

## SYLLABUS AND SCHEME OF Ph.D. Course Work/ M.Phil. Program

### Session 2018

The Ph.D. Course work and the First Semester of M.Phil. Program shall be conducted together.

The courses of study for the same along with the credits are as under:

#### FIRST SEMESTER: Ph.D. and M. Phil.

S. No.	COURSES OF STUDY	Ph.D. (course work)	M. Phil
1.	Research Methodology	4 credits	4 credits
2.	Review of Published Research in the relevant field	3 credits	4 credits
3.	Computer Applications	3 credits	4 credits
4.	Advance course in the subject of research (any one)	3 credits	4 credits
5.	Synopsis Submission	--	4 credits
6.	Comprehensive Viva-Voce	3 credits	4 credits
	<b>TOTAL CREDITS</b>	<b>16 Credits</b>	<b>24 Credits</b>

#### SECOND SEMESTER: M. Phil.

S. No.	COURSES OF STUDY	CREDITS
1.	Seminar	4 credits
2.	Term Paper/ Assignment	4 credits
3.	Final Dissertation/ Project Presentation	12 credits
4.	Comprehensive Viva-Voce	4 credits
	<b>TOTAL CREDITS</b>	<b>24 Credits</b>

**PART: A****Objectives:**

- To familiarize students with the nature of Science and Scientific method.
- To familiarize students with different types of qualitative and quantitative research.
- To acquaint students with different stages of conducting various type of research.
- To develop among students skill of objective writing commensurate with qualitative and quantitative types of research.
- To develop among students competency for use of various sampling techniques according to their research objectives.
- To acquaint students with process of development of tools.
- To develop among students skill of research report writing.
- To train students with different techniques of data analysis in qualitative research.

**Contents:**

**Unit I:** Essential Characteristics of Science and Scientific Method, Definition of Research & Educational research, Qualitative & Quantitative Research: Meaning, Definition Characteristics and Need

**Unit II:** Descriptive Research: Meaning, Definition, Characteristics and Nature of Descriptive Research, Surveys, Casual-Comparative Studies, Developmental Study, Longitudinal & Cross Sectional Study, Correlation & Prediction Study and Trend Study.

**Unit III: (a) Sampling:** Population and Sample, Importance of Sampling, Sampling Unit, Sampling Frame, Sampling Error & Bias, Probability & Non Probability Sampling, Methods and Sample Size.

**Unit IV:** Experimental Research: Experimental Design: Definition, Characteristics, Methods of Control, Types of Experimental Design: Pre, True and Quasi experimental design, Factors affecting Internal and External Validity of Experimental design, Single Group, two group, multi group, factorial design.

**Unit V: (a) Qualitative Research Approaches:** Naturalistic Enquiry, Historical & Case Studies, Philosophical research, Analysis of Qualitative Data, Content analysis,  
**(b) Report Writing**

## **PART: B**

### **Contents**

**Unit I:** Scales of Measurements: Nominal, Ordinal, Interval & Ratio. Statistics permissible at each level of measurement. Parametric & Non-parametric tests: Underlying assumptions, considerations for deciding appropriateness of parametric tests.

**Unit II:** The concept of Hypothesis testing: Null hypothesis, Alternative hypothesis: Directional & Non-directional hypothesis, One & Two tailed tests, Significance of statistics in terms of critical value & probability, Errors in hypothesis testing: Type I and Type II errors, Family wise & test wise errors, Controlling for alpha inflation, Power of a test, Two sample difference tests of significance.

**Unit III:** K-Samples difference tests: One way ANOVA, Post Hoc tests of varying powers, Two way ANOVA with equal and unequal cell size, One & Two way ANCOVA of equal & unequal cell size.

**Unit IV:** Non Parametric Statistics: Mann-Whitney test, Wilcoxon test, Signed Ranks test, Chi Square test-One and two samples.

**Unit V:** Use of SPSS in Data Analysis: Data entry, testing underlying assumptions, running the tests, editing and exporting the output, writing interpretation.

### **References**

Aggrawal, Y. P. (1990). Statistical Methods: Concepts, Application and Computation. New Delhi: Sterling Publishing Private Limited

Ahuja, R. (2001). Research Methods. Jaipur: Rawat Publications

Ary, D., Jacobs, L.C. and Razanch A. (1972). Introduction to Research in Education. New York: Holt Rinehart.

Blackman, S. and Gldstein, K. M. (1979). Introduction to Data Management in the Behavioural and Social Sciences. New York: John Wileys

Blommers, P. and Lindquist, E. F. (1960). Elementary Statistical Methods in Psychology and Education. Boston: Houghton Mifflin Company

Borko, M. H. (Ed.). (1962). Computer Application in Behavioural Science. Eaglewood Cliffs, Prentice Hall

Buch, M.B. (Ed.) (1974). A Survey of Research in Education in India. Baroda: Centre of Advance Study in Education, M. S. University of Baroda.

Buch, M.B. (Ed.) (1979). Second Survey of Research in Education (1972-1978). Baroda: Society for Educational Research and Development.

Buch, M.B. (Ed.) (1986). Third Survey of Research in Education (1978-1983). New Delhi: NCERT.

Siegel, S. (1988). Non-Parametric Statistics for the Behavioral Science. New York: McGraw Hill Book Company

## **REVIEW OF PUBLISHED RESEARCH IN THE RELEVANT FIELD**

**Credits: 03 (Ph.D.)**

**04 (M. Phil.)**

### **Objectives:**

- To acquaint students with scope and functions of review of research.
- To familiarize students with various steps of conducting a review of literature.
- To acquaint students with use of various reference material.
- To develop among students skill of abstracting a research study.
- To develop among students competency to synthesize research findings.

### **Contents:**

**Unit I:** Review of Research: Concept, Purpose and Importance. The functions of review; a) Conceptual frame of reference, b) Status of research, c) Research Approach, Method, Instrumentation and Data Analysis, d) Probability of success and significance of findings, e) Stating the definitions, assumptions, limitations and hypotheses, f) Selection of Tools and Design.

**Unit II:** Use of Reference Materials: Using library; Card catalogue, library classification- Dewey decimal system of classification. Encyclopaedias, Handbooks of research on teaching, First, Second and Third handbooks of psychological and social instruments, Research of surveys in Education I-VI, Journals and Research Abstracts, Dictionaries of Education, Yearbooks, role of association of Indian Universities, NCERT, New Delhi & Devi Ahilya University in research survey.

**Unit III:** Conducting a review of the literature; Listing key words, Checking preliminary sources, Reading and noting selected references. Preparing references at the time of review of literature.

**Practical Work:**

- Conducting a review of research in the area of research interest under the guidance of supervisor.
- Preparing review of a Ph. D. thesis.
- Searching related literature online.

**COMPUTER APPLICATION**

**Credit: 03 (Ph. D.)**

**04 (M. Phil.)**

**Objectives**

- To enable researcher to understand the scope of ICT and its pedagogic applications.
- To help researcher to understand the meaning of ICT integration in research related tasks.
- To develop Techno-pedagogic skills among the researcher
- To help them acquire instructional applications of Internet and web resources.
- To develop competency among researcher to use Online and Offline electronic resources.
- To empower researcher in handling Word Processing, Spread sheet and Presentation applications.
- To help researcher to explore the environment of window Operating System.
- To make the researcher aware of latest happenings in the technology integrated Pedagogy

**Content:**

**UNIT I:**

[a] Hardware: Input and Output Devices used in Research Process, Memory ,characteristics of laptop, tablet , smart Mobiles etc.

[b] **Word Processing:** Operating through Different Menus and Ribbon: Mailings ,Creating References and Bibliography, Inserting End Notes and Footnotes, Tables of Content, Hyper linking within and outside document.

[c] **Presentations :** Exploring different Menus and ribbons, working with Templates, Creating and editing slides, Custom Animation, Slide Show, Recording Narration, Rehearsing/recording timing for presentations

**UNIT II:**

[a] Use of Note Pad, One Note Calculator, Dictionary and Paint Brush in research.

[b] **Data Computation:** Different Menus and ribbon, Charts and their Functions in the field of Education, Application of Function Library, Creating Auto-calculators for various Mathematical and Statistical Computations, Data Analysis using excel

### **UNIT III**

[a] World Wide Web – Access information, reliability of information. Use of Internet in Research Process. Accessing information through web, Exploring Web resources, communicating through Email: Preparation of Docs, Sheets and slide on internet.

[b] Creation of Forms, maps and drawing with the help of internet tools.

### **UNIT IV**

[i] **Internet Applications:** Online Conferencing, Webinar, Creation & Use of email, Blogs, Use of Online Dictionaries, Translator, Google transliteration, working with Plagiarism Software, Use of Cloud Computing, Social Networking Sites

[a] **Web Publishing:** Creating own website (local host), Uploading and downloading information on the web.

[b] **Handling Multimedia:** Creating, editing and broadcasting videos; Recording, editing and using Audios, Inserting Text in the videos, Creating with ICT – Media : charts(makesign.com), Images, Photo story, collage(research auto collage), Audio and video, Text(moviemaker) ,

### **UNIT V:**

[a] Modular Object Oriented Dynamic Learning (MOODLE), National Mission on Education through ICT (NMEICT),SWAYAM, Sakshat Portal, e-Pathshala, On line examination.

[b] Social, ethical, legal aspects of ICT & cyber safety Synchronous communication on web

### **SUGGESTED ACTIVITIES (Any Three)**

- MS-WORD related work Useful in Research Paper writing ,
- Use of different Options available in MS-EXCEL for Educational Research,
- Preparation of a POWER POINT presentation,
- Surfing of a topic on INTERNET

- Plagiarism reporting and interpretation.
- Preparation of Google site/doc/map/form

## REFERENCES

- Flynn, M. and Rutkosky, N. (2000). Advanced Microsoft Office 2000. Delhi: New Delhi Publications.
- Harvest, D. (1992). Excel 4 for Windows – Instant Reference. Singapore: Tech Publications PTE Ltd.
- Hillman, D. (1998). Multimedia Technology and Applications. New York: Delmar Publishers.
- Matthews, M. (1995). Windows 95 Power Tools. New York: Random House Electronic Publishing.
- Minasi, Mark, Christiansen, Eric & Shapar, Kristina (1998). Expert Guide to Windows 98. San Francisco: Sybex.
- Nagpal, D.P. (2001). Computer Course. New Delhi: Wheeler Publishing.
- Oberlin, S.K., Kervran, P. & Cox, J. (1993). A Quick Course in Windows3.1. Delhi: Jaico Publishing House.
- Rajaraman, V. (1997). Fundamentals of Computers. New Delhi: Prentice Hall of India Pvt. Ltd.
- Rathbone, A. (1993). Windows for Dummies. Delhi: Pustak Mahal.
- Ray, J. (1997). Special Edition Using Microsoft TCP/IP. New Delhi: Prentice Hall of India Pvt. Ltd.
- Sanders, D. H. (1988). Computers Today. New York: McGraw hill Book Co. Sansanwal, D.N. (2000). Information Technology in Higher Education. University News, Vol 38, No.46, pp1-6.
- Sansanwal D.N. & Suri, S. (1996). Computers in Psychological Testing. Journal of Educational and Psychology, Vol. 53, Nos. 1-2-3.
- Sinha, P.K. (1992). Computer Fundamentals: Concepts, Systems and Applications. New Delhi: BPB Publications. Under Dahl, Brain & Under Dahl, Keith: Internet with Webpage/Web Site Design. New Delhi: IDG Books India (P) Ltd., 2000.

## ADVANCE COURSE IN THE SUBJECT OF RESEARCH (ANY ONE)

### GUIDANCE AND COUNSELLING

#### OBJECTIVES

CREDITS: 03 (Ph.D.)

04 (M. Phil.)

- To acquaint students with the meaning and scope of Guidance.
- To make them aware about current trends and issues in guidance and counselling.
- To acquaint students with meaning, nature, theories and techniques of Counselling.
- To familiarize students with Counselling Process.
- To sensitize them towards Ethical and Legal considerations involved in Counselling.
- To enable them to learn and apply the various types of Counselling strategies.
- To enable them to learn and apply Guidance techniques for Special Children.
- To make them familiar with Researches and Follow up studies in Counselling.

#### Content:

**UNIT I:** Meaning, definition and scope of Guidance and Counselling, Theories of Counselling: Rational theory of Counselling, Learning theory, Psychoanalytic and Existential Approaches to Counselling.

**UNIT II:** Vocational Development and Educational Planning: Vocational Development , Vocational Maturity and Vocational adjustment, Dynamics of Vocational Development, Career Development Theories: Hollands Personality theory, Psychodynamic theory, Cognitive and Social Learning theories.

**UNIT III:** Theories of Career Counselling :Trait and Factor Career Counselling, Counselor centered Counselling, Psychodynamic Career Counselling, Developmental Career Counselling and Behaviour Career Counselling.

**UNIT IV:** Counselling Process: Building a Counselling relationship, Working in Counselling Relationship and Termination of Counselling.

#### UNIT V:

- (a) Currents trends and issues in Counselling Evaluation,
- (b) Researches and follow-up in Counselling,
- (c) Ethical and Legal aspects of Counselling.



## **SUGGESTED ACTIVITIES (ANY TWO)**

- Conselling of a child and report writing (Drug abused/Physically handicapped/Gifted)
- Assessment of Intelligence /Aptitude/Personality/Attitude/Creativity/ Interest and Report writing
- Preparing Autobiography / case Study/Anecdotal Record.
- Survey of problems & needs of Emotionally Challenged/ Disturbed Youth.
- Identifying growth needs and designing developmental tasks.

## **REFERENCES**

Adelman, H.S., & Taylor, L: An Introduction to Learning Disabilities. Glenview, IL: Scott, Foreman, 1986.

Baker, H.J.: Introduction to Exceptional Children, New York, Mac Millan, 1944.

Batman, B.. Learning Disabilities: Yesterday, Today and Tomorrow. Exceptional Children,1964.

Bhatnagar, A. and Gupta, N. (Ed.): Guidance and Counselling Vol. I: A Theoretical Perspective. New Delhi: Vikash Publishing House Pvt. Ltd., 1999.

Bhatnagar, A. and Gupta, N. (Ed.): Guidance and Counselling Vol. II: A Practical Approach. New Delhi: Vikash Publishing House Pvt. Ltd., 1999.

Crow, L. D. and Crow, A.: An Introduction to Guidance. New Delhi: Eurasia Publishing House Pvt. Ltd., 1962.

Freeman, F. S.: Theory and Practice of Psychological Testing (3rd Ed.). New Delhi: Oxford and IBH Publishing Co., 1965.

Gibson, R. L. and Mitchell, M. H.: Introduction to Counselling and Guidance. London: Prentice-Hall International Limited, 1995.

Goldman, L.: Using Test in Counselling(Second Edition). New York: Meredith Corporation, 1971.

Gothward, W. P.: Vocational Guidance Theory and Practice. London: Croomtelm, 1987.

Gowan, J.C. and Demos, G.D. (1964) The Education and Guidance of the Ablest-Springfield, III: Charles C. Thomes.

Kocher, S. K.: Educational and Vocational Guidance in Secodary School. New Delhi: Sterling Publisher Pvt. Ltd., 1992.

Kowitz, G. T. and Kowitz, N. G.: Operating Guidance Services for the Modern School. New York: Holt Rinehart and Winston INC., 1968.

- Miller, C. H.: Guidance Services: An Introduction. New York: Harper and Row, 1965.
- Mishra R.C, Guidance and Counseling Vol. I-II, APH Publishing Corporation, New Delhi,2011
- Pal, H. R.: Advanced Educational Psychology. New Delhi: Directorate of Hindi Implementation, Delhi University, 2006.
- Pal, H. R. and Pal, A.: Education of The Learning Disabled. Delhi: Shipra Publications, 2008.
- Pal, H. R. and Pal, A.: Exceptional Children. Bhopal: M.P. Hindi Granth Acedemy, 2010.
- Pal, H. R. and Sharma, M.: Education of The Gifted. Delhi: Shipra Publications, 2007.
- Pal, H. R. and Sharma, M.: Measurement/Assessment and Evaluation. Delhi: Shipra Publications, 2009.
- Pasricha, P: Guidance and Counselling in Indian Education. New Delhi: NCERT, 1976.
- Siddiqui M.H: Guidance and Counseling, APH Publishing Corporation, New Delhi,2009.
- Singh, R. (Ed.): Educational and Vocational Guidance. New Delhi: Commonwealth Publishers, 1994.
- Suri, S.P. and Sodhi, T.S.: Guidance and Counselling. Patiyala: Bawa Publications, 1997.
- Qureshi, H.:Educational Counseling, Anmol Publications Pvt. Ltd, New Delhi,2004.
- Yadav, S: Guidance and Counseling, Anmol Publications Pvt. Ltd. New Delhi 2005

## **ADVANCED EDUCATIONAL TECHNOLOGY**

### **OBJECTIVES**

**CREDITS: 03 (Ph.D.)**

**04 (M. Phil.)**

- To familiarize the students with concept, scope and approaches of Educational Technology.
- To acquaint the students with different aspects of teaching learning.
- To train the students in different styles of developing instructional material.
- To improve the students' understanding, ability and technical proficiency in variety of areas relevant to Educational Technology.
- To acquaint the students with the ICT Trends in Education.
- To familiarize the students with the concept of assistive technology and research trends in educational technology.

## **CONTENT**

**Unit I:** Concept and Scope of Educational Technology, Technology in Education, Technology for Education, Technology of Education. Approaches of Educational Technology- Hard Ware, Soft Ware and System Approach. Cybernetics: Meaning and Scope. National Policy and Education Technology.

**Unit II:** Teaching Technology: Planning, Organization, Leading and Evaluation of Teaching: Identification of Objectives, Task analysis, Designing of subject matter, Motivational theories of Teaching, Evaluation of Teaching Behaviors.

**Unit III** Instructional Technology: Mechanics of developing different types of Individualized Instruction material- Linear, Branching PLM, Mathetics and Modules. Computer Aided Instruction, Computer Based Management, e-Content, WBI, Office Automation.

**Unit IV:** ICT in Education: Use of Web Based Instruction: Web Links, Wikieducator m-Learning, gamification, flipped classroom, cloud based learning. blended learning, MOOCS, Virtual Classrooms, Computer based Assessment System, Computer Mediated Communication.

**Unit V:** a) Adaptive and assistive Technologies for CWSN (Children With Special Needs)  
b) Research Trends in Educational Technology.

## **SUGGESTED ACTIVITIES (ANY TWO)**

- Developing an instructional Material on a selected topic.
- Creating and using an Educational Blog.
- Development of e-content in an area.
- Construction of profile on wiki-educator

## **REFERENCES**

- Agrawal, R: Educational Technology Management & Evaluation. Delhi: Shipra Publications, 2009
- Anand, S :Educational Development and Technology. New Delhi: Anmol Publications Pvt. Ltd, 2007
- Dahiya, S. S: Educational Technology-Towards Better Teacher Performance. Delhi: Shipra Publications, 2008
- Dangwal, K.L: Educational Technology ( Technology supported Teaching & Learning). New Delhi: APH Publishing Corporation, 2011
- Lucido, P.L. & Borabo, R.G : Educational Technology. Quezon City: Katha Publishing Co,1997
- Mangal,S.K : Essentials of Educational Technology.New Delhi: PHI Learning Pvt. Ltd, 2009.
- Mohanty, J: Modern Trends in Educational Technology. ND: Neelkamal Publications Pvt. Ltd, 2007
- Pathak, G. P: Education and Communication Technology. ND: Reference Press, 2005.
- Rao, V. K:Educational Technology. ND: APH Publishing Corporation, 2011.
- Rather, A. R.: Dynamics of Educational Technology. New Delhi: Anmol Publications Pvt. Ltd, 2006
- Siddiqui, M. H:Challenges of Educational Technology. ND: APH Publishing Corporation, 2009
- Yadav, N. (2008). A Handbook of Educational Technology. New Delhi: Anmol Publications Pvt. Ltd, 2008

## **WEB REFERENCES:**

- 7 Good Examples of Gamification in Education. (2013, May 11). Retrieved from EdTechReview:  
<http://edtechreview.in/index.php/news/news/products-apps-tools/324-examples-gamification-in-education>
- Behrmann, M. (1998, January Fifth). Assistive Technology for Young Children in Special Education: It Makes a Difference. Retrieved from Edutopia: <http://www.edutopia.org/assistive-technology-young-childrenspecial-education>
- Flipped Classroom. (2013). Retrieved from Knewton: <http://www.knewton.com/flipped-classroom/>

Hussain, M. (2011, February Second). The Pedagogue: APPROACHES OF EDUCATIONAL TECHNOLOGY . Retrieved from blogspot.com: <http://mjhthepedagogue.blogspot.in/2011/02/approaches-of-educationaltechnology.html>

html

Information and communication technologies in education. (n.d.). Retrieved from wikipedia: [http://en.wikipedia.org/wiki/Information\\_and\\_communication\\_technologies\\_in\\_education](http://en.wikipedia.org/wiki/Information_and_communication_technologies_in_education)

Lee, L. (2005, September). Using Web-based Instruction to Promote Active Learning: Learners' Perspectives . Retrieved from CALICO Journal: <https://calico.org/memberBrowse.php?action=article&id=135>

Pangaro, P. (2006, August Third). Getting Started- Guide to Cybernetics. Retrieved from Pangaro: <http://www.pangaro.com/published/cybermacmillan.html>

Principles of Programmed Learning. (n.d.). Retrieved from Kumamoto University: Graduate School of Instructional systems: [http://www.gsis.kumamoto-u.ac.jp/en/opencourses/pf/3Block/07/07-2\\_text.html](http://www.gsis.kumamoto-u.ac.jp/en/opencourses/pf/3Block/07/07-2_text.html)

Virtual Classrooms. (n.d.). Retrieved from Teaching With Technology: <http://tw.wikispaces.com/Virtual+Classrooms>

## **SYNOPSIS SUBMISSION**

**Credits: 04**

Each M. Phil. candidate is required to develop Research Proposal (Synopsis) under the supervision of his/her Guide, to be allotted by the Department

## **EVALUATION OF COURSES OF STUDY**

Evaluation of the Courses will be as per University Guidelines/ Ordinance 31 of Devi Ahilya University.