper for publication	10
Viva Voce	20
Total	100

Course Title: International Mentoring

Course Code: EDU711

L	T	P	Credits
0	0	0	1

The course aims at providing international exposure on various areas, methods and recent trends in educational research

Learning Outcomes

After completion of the course the students will be able to

- Establish a link with international learning community for developing global vision
- Identify thrust areas of global research
- Analyse and suggest solutions to problems at global level

Course content

- 1) Virtual session with international experts
- 2) Virtual interaction with foreign students

Evaluation criteria

e-assessment (Report writing)- 50 marks