Curriculum of

M.Phil in Education

2024

Institute of Education

University of Sargodha

Vision

Generate and impart knowledge through innovative learning, research and training in line with national and international norms in order to support the knowledge-based economy

Mission

Development of human beings and society as a whole through the cultivation and enrichment of the human mind and spirit through purposeful education and training, and excel in research relevant to regional, national and global needs through innovation

1. Nomenclature of the Program:

Master of Philosophy in Education

2. Department Brief

The Institute of Education prepares future teachers and leaders to excel in education. Our programs encourage active learning, critical thinking, and creativity, while our research focus solves real-world educational challenges. Guided by experienced faculty, students become academically sound, pedagogically skilled, and responsive to societal needs.

3. Program Learning Objectives

The objectives are to:

- Prepare educational leaders for public and private educational institutions
- Provide the scholars with knowledge about educational plans, policies and their implementation
- Provide skills in methodology of conducting various types of research and their importance in education
- Enable the scholars to use various techniques of educational measurement and evaluation
- Enable the scholars to be familiar with the modern trends in educational process
- To develop critical and reflective thinking skills for improvement of educational practices
- To boost the potentials for the implementation of reflective teaching practices in higher education
- To develop research and assessment skills to promote research culture in the field of education

4. Learning Outcomes

Upon completion of this program, scholars will be able to:

a. Conduct various types of educational research, understanding their importance and relevance in improving educational practices.
b. Critically analyze and implement educational policies and plans within diverse educational settings.
c. Apply a range of research methodologies in educational research, contributing to the advancement of knowledge in the field.
d. Apply educational measurement and evaluation techniques and methods to assess learning outcomes and improve educational standards.
e. Understand modern trends and innovative practices in the education.
f. Develop and demonstrate reflective practices and critical thinking to improve educational outcomes.
g. Understand and apply contemporary educational practices and theories to improve educational effectiveness.
h. Promote a research-oriented culture in the field of education by developing robust research competencies and assessment skills.
i. Demonstrate leadership skills and qualities in managing and leading educational institutions in both private and public sectors.

5. Program Structure:

Duration	Minimum 1.5-Years (3-Semesters), Maximum 4-Years (8-Semesters)
Entry Requirements:	Eligibility: MA/M.Ed., BEd (Hons), B.Ed. Hons (after 14 years of education), BS Education, BS in Special Education, B.Ed. 1.5 Years (16 Years of Education) in the relevant field or equivalent degree from HEC recognized institution with at least Second Division or CGPA 2.00 out of 4.00 + Departmental test (at least 50% marks)
Intra-disciplinary fields allowed for admission	As per "UNESCO International Standard Classification of Education (ISCED-F-2013)" documents 1. Curriculum Studies 2. Didactics 3. Educational Assessment, Testing and Measurement 4. Educational Evaluation and Research 5. Pedagogical Sciences **NB:** The Intra-disciplinary courses are per UNESCO format
Degree Completion Requirements:	Credit Hours of Course Work: 24 Credit Hours of Thesis/Courses In Lieu of thesis: 06 Total Credit Hours of Program: 30
Program Mode (select one)	I. Thesis Track II. Coursework Track
Specialization (if any)	Area-A: Educational Assessment and Evaluation Area-B: Educational Planning and Management Area-C: Educational Psychology

6. Deficiency Courses of Level-6:

Sr. No.	Course Code	Course Title	Credit Hours	Prerequisite
1.		No deficiency courses are needed		
2.				

7. Mandatory/Compulsory/Core Curses: (Minimum 12 credit hours)

Sr. No.	Course Code	Course Title	Credit Hours	Prerequisite
1.	EDUC-7101	Research Methods in Education	3(3-0)	Nil
2.	EDUC-7102	Statistics in Education	3(3-0)	Nil
3.	EDUC-7103	Instrument Development and Data Analysis	3(3-0)	Nil
4.	EDUC-7104	Policy Studies	3(3-0)	Nil
5.	EDUC- 7105	Computers in Education	NC	Nil

8. Elective Courses: (Minimum 12 credit hours)

Students must choose one area of specialization and then select three courses from within that area

Sr. No.	Course Code	Course Title	Credit Hours	Prerequisite
A-Educational Assessment and Evaluation				
1	EDUC-7106	Introduction to Assessment and Evaluation	4(4-0)	Nil
2	EDUC-7107	Test Theories and Design	4(4-0)	Nil
3	EDUC-7108	Test Construction and Standardization	4(4-0)	Nil
4	EDUC-7109	Seminar on Issues and Trends in Assessment	4(4-0)	Nil
B-Educational Planning and Management				
1	EDUC-7110	Instructional Leadership and Supervision	4(4-0)	Nil
2	EDUC-7111	Educational Planning and Management	4(4-0)	Nil
3	EDUC-7112	Organizational Theory and Behavior in Education	4(4-0)	Nil
4	EDUC-7113	Human Resource Management in Education	4(4-0)	Nil
C- Educational Psychology				
1	EDUC-7114	Advance Educational Psychology	4(4-0)	Nil
2	EDUC-7115	Cognitive psychology	4(4-0)	Nil
3	EDUC-7116	Psychological Testing	4(4-0)	Nil
4	EDUC-7117	Social Psychology	4(4-0)	Nil

9. Thesis/Courses in lieu of Thesis: (Minimum 6 credit hours)

1	EDUC-7118	Thesis	6(6-0)	CW Completion
Courses In Lieu of Thesis				
2	EDUC- 7119	Introduction to Academic Writing	3 (3+0)	CW Completion
3	EDUC- 7120	Qualitative Research Method in Education	3 (3+0)	

Scheme of Studies

Semester-I

Category	Course Code	Course Title	Credit Hours	Pre-Requisite
Complusory-1	EDUC-7101	Research Methods in Education	3(3-0)	Nil
Complusory-2	EDUC-7102	Statistics in Education	3(3-0)	Nil
Complusory-3	EDUC-7103	Instrument Development and Data Analysis	3(3-0)	Nil
Complusory-4	EDUC-7104	Policy Studies	3(3-0)	Nil
Complusory-5	EDUC-7105	Computers in Education	NC	Nil

Semester Total Credit Hours:12

Semester-II

Students must choose one area of specialization and then select three courses from within that area

Sr. No.	Course Code	Course Title	Credit Hours	Prerequisite
A-Educational Assessment and Evaluation				
1	EDUC-7106	Introduction to Assessment and Evaluation	4(4-0)	Nil
2	EDUC-7107	Test Theories and Design	4(4-0)	Nil
3	EDUC-7108	Test Construction and Standardization	4(4-0)	Nil
4	EDUC-7109	Seminar on Issues and Trends in Assessment	4(4-0)	Nil
B-Educational Planning and Management				
1	EDUC-7110	Instructional Leadership and Supervision	4(4-0)	Nil
2	EDUC-7111	Educational Planning and Management	4(4-0)	Nil
3	EDUC-7112	Organizational Theory and Behavior in Education	4(4-0)	Nil
4	EDUC-7113	Human Resource Management in Education	4(4-0)	Nil
C- Educational Psychology				
1	EDUC-7114	Advance Educational Psychology	4(4-0)	Nil
2	EDUC-7115	Cognitive psychology	4(4-0)	Nil
3	EDUC-7116	Psychological Testing	4(4-0)	Nil
4	EDUC-7117	Social Psychology	4(4-0)	Nil

Semester Total Credit Hours:12

Semester-III & Onward

1	EDUC-7118	Thesis	6(6-0)	CW Completion
Courses In Lieu of Thesis				
2	EDUC-7119	Introduction to Academic Writing	3 (3+0)	CW Completion
3	EDUC-7120	Qualitative Research Method in Education	3 (3+0)	

Semester Total Credit Hours:6

Program Summary

Category	Minimum No of Courses	Minimum No of Credit Hours
Deficiency Courses	Not applicable	
Compulsory Courses	**05**	**12**
Elective Courses	**03**	**12**
Thesis or Courses In Lieu of Thesis	**02**	**06**
	Total Credit Hours	**30**

Course Outlines

EDUC-7101 Research Methods in Education 3 (3+0)

In order to get research students prepared to be research professionals and to enhance their professional practice it is sagaciously recommended to engage them in a critical analysis of different research work and relate it to their own context; so that they may be better able to only identify the problem in that very context but also to find and suggest a tailored way to approach it and consequently reach workable solution to the problem. This course offers students a comprehensive introduction of research methodologies. Objectives of this course are to make students able: to conduct research in Education and other interdisciplinary areas; to think scientifically towards the solution of research problems; to respect the ethics of research; to differentiate between qualitative and quantitative research methodologies; to understand and conduct mixed-methods research in Education; to develop different kinds of research instruments; to develop quality research proposals in the areas of their interests; and to write a good research report.

Objectives

After studying the course, the students will be able to:

- Conduct research in Education and other interdisciplinary disciplines
- Think scientifically towards the solution of research problems
- Respect the ethics of research
- Differentiate qualitative and quantitative research methodologies
- Distinguish the range of the types of research
- Understand and conduct mixed-methods research in Education
- Design different types of sampling
- Develop different kinds of research instruments
- Develop quality research proposals in the areas of their interests
- Write a good research report

Contents

Unit-1. Introduction to Research

1.1 The need and importance of research
1.2 Scientific method and educational research
1.3 Ethics and legal issues of research in education
1.4 Variables and measurement scales

Unit-2. Problem Identification and Hypotheses Formulation

2.1 Understanding research problem
2.2 Identification of research problem
2.3 Review of related literature
2.4 Understanding variables of research problem and their mutual relationship
2.5 Writing the objectives of research
2.6 Understanding different types of hypotheses
2.7 Formulating hypotheses and research questions
2.8 Hypotheses testing

Unit-3. Qualitative and Quantitative Research

3.1 Qualitative Research
  3.1.1 The salient features of qualitative research
  3.1.2 Approaches to qualitative research
  3.1.3 Designing and conducting qualitative research
  3.1.4 Data analysis and reporting results
3.2 Mixed-method research (qualitative-cum-quantitative)
3.3 Quantitative Research: The salient features of quantitative research
  3.3.1 Designing and conducting quantitative research

3.3.2 The application of statistics and data analysis
3.3.3 Techniques for reporting research results
3.3.4 Review of Research Methodologies

Unit-4. Sampling Designs

4.1 Sampling size for the range of research
4.2 Types of sampling Designs
4.3 Considerations on drawing samples

Unit-5. Data Collection

5.1 Data collection: procedures and considerations
5.2 Pre analysis Considerations
5.3 Post Analysis Considerations

Unit-6. Developing a Research Proposal

Unit-7. Writing a Research Report

7.1 Content and Organization of a Manuscript
7.2 APA Editorial style and Mechanics
7.3 APA References and bibliography
7.4 Types of Research reports: Thesis, dissertation and Journal article

Recommended Readings

1. Cohen, L., Manion, L., & Morrison, K. (2013). *Research methods in education*. NY: Routledge.
2. Fraenklen, J. R. and Wallen, N. E. (2017). *How to design and evaluate research in education* 4th ed. New York: McGraw Hill Book Co.

Suggested Readings

1. Ary, D., Jacobs, L. C., Irvine, C. K. S., & Walker, D. (2018). *Introduction to research in education*. Wadsworth CA: Cengage Learning.
2. Check, J., & Schutt, R. K. (2011). *Research methods in education*. Thousand Oaks, CA: Sage Publications.
3. Punch, K. F., & Oancea, A. (2014). *Introduction to research methods in education*. Thousand Oaks, CA: Sage Publications.
4. Walliman, N. (2017). *Research methods: The basics*. London: Routledge.

EDUC-7102 Statistics in Education 3 (3+0)

Statistics refer to numerical data or facts. The meaning and the importance of statistics is inevitable for the researchers particularly the young ones. 'Statistics', as a subject, refers to that branch of knowledge which helps in the scientific collection, presentation, analysis and interpretation of numerical facts. The knowledge of statistics will provide students a firm foundation which will help them carry out the statistical analyses to the problems encountered in Education. Statistics is to develop analytical literacy and statistical skills of graduates. In the social sciences, it is imperative to understand the rationale for statistical modelling, with its merits and limitations. Objectives of this course are to make students able: to comprehend the basic concepts of statistics; to understand the statistical concepts frequently applied in Education and other social sciences; to apply various statistical techniques in analysing research data in Education and other social sciences; to apply appropriate statistics in qualitative and quantitative researches; and to understand the advanced concepts of statistics.

Objectives

After studying the course, the students will be able to:

- Comprehend the basic concepts of statistics;
- Understand the statistical concepts more frequently applied in Education and other social sciences
- Apply various statistical techniques in analyzing research data in Education and other social sciences
- Apply appropriate statistics in qualitative and quantitative researches
- Understand the advanced concepts of statistics especially multivariate analysis

Course Outline

Unit-1: Introduction to statistics

Unit-2: Inferential Statistics

2.1 Concept of Inferential Statistics
2.2 Parametric versus Non-parametric Tests
2.3 Hypothesis Testing
2.4 Level of Significance
2.5 Types of Error

Unit-3: Comparing Measures of Central Tendency between Groups

3.1 Differences between Groups
3.2 Comparing a Single Group
3.3 Comparing Two Groups
3.4 Comparing Two or More Groups
3.5 Paired or Dependent Measures
3.6 Two-way ANOVA
3.7 Factorial Analysis of Variance

Unit-4: Correlation and Regression

4.1 Correlation
4.2 Properties of Correlation Co-efficient
4.3 Factors Affecting Correlation
4.4 Multiple Correlation Co-efficient
4.5 Scatter Plots
4.6 Cronbach's Alpha
4.7 The Regression Line

Unit-5: Probability and Distribution of Sample Means

5.1 Concept of Probability
5.2 Probability and the Normal Distribution
5.3 The Distribution of Sample Means
5.4 Probability and the Distribution of Sample Means

Unit-6: Tests for Ordinal Data and Nominal Data

6.1 Spearman's Correlation
6.2 Tests for Nominal Data
6.3 Chi-Square Goodness-of-Fit
6.4 Chi-Square Independence
6.6 Cochran's Q
6.7 Phi or Cramer's V (Correlations for Nominal Data)

Multivariate Analysis

Unit-7: Introduction

7.1 Introduction to Multivariate statist number, nature, and combination of variable In Multivariate statistics
7.2 The Data Matrix
7.3 The Correlation Matrix
7.4 The variance –covariance Matrix
7.5 The sum of squares and crocs-Production Matrix
7.6 Residuals

Unit-8: Data preparation: screening data prior to Analysis

8.1 Accuracy of Data file
8.2 Honest Correlations
8.3 Missing data Analysis
8.4 Outlines
8.5 Normality
8.6 Exploratory Factor Analysis

Unit-9: Multiple Regressions

9.1 General purpose and Description
9.2 Kinds of Research Question
9.3 Limitation to Regression Analysis
9.4 Fundamental Equations for Multiple Regressions

Unit-10: Discriminate Analysis

10.1 General Purpose and Description
10.2 Kind of research Question
10.3 Limitation to Discriminate Analysis
10.4 Fundamental Equation for Discriminate Analysis
10.5 Types of Discriminate Function Analysis
10.6 Issues of Discriminate Analyses.

Unit-11: Logistic Regressions

11.1 General purpose Descriptions
11.2 Kinds of Research Question
11.3 Limitation to logistic Regression Analysis
11.4 Fundamental equations for logistic Regression
11.5 Types of logistic Regression
11.6 Issues of logistic Regression

Unit-12: Multivariate Analysis of Analysis of Variance & Covariance MANCOVA.

11.7 General Purpose and Description
11.8 Limitation to Multivariate Analysis of Variance (MANOVA) & MANCOVA
11.9 Fundamental Equations for multivariate Analysis of variance
11.10 Issues of MANOVA

Recommended Readings

1. Coladarci, T., Cobb, C. D., Minium, E. W., & Clarke, R. C. (2016). *Fundamentals of statistical reasoning in education.* Oviedo: John Wiley & Sons.
2. Dunn, D. S., Smith, R. A., & Beins, B. C. (Eds.). (2007). *Best practices in teaching statistics and research methods in the behavioral sciences*. NY: Routledge.

Suggested Readings

1. Bluman, A. G. (2014). *Elementary statistics: A step by step approach: A brief version* (No. 519.5 B585E.). NY: McGraw-Hill.
2. Howell, D. C. (2012). *Statistical methods for psychology.* Wadsworth CA: Cengage Learning.
3. Gravetter, F. J., & Wallnau, L. B. (2016). *Statistics for the behavioral sciences.* Wadsworth CA: Cengage Learning.

EDUC-7103 Instrument Development and Data Analysis 3(3+0)

Instrument is the device used by the researchers for collecting data. Instrument development is about the ways how items in a psychological measure are created and decided upon. It is related not only to instrument design, selection, construction, and assessment, but also to the conditions under which the designated instruments are administered. There are three commonly used general strategies: inductive, deductive and empirical. Scales used in research instruments, nowadays, often incorporate elements of all (or these) three methods. Data analysis is a process of inspecting, cleaning, transforming and modelling data with the goal of discovering useful information, and informing conclusions. The objectives of the course are to make the students capable: to comprehend the basic concepts of instrument development and data analysis; to develop different types of research instruments; to apply various statistical techniques in analysing research data in education; to apply appropriate statistics in qualitative and quantitative researches and to use SPSS for descriptive and inferential statistics.

Objectives

After studying the course, the students will be able to:

- Comprehend the basic concepts of Instrument development and data analysis
- Develop different types of research instruments
- Understand the statistical concepts more frequently applied in
- Apply various statistical techniques in analyzing research data in Education
- Apply appropriate statistics in qualitative and quantitative researches
- Use SPSS for descriptive and inferential statistics.

Course Outline

Part-I Instrument Development

Unit-1: Introduction

1.1 Concepts, Constructs and Variables
1.2 Proposition and Hypothesis
1.3 Unit of Analysis
1.4 Theory: Building Blocks of a theory

Unit-2: Measurement of Constructs

2.1 Conceptualization
2.2 Operationalization
2.3 Levels of Measurements
2.4 Scaling: Types of Scales/Measurement
2.5 Indexes
2.6 Typologies

Unit-3: Unit-4: An Overview of Psychometric Properties of a Scale

3.1 Psychometric properties of a scale
3.2 Internal consistency
3.3 Reliability
3.4 Validity
3.5 Dimensionality
3.6 Stability of dimensionality (factor structure)
3.7 Scale length (No. of items)
3.8 Validation
3.9 Standardization

Unit-5: Scale Reliability and Validity

5.1 Reliability of a scale and its types
5.2 Validity of a scale and its types
5.3 Sources of error

5.4 Theory of Measurement
5.5 An Integrated Approach to Measurement Validation

Unit-6: Research Instrument

6.1 Meanings
6.2 Research Instrument in quantitative research
6.3 Research Instrument in qualitative research
6.4 The MEASURE Approach to Instrument Development
6.4.1 M=Make the purpose and rationale clear
6.4.2 E=Establish empirical framework
6.4.3 A=Articulate theoretical blueprint
6.4.4 S=Synthesize content and scale development
6.4.5 U=Use expert reviewers
6.4.6 R=Recruit participants
6.4.7 E=Evaluate validity and reliability
6.5 Construction of test design for predictive validation
6.6 Unipolar vs Bipolar attributes

Part-II Data Analysis

Unit-1: Data Analysis

1.1 The role of statistical analysis
1.2 Data and its types
1.3 Selecting an appropriate statistical analysis
1.4 Coding and inputting data

Unit-2: Analysis of Quantitative data through SPSS

2.1 Descriptive statistics
2.2 Measures of central tendency and variability
2.3 Measures of relationship
2.4 Inferential statistics (correlation + regression)
2.5 Hypothesis testing; the null hypothesis; one and two tailed tests; use of null hypotheses
2.6 Parametric vs. nonparametric techniques
2.7 Carrying out parametric statistical tests: t-distribution, z-test, ANOVA and ANCOVA.
2.8 Carrying out non-parametric statistical tests: Chi Square test
2.8.1 The role of statistical analysis
2.8.2 Selecting an appropriate statistical analysis
2.8.3 Coding and inputting data

Unit-3: Data Analysis in Qualitative Research

3.1 Analysis of data in the field:
3.1.1 Field memos
3.1.2 Discovering themes and hypotheses
3.1.3 More about analysis in the field
3.2 Analysis after data collection:
3.2.1 Coding and coding categories
3.2.2 Developing coding categories
3.2.3 Influence on coding and analysis
3.2.4 Data displays etc
3.2.5 Mechanics of working with data
3.2.6 Using a computer for analysis

Recommended Readings

1. Colton, D., & Covert, R. W. (2017). *Designing and constructing instruments for social research and evaluation.* San Francisco: Jossey-Bass.
2. A Practical Guide to Instrument Development and Score Validation in the Social Sciences: The MEASURE Approach: https://openpublishing.library.umass.edu/pare/article/id/1571/

Suggested Readings

1. Aneshensel, C. S. (2012). *Theory-based data analysis for the social sciences*. Thousand Oaks: Sage Publications.
2. Cohen, L., Manion, L., & Morrison, K. (2013). *Research methods in education*. NY: Routledge.
3. Fraenklen, J. R. and Wallen, N. E. (2017). *How to design and evaluate research in education*. NY: McGraw Hill Book Co.

EDUC-7104 Policy Studies 3(3+0)

This course provides an in-depth exploration of the field of Policy Studies, focusing on the theories, processes, and practices of policy-making, implementation, and evaluation. It is designed to equip students with the analytical tools and critical thinking skills necessary to understand and address complex policy issues in both domestic and global contexts. The course emphasizes the interdisciplinary nature of policy studies, drawing on insights from political science, economics, sociology, and public administration. Students will engage with key concepts such as policy formulation, stakeholder analysis, policy networks, and evidence-based decision-making. They will also examine contemporary policy challenges, including climate change, health policy, social inequality, and technological innovation. Through case studies, simulations, and practical exercises, students will develop the skills needed to analyze policies, write policy briefs, and communicate effectively with diverse stakeholders.

Learning Objectives:

By the end of this course, students will be able to:

1. Understand the theoretical foundations and key concepts of policy studies.
2. Analyze the policy-making process, including agenda-setting, formulation, implementation, and evaluation.
3. Evaluate the role of stakeholders, institutions, and power dynamics in shaping policies.
4. Apply comparative and global perspectives to analyze policy issues across different contexts.
5. Develop practical skills in policy analysis, including data interpretation, stakeholder engagement, and policy writing.
6. Critically assess the ethical and social implications of public policies.

Unit 1: Foundations of Policy Studies
1.1 Introduction to Policy Studies: Definitions and Scope
1.2 Historical Evolution of Policy Studies as a Discipline
1.3 Policy, Public Policy, and Governance
1.4 Theoretical Frameworks in Policy Studies
1.5 Interdisciplinary Approaches to Policy Analysis

Unit 2: Policy-Making Processes
2.1 Models of Policy-Making: Rational, Incremental, and Garbage Can Models
2.2 Agenda-Setting and Problem Definition
2.3 Policy Formulation: Actors, Institutions, and Tools
2.4 Decision-Making in Policy Processes

Unit 3: Policy Implementation
3.1 Theories of Policy Implementation
3.2 Challenges in Policy Implementation: Top-Down vs. Bottom-Up Approaches
3.3 Role of Bureaucracy and Street-Level Bureaucrats
3.4 Monitoring and Feedback Mechanisms
3.5 Case Studies of Policy Implementation Successes and Failures

Unit 4: Policy Evaluation
4.1 Purpose and Methods of Policy Evaluation
4.2 Quantitative and Qualitative Approaches to Evaluation
4.3 Impact Assessment and Cost-Benefit Analysis
4.4 Using Evaluation Results for Policy Improvement

Unit 5: Stakeholders and Policy Networks
5.1 Identifying Key Stakeholders in Policy Processes
5.2 Role of Interest Groups, NGOs, and Civil Society
5.3 Public-Private Partnerships in Policy-Making
5.4 Policy Networks and Advocacy Coalitions

Unit 6: Global and Comparative Policy Studies
6.1 Globalization and Its Impact on Policy-Making
6.2 Comparative Policy Analysis: Methods and Frameworks
6.3 Policy Transfer and Diffusion Across Borders
6.4 Role of International Organizations in Shaping Policies

Unit 7: Contemporary Policy Challenges
7.1 Climate Change and Environmental Policy
7.2 Technology and Digital Policy
7.3 Social Inequality and Welfare Policies
7.4 Crisis Management and Policy Responses

Unit 8: Skills for Policy Analysts
8.1 Writing Policy Briefs and Memos
8.2 Data Analysis and Visualization for Policy Studies
8.3 Stakeholder Engagement and Communication Strategies
8.4 Ethical Considerations in Policy Analysis
8.5 Career Pathways in Policy Studies

Recommended Readings

1. Bardach, E., & Patashnik, E. M. (2020). *A Practical Guide for Policy Analysis: The Eightfold Path to More Effective Problem Solving*.
2. Birkland, T. A. (2019). *An Introduction to the Policy Process: Theories, Concepts, and Models of Public Policy Making*. Routledge.
3. Dunn, W. N. (2017). *Public Policy Analysis: An Integrated Approach*.
4. Hill, M. J. (2021). *The Public Policy Process*.
5. Hill, M., & Hupe, P. (2014). *Implementing Public Policy*. SAGE Publications.

Suggested Readings

1. Knoke, D. (2011). *Policy Networks*. In Scott & Carrington (Eds.), *The SAGE Handbook of Social Network Analysis*. SAGE Publications.
2. Margetts, H., & Dunleavy, P. (2013). *The Second Wave of Digital-era Governance*.
3. Ostrom, E. (2010). *Governing the Commons: The Evolution of Institutions for Collective Action*.
4. Peters, B. G. (2021). *Advanced Introduction to Public Policy*.
5. Stiglitz, J. E. (2012). *The Price of Inequality: How Today's Divided Society Endangers Our Future*.
6. Stone, D. (2012). *Policy Paradox: The Art of Political Decision Making*.
7. Vedung, E. (2017). *Public Policy and Program Evaluation*. Routledge.
8. Weimer, D. L., & Vining, A. R. (2017). *Policy Analysis: Concepts and Practice*. Routledge.

N.B: All Education Policies and related documents from 1947 to 2017 are the part of recommended books.

EDUC – 7105 Computer in Education Non-Credit

In the modern era of education and research, technology plays a crucial role in enhancing efficiency, collaboration, and data management. The course "Computer in Education" is designed to equip researchers with both technical and theoretical skills in computing and information technology. These skills empower scholars to tackle complex research problems, manage large datasets, and effectively communicate their findings**.**

The course covers essential digital tools and platforms that support research and academic work. From presentation and communication skills using tools like PowerPoint and Prezi to cybersecurity and data privacy measures for protecting sensitive research data, researchers need to gain hands-on experience with a variety of applications. Additionally, the course introduces digital libraries and search engines for efficient literature reviews, cloud storage and virtual collaboration tools for seamless teamwork, and survey software. Students will also explore data analysis and visualization tools, along with project management platforms to streamline research projects. By integrating these tools into their research workflow, scholars can enhance productivity, collaboration, and data-driven decision-making, making them well-prepared for academic and professional success.

Objectives of the Course:
By the end of this course, scholars will be able to:

a. Understand the structure and Role of Computers in Educational Research
b. Utilize Computers for Literature Review and Research Writing
c. Develop Competency in Data Management and Analysis
d. Explore Computational Methods for Educational Research
e. Enhance Skills in Online Data Collection and Survey Tools
f. Explore Emerging Trends in Educational Research

Course Outlines:

Unit 1: Basic Computer Architecture and Internet Devices
- Computer; generations
- Memory devices
- Internet and communication Devices
- Classification of Software

Unit 2: Presentation and Communication Skills
- Presentation Software
- PowerPoint/Google Slides: Common tools for preparing research presentations.
- Prezi/Canva: Tools to create visually engaging presentations for conferences or seminars.

Unit 3: Working with Portable Document Format (PDF)
- Portable Document Format concept and benefits
- File Conversion, Splitting, Merging, Editing, Compressing and protecting PDF Files

Unit 4: Digital Libraries and Search Engines
- Database Search Skills:
    - Expertise in using academic databases such as PubMed, IEEE Xplore, JSTOR, and Google Scholar for conducting literature reviews and accessing research papers.
    - Proficiency in advanced search techniques like Boolean operators, filtering search results, and citation tracking.

- Use of LinkedIn, Research Gate, Google Scholar,
- Use of research collaboration and reference management tools like Mendeley and EndNote

Unit 5: Data Collection and Virtual Collaboration Tools

- Design and conduct surveys using platforms
    - Google Forms, Qualtrics, SurveyMonkey
- Virtual Collaboration Tools/Video Conferencing:
    - Zoom/Google Meet/Microsoft Teams: Knowledge of virtual collaboration and conferencing tools, especially useful for remote collaboration and virtual academic conferences.
- Cybersecurity and Data Privacy
- Basic Cybersecurity: Understanding of basic cybersecurity principles to protect sensitive research data, including encryption, firewalls, and secure password management.

Unit 6: Cloud Storage and Project Management

- Google Drive/Dropbox: Cloud storage solutions for sharing research data and documents among team members.
- Use project management tools like Trello, Notion, and Asana to effectively organize and track research tasks

Unit 7: Using computer in emerging trends in Teacher Education Research

- Block chain
- Open Learning Resources i.e Coursera, MOOC
- Flipped learning
- Blended learning
- Artificial Intelligence

Unit 8: Data Analysis and Visualization

- Excel: For basic and advanced function of coloration and exporting data and graphs to others platform for data analysis and presentation
- SPSS etc. these statistical tools are commonly used for complex data analysis, particularly in social sciences.

Recommended Text

1. Suppes, P., & Smith, R. (2017). Computers in education: a half-century of innovation. *(No Title)*.
2. Paulus, T., Lester, J., & Dempster, P. (2013). *Digital tools for qualitative research*. Sage.

Suggested Reading

1. O'Neil Jr, H. F., Perez, R. S., & O'Neil, H. F. (Eds.). (2003). *Technology applications in education: A learning view*. Routledge.
2. Fincher, S. A., & Robins, A. V. (Eds.). (2019). *The Cambridge handbook of computing education research*. Cambridge University Press.
3. Saint-Martin, A. (2015). Digital Paper: A Manual for Research and Writing with Library and Internet Materials.

Web resource:

1. Access PubMed, IEEE Xplore, JSTOR, and Google Scholar for literature reviews and research papers.

2. **Professional Networking Platforms**: Utilize LinkedIn, ResearchGate, and Google Scholar to connect with peers and discover research opportunities.
3. For tutorials on creating effective presentations using PowerPoint and Google Slides, consider watching the following video:
4. Comparing Prezi, PowerPoint, Canva, Keynote & Google Slides
5. https://www.dropbox.com/
6. https://www.microsoft.com/en-us/microsoft-365/excel
7. https://www.surveymonkey.com/
8. https://trello.com/
9. https://www.notion.com/
10. https://asana.com/
11. https://www.educause.edu/

AREAS OF SPECIALIZATION

A)	Educational Assessment and Evaluation	Credit Hours
EDUC – 7106	Introduction to Assessment and Evaluation	4(4+0)
EDUC – 7107	Test Theories and Design	4 (4+0)
EDUC – 7108	Test Construction and Standardization	4 (4+0)
EDUC – 7109	Seminars on Issues and Trends in Assessment	4 (4+0)

EDUC-7106 Introduction to Assessment and Evaluation 4(4+0)

Systematic process of documenting and using empirical data on the knowledge, skill, attitudes, and beliefs of the learners is what makes the core of this course. Indeed, it helps to get the programs refine and improve their learning as well. Assessment of learning and Assessment for learning are inevitable in the teaching learning process; and probably the only way to establish if the learning outcomes have been achieved and to what extent they have been achieved. The purpose of this course is to equip students with the latest development in the area of assessment, evaluation and testing. It mainly covers fundamental concepts in assessment and evaluation, taxonomies of educational objectives, test item development and analysis using different software, alternative assessment techniques, computer-assisted assessment in higher education, teacher-made and standardized tests, and role of different agencies in testing and assessment at national and international perspectives. Contextualised notion of assessment and evaluation is more required to reap greater benefit of it.

Objectives

After studying the course, the students will be able to:

- Understand the basic concepts of assessment, evaluation and measurement;
- Distinguish between classroom, national and international assessment;
- Understand taxonomies of educational objectives
- Use assessment instruments in respect to objectives achievement;
- Develop students' achievement tests at different levels;
- Understand the test administration and assembling procedures;
- Analyse test items by using different softwares such as Quest, Itteman etc.
- Comment upon the role of national and international testing agencies such as ETS, SAT, NTS etc.

Contents

Unit-1: Basic Concepts in Assessment and Evaluation

1.1 Distinction between assessment, measurement and evaluation
1.2 Types of assessment (Formative, summative, diagnostic etc)
1.3 Purposes and multiple roles of assessment in educational process
1.4 Prevailing practices in regard to assessment and evaluation in Pakistan

Unit-2: Taxonomies of Educational Objectives

2.1 Aims, goals and objectives
2.2 Bloom's Taxonomy Educational Objectives
2.3 Cognitive domain
2.4 Affective Domain
2.5 Psychomotor Domain

Unit-3: Alternative Assessment Strategies

3.1 Classroom observations
3.2 Assignments and presentations
3.3 Projects
3.4 Discussion
3.5 Oral questioning
3.6 Peer appraisal
3.7 Interview
3.8 Other assessment strategies

Unit-4: Tests

4.1 Concept of standardized testing
4.2 Distinguishing teacher made and standardized tests
4.3 Advantages and limitations of standardized tests
4.4 Standardized tests in Education used internationally

Unit-5: Assessment and Evaluation at School and Higher Level in Pakistan

5.1 Assessment of students learning at school level
5.2 Assessment of students learning at higher education level
5.3 GRE type tests
5.4 Grading and ranking
5.5 Reporting assessment results
5.6 Issues in testing and assessment

Unit-6: Computer Assisted Assessment in Higher Education

6.1 Concept of Computer Assisted Assessment
6.2 Automated online tutorials: new formats for assessment
6.3 Automatic test generation from a data base
6.4 Validating formative and summative assessment
6.5 Online assessment
6.6 Computer-assisted peer review
6.6 Advantages and limitations of CAA

Unit-7: Seminar in Assessment and Evaluation

Recommended Readings

1. Cooper, C. (2019). *Psychological testing: Theory and practice.* NY: Routledge.
2. Urbina, S. (2014). *Essentials of psychological testing*. New Jersey: John Wiley & Sons.

Suggested Readings

1. Boud, D., & Falchikov, N. (Eds.). (2017). *Rethinking assessment in higher education: Learning for the longer term.* NY: Routledge.
2. Brookhart, S. M., & McMillan, J. H. (Eds.). (2020). *Classroom assessment and educational measurement.* NY: Routledge.
3. Earl, L. M. (2012). *Assessment as learning: Using classroom assessment to maximize student learning.* Thousand Oaks: Corwin Press.
4. Hambleton, R. K., & Zaal, J. N. (Eds.). (2013). *Advances in educational and psychological testing: Theory and applications*. NY: Springer.

EDUC-7107 Test Theories and Design 4(4+0)

Classical test theory says that the observed test scores are the sum of a true score and an error score where the true and the error scores are independent. Generalizability theory acknowledges and allows for variability in assessment conditions that may affect measurements. Advantage of this theory lies in the fact that researchers can estimate what proportion of the total variance in the results is due to the individual factors that often vary in assessment, e.g. setting, time, items, and raters. Item response theory was proposed for ability assessment. It offers a paradigm for the design, analysis, and scoring of tests, questionnaires, and similar instruments measuring abilities, attitudes, or other variables of interest among students. The aim of this course is to provide students with the latest development in the area of assessment, evaluation and testing. It mainly covers: appraising the history of test development in international perspective, critically reviewing the test theories, explaining the concepts of NRT and CRT, explaining the concept of standardized testing, critically reconsidering the models of assembling test items, explaining the concepts in item generation and item banking, critically revisiting the models of assembling multiple tests, and demonstrating the basics of computer-based test design models.

Objectives

After studying the course, the students will be able to:

- Review the history of test development in international perspectives
- Critically review the test theories (Classical, Generalizability and Item Response)
- Understand the concepts of NRT and CRT
- Understand the concept of standardized testing
- Critically review the models of assembling test items in regard to IRT
- Explain the concepts of item generation and item banking using IRT
- Critically review the models of assembling multiple tests
- Understand basics of computer-based test design models (CAT, MST)

Contents

Unit-1: Test Theories in Historical Perspectives

1.1 Classical test theory
1.2 Theory of generalizability
1.3 Item response theory
1.4 Comparative view of test theories
1.5 IRT and new notion of test standardization
1.6 Item banking using IRT

Unit-2: Test Development Process (both NRT and CRT Perspectives)

2.1 Understanding of norm standard / NRT and criterion standard / CRT
2.2 Reviewing course curricula and reading materials
2.3 Writing objectives and competencies (Activity)
2.4 Designing specification grid/test specification (Activity)

Unit-3: Test Equating and DIF

3.1 Test score equating using IRT
3.2 Differential item functioning (DIF)

Unit-4: Models for Assembling Test Items

4.1 IRT-based test assembly (absolute and relative targets, cut-off scores)
4.2 CRT-based test assembly (maximizing test validity and reliability)
4.3 Matching observed score distributions

Unit-5: Models of Assembling Multiple Tests

5.1 Sequential and simultaneous assembly
5.2 Big-shadow test method
5.3 Optimizing Bib design

Unit-6: Models of Assembling Tests with Item Sets

6.1 Power-set method
6.2 Edited-set method
6.3 Pivot-item method
6.4 Two-stage method

Unit-7: Item Generation and computer-based test designs

7.1 Foundation of item generation of mass testing
7.2 Item generation models for lower and higher order cognitive abilities
7.3 Computer-based test designs (CAT, MST)
7.4 Foundation of item generation of mass testing

Unit-8: Seminars on Contemporary Relevant Theme

Recommended Readings

1. Boud, D., & Falchikov, N. (Eds.). (2017). *Rethinking assessment in higher education: Learning for the longer term.* NY: Routledge.
2. Shultz, K. S., Whitney, D. J. & Zickar. M. J. (2014). *Measurement theory in action: case studies and exercises*. NY: Routledge.

Suggested Readings

1. Brookhart, S. M., & McMillan, J. H. (Eds.). (2020). *Classroom assessment and educational measurement*. NY: Routledge.
2. Cooper, C. (2019). *Psychological testing: Theory and practice*. NY: Routledge.
3. Earl, L. M. (2012). *Assessment as learning: Using classroom assessment to maximize student learning.* Thousand Oaks: Corwin Press.
4. Eckes, T. (2015). *Introduction to many-facet Rasch measurement: analyzing and evaluating rater-mediated assessments*. NY: Peeterlang.

EDUC-7108 Test Construction and Standardization 4(4+0)

Test construction is a difficult chore. Besides technical knowledge, there it requires patience and hard work as necessary ingredients in the process. Constructing a good test asks for a good amount of responsibility on the part of the test constructor. Consistency and objectivity in administering and scoring the test is what refers to Standardization. Standardized testing is an examination that is administered and scored in a predetermined, standard manner. It allows for comparisons to be made among schools in regard to student achievement, ensures accountability for teachers, and has the ability to inform instruction for educators. The aim of this course is to provide students with the latest development in the area of assessment, evaluation and testing. Selecting the successful assessment techniques is required for efficacious preparation on the part of the student. It mainly covers: history of test development in international context, concept of standard setting, the standard setting methods, practical issues in standard setting on Computer Adaptive Tests, psychometric theory and the validation of performance standards, and challenges and future directions of the standard setting.

Objectives

After successful completion of this course, the students will be able to:

- Comprehend the concept of standard setting
- Critically examine the standard setting method
- Compare Angoff method of standard setting with other methods
- Understand the concept of vertically-moderated standardized testing (VMSS)
- Apply VMSS
- Use multiple methods of standard setting
- Explore practical issues in SS on Computerized Adaptive Tests
- Understand psychometric theory and the validation of performance standards
- Explore challenges and future directions of standard setting

Contents

Unit-1: Standard Setting for Testing

1.1 Definitions and concept of standard setting
1.2 Standard setting: An enduring need
1.3 General approaches to standard setting
1.4 Standard setting
  1.4.1 Policy issues
  1.4.2 Item scoring criteria
  1.4.3 Total test performance standards
1.5 Benefits of standard setting

Unit-2: Common Elements in Setting Performance Standards

2.1 Purpose
2.2 Choosing a standard setting method
2.3 Performance level labels and descriptions
2.4 Key conceptualizations
2.5 Selecting and training participants
2.6 Professional guidelines for standard setting
2.7 Evaluating standard setting
2.8 Providing feed back to participants

Unit-3: Development of Table of Specifications

3.1 Bloom Taxonomy

Unit-4: Test Development

4.1 Types of Tests
4.2 Extended Response questions
4.3 Constructed Response Questions
4.4 Types of Essay Tests
4.5 Developing test items
4.6 Improving test items through repeated reviews and experts' opinions

Unit-5: Item Analysis

3.1 Definition, advantages and limitations of item analysis
3.2 Test characteristics (Difficulty level, discrimination index, destructor power etc)
3.3 Reviewing and marking the tests (rubrics)
3.4 Item analysis by using Iteman, Quest or other software
3.5 Ensuring validity and reliability of test items
3.6 Test administration and assembling
3.7 Difference between NRT and CRT item analysis
3.8 Practicum on use of item analysis (Demonstration

Unit-6: Scoring of Extended Response Questions (Essay type)

5.1 Scoring standards for Essay Type tests
5.2 Use of Command words in constructing Marking Scheme
5.2 Inter Rater Reliability

Unit-7: Scoring Objective Type Tests

6.1 Item analysis
6.2 Difficulty Level
6.3 Discriminatory Power

Unit-8: Process of Test Standardization

Unit-9: Testing Higher Order Learning

8.1 Development of Rubrics
8.2 Use of Rubrics

Unit-10: Seminar on issues in Test Construction and Standardization

Recommended Readings

1. Brookhart, S. M., & McMillan, J. H. (Eds.). (2020). *Classroom assessment and educational measurement*. NY: Routledge.
2. Hambleton, R. K., & Zaal, J. N. (Eds.). (2013). *Advances in educational and psychological testing: Theory and applications* (Vol. 28). NY: Springer Science & Business Media.

Suggested Readings

1. Cizek, G. J. & Sternberg, R. J. (2011) *Setting performance standards: Concepts, methods, and perspectives.* New Jersey: Lawrence Erlbaum Associates, Publishers.
2. Cooper, C. (2019). *Psychological testing: Theory and practice.* NY: Routledge.
3. Earl, L. M. (2012). *Assessment as learning: Using classroom assessment to maximize student learning.* Thousand Oaks: Corwin Press.
4. Urbina, S. (2014). *Essentials of psychological testing*. NJ: John Wiley & Sons.

EDUC-7109 Seminars on Issues and Trends in Assessment 4(4+0)

Criticism over the years has focused largely on the impacts of attaching high stakes to assessment results, because of their connection to teacher and school evaluations. Access, acceptability, and extent of technology use in assessment are some of the sensitivities we go along. There is still another dimension that beyond network issues, navigational limitations have also hindered student performance. Such issues and trends in assessment cannot be overlooked at all. Therefore, this course aims at creating an enabling guide on how to use the modern techniques in assessment. After the seminars required for this course, students should have adequate knowledge on educational assessment enabling them to analyse a research problem, conduct literature review, and understand methods of data gathering, analysis and interpretation and discussion of research findings. This course comprised the discussion of assigned readings and presentation and critical evaluation of scholars' emerging research proposals. This course is vibrant and novel in because it builds students' confidence so that they can assess their work and others' work effectively, structure an assessment criterion and use modern techniques to explain things in a wider context, embark on modern trends in assessment and evaluation, and pursue an analysis in both quantitative and qualitative fashion.

Objectives

This course will be helpful for scholars to:

- Gain better insight into the subject matter
- Be able to critically examine the theory
- Learn skills of integrative discussion
- Know the ways of exploring and mining a text
- Have experience of diverse views on a text
- Clarify their own views through discussion
- Know the systematic organization of content
- Have more in-depth understanding of the material due to group sharing
- Build students' confidence so that they can assess their work and others' work effectively
- Increase their vocabulary

Note: *Each student will conduct seminar on the topic assigned to him/her. Concerned teacher may include any other emerging topic along with topics mentioned above. Topic for Issues and Trends in Assessment*

1. Introduction to Assessment and Evaluation
2. How to design assessment criteria
3. Evaluation of a research proposal (Criteria of different high ranked universities)
4. Defining Different Assessment Terms and Techniques
5. Describing the modern trends in Educational Assessment
6. Use of Formal Assessment Techniques in Educational Assessment
7. Use of Informal Assessment Techniques in Educational Assessment
8. Use of Alternative Assessment Techniques in Educational Assessment
9. Exploring novel Assessment Strategies
10. Evaluation of a research dissertation (Criteria of different high ranked universities)
11. How to evaluate plagiarism in a dissertation (Criteria of different high ranked universities)
12. Presenting a seminar by the scholars

Recommended Readings

1. Earl, L. M. (2012). *Assessment as learning: Using classroom assessment to maximize student learning.* Thousand Oaks: Corwin Press.
2. Eckes, T. (2015). *Introduction to many-facet Rasch measurement: analyzing and evaluating rater-mediated assessments*. NY: Peeterlang.

Suggested Readings

1. Brookhart, S. M., & *McMillan*, J. H. (Eds.). (2019). *Classroom assessment and educational measurement*. NY: Routledge.
2. Cizek, G. J. and Sternberg, R. J. (2011). *Setting performance standards: Concepts, methods, and perspectives.* New Jersey: Lawrence Erlbaum Associates.
3. Cooper, C. (2019). *Psychological testing: Theory and practice.* NY: Routledge.
4. Urbina, S. (2014). *Essentials of psychological testing*. New Jersey: John Wiley & Sons.

B) Educational Planning and Management **Credit Hours**

EDUC – 7110	Instructional Leadership and Supervision	4(4+0)
EDUC – 7111	Educational Planning and Management	4(4+0)
EDUC – 7112	Organizational Theory and Behavior in Education	4(4+0)
EDUC – 7113	Organizational Behavior	4(4+0)

EDUC-7110 Instructional Leadership and Supervision 4(4+0)

Student success is the prime goal of education. Instructional leadership is generally defined as the management of curriculum and instruction by the head of institution. Instructional supervision is the work of ensuring the implementation of the educational mission of a school by overseeing, equipping, and empowering teachers to provide meaningful learning experiences for students. Leadership plays a vital role in the success of an organization. Focusing on instructional activities is inevitable for effective teaching and learning. This course covers: concepts, theories and models of educational leadership and management, difference between the concept of leadership and management, different roles and responsibilities of leadership, different qualities and skills of effective leadership, styles of leadership and their implication for educational institutions improvement, effective leadership and management practices, key theories of leadership to their own working environment, and ways in which educational management and leadership can contribute to improving quality of teaching and learning process.

Objectives

After studying the course, the students will be able to:

- Understand concepts, theories and models of educational leadership and management
- Differentiate between the concept of leadership and management
- Describe different roles and responsibilities of leadership
- List the different qualities and skills of effective leadership
- Explain different styles of leadership and their implication for educational institutions improvement
- Demonstrate effective leadership and management practices
- Apply key theories of leadership to their own working environment
- Explore ways in which educational management and leadership can contribute to improving quality of teaching and learning process

Contents

Unit-1: Introduction to Leadership

- 1.1 Concept of Leadership
- 1.2 Educational Leadership
  - 1.2.1 Moral dimensions of educational leadership
  - 1.2.2 Ethical dimensions of educational leadership
- 1.5 Role of Educational Leadership in School Improvement and Management
- 1.6 Educational Change and Leadership in National and International Perspectives

Unit-2: Leadership Models and Theories

- 2.1 Philosophical Background: Theory X and Y
- 2.2 Trait Theories
- 2.3 Behavioral Theories
- 2.4 Contingency Theories
- 2.5 Transformational Theories
- 2.6 Application of Leadership Theories to the Leadership and Management of Education

Unit-3: Leadership Styles

3.1 Authoritative/Bureaucratic Leadership
3.2 Democratic/Participative Leadership
3.3 Distributed Leadership
3.4 Instructional Leadership
3.5 Pedagogical Leadership
3.6 Teacher Leadership
3.7 Other Leadership Styles

Unit-4: Roles and Responsibilities of Leadership

4.1 Setting Directions
4.2 Developing People
4.3 Strengthening School Cultures
4.4 Providing Instructional Leadership
4.5 Developing and Executing Strategic Plans
4.6 Staff Evaluation
4.7 Budget Management
4.8 Performance Assessment
4.9 Held Accountable for Results
4.10 Community Relations
4.12 Other Role and Responsibilities

Unit-5: Instructional Leadership

5.1 Introducing Principals to the Role of Instructional Leadership
5.2 Instructional leadership and school improvement
5.3 Developing Instructional Leaders
5.4 Beyond Instructional Leadership: Towards Pedagogic Leadership
5.5 Leadership in Schools
5.6 Pedagogy and Leadership
5.7 School Leadership and Change
5.8 Distributed Leadership
5.9 How Leadership Influences Student Learning
5.10 Leading for Learning

Unit-6: Leadership: Values and Ethics

6.1 Caring, Respect for Individual and Group Rights
6.2 Respect of Roles and Responsibilities
6.3 Justice, Honesty, Integrity, Fairness, Courage and Good Character
6.4 Creating Shared Vision
6.5 Ethical Decision-Making
6.6 sensitivity to Self and Others

Unit-7: Introduction to Supervision

7.1 Concept of Supervision
7.2 Leadership versus Supervision
7.3 Concept of Educational Supervision
7.4 Types of Educational Supervision

Unit-8: Supervision and Inspection

8.1 Concept of supervision
8.2 Need, importance and aims of supervision and inspection
8.3 Types of supervision
8.4 New trends in supervision
8.5 Modern vs. old concept of inspection
8.6 Techniques of supervision
8.7 Factors affecting educational supervision

8.8 Roles and Responsibilities of Supervisor

Unit-9: Seminars in instructional Leadership and Supervision

Recommended Readings

1. Hallinger, P. (2010). *Developing instructional leadership. In developing successful leadership* (pp. 61-76). Dordrecht: Springer.
2. Hallinger, P., Wang, W. C., Chen, C. W., & Liare, D. (2015). *Assessing instructional leadership with the principal instructional management rating scale*. Dordrecht: Springer.

Suggested Readings

1. Blase, J., & Blase, J. (1998). *Handbook of instructional leadership: How really good principals promote teaching and learning*. Thousand Oaks: Corwin Press, Inc.
2. Davies, B. (2013) *Handbook of educational leadership and management*. London: Pearson Education.
3. Glickman, C. D., Gordon, S. P., & Ross-Gordon, J. M. (2014). *Supervision and instructional leadership: A developmental approach.* MA: Allyn & Bacon Publishing http://www.abacon.com
4. Smith, W. F., & Andrews, R. L. (1999). *Instructional leadership: How principals make a difference*. Alexandria, VA: Association for Supervision and Curriculum Development.

EDUC-7111 Educational Planning and Management 4(4+0)

Educational planning is the systematic analysis of educational development. It aims at making education more effective and efficient in responding to the needs and goals of its students and society. Educational Management is the process of planning, organising, directing and controlling the activities of an institution no matter how big or small it may be. Educational management refers to the administration of the education system in which a group combines human and material resources to supervise, plan, strategize, and implement structures to execute an education system. This course contains a number of themes connected to educational management and planning from policy formulation perspective. It contains theoretical perspectives as well as examples of what planning means in practice. The themes covered herein are strategic planning, analysis of education systems and financing, planning related to placement and development of personnel, the analysis of different measures taken, questions about planning, management and policy at national and local levels, and the follow up and evaluation of quality-related issues.

Objectives

After studying the course, the students will be able to:

- Differentiate among policy, planning and strategy
- Understand the process of policy making and implementation
- Describe the outcomes of educational planning
- Describe the different types of plans and the processes of educational planning
- Aware of the different approaches for educational planning
- Understand the key concepts of educational financing
- Aware of the different agencies and process of educational planning, implementation and monitoring in Pakistan
- Evaluate the different education policies and plans of Pakistan
- Describe the concept and process of total quality management

Contents

Unit-1:
- 1.1 Policy, Planning and Strategy
- 1.2 Role of Strategy in Planning
- 1.3 Role of Policy in Planning
- 1.4 Policy Definition and Scope

Unit-2: Educational Policy Making
- 2.1 Approaches to Policy Making
- 2.2 Process of Policy Making
  - 2.2.1 Analysis of the existing situation
  - 2.2.2 The process of generating policy options
  - 2.2.3 Evaluation of policy options
  - 2.2.4 Making the policy decision
  - 2.2.5 Planning policy implementation
  - 2.2.6 Policy impact assessment
  - 2.2.7 Subsequent policy cycle

Unit-3: Educational Planning
- 3.1 The Nature and Scope of Educational Planning
- 3.2 The Role of Educational Planning
- 3.3 The Emergence of Educational Planning
- 3.4 Objectives for Educational Planning- National and Regional Levels
- 3.5 Factors Affecting Educational Planning (Political, Administrative and Economic etc.)

Unit-4: Types of Plans

- 4.1 Academic or Strategic Plan
- 4.2 Financial Plan
- 4.3 Campus Plan
- 4.4 Master Plan
- 4.5 Landscape Plan
- 4.6 Programmatic Plan
- 4.7 Building Plan
- 4.8 Technology Plan

Unit-5: The Process of Educational Planning and Implementation

- 5.1 Conditions for Planning
- 5.2 Educational Planning Bodies
- 5.3 Planning for Planning
- 5.4 Data Collection and Processing
- 5.5 Stages of Educational Planning Process
  - 5.5.1 Vision and academic plan
  - 5.5.2 Assessment of existing situation
  - 5.5.3 Articulation of needs
  - 5.5.4 Alternatives –benefits and costs
  - 5.5.5 Plan of action
  - 5.5.6 Implementation strategy
  - 5.5.7 Assessment/evaluation
- 5.6 Plan Implementation
  - 5.6.1 Process of implementation
  - 5.6.2 Strategies for implementation

Unit-6: Approaches to Educational Planning

- 6.1 Social Demand Approach
  - 6.1.1 The importance of human resources
  - 6.1.2 Manpower requirements and educational planning
  - 6.1.3 Preparation of projections
  - 6.1.4 Sources of data for manpower forecasting
  - 6.1.5 Analysis of the existing situation of education and employment
  - 6.1.6 Estimation future manpower requirements
- 6.2 Manpower and Rate of Return Approach
  - 6.2.1 Cost-benefit and rate of return analysis in educational planning
  - 6.2.2 The measurement of cost
  - 6.2.3 The measurement of benefits
  - 6.2.4 Cost-benefit analysis and decision making

Unit-7: Introduction to Management

- 7.1 Concept of Management
- 7.2 Leadership versus Management
- 7.3 Concept of Educational Management
- 7.4 Principles of Educational Management
- 7.5 Management Competencies for Effective Implementation
- 7.6 Management Practices/Techniques
  - 7.6. 1 Human resource management
  - 7.6.2 Performance management
  - 7.6. 3 Change management
  - 7.6.4 Conflict management
  - 7.6. 5 Financial management

Unit-8: Emerging Issues in Educational Leadership and Management

8.1 Gender Issues
8.2 Ethical Issues and Dilemmas
8.3 Leadership of Educational Transformation
8.4 Strategic Leadership and Educational Improvement
8.5 Other Emerging Issues in Leadership and Management

Unit-9: Educational Policy and Planning in Pakistan

9.1 Different Bodies of Education Planning
9.2 Process of Education Planning in Pakistan
9.3 Implementation, Monitoring and Evaluation
9.4 Different Education Policies of Pakistan
- 9.4.1 First Educational Conference (1947)
- 9.4.2 National Commission on Education (1959)
- 9.4.3 New Education Policy (1970)
- 9.4.4 Education Policy (1972)
- 9.4.5 National Education Policy (1979)
- 9.4.6 National Education Policy (1992)
- 9.4.7 National Education Policy (1998-2010)
- 9.4.8 Education Sector Reforms

9.5 Five-year Development Plans for Education
Seventh Five Year Plan (1988
Eighth Five
Ninth Five Year Plan (1998)

Unit-10: Seminars on Educational planning and Management

Recommended Readings

1. Bush, T. (2015) *Theories of educational leadership and management.* London: Sage.
2. Hargreaves, A., & Fink, D. (2012). *Sustainable leadership* (Vol. 6). NY: John Wiley & Sons.

Suggested Readings

1. Coleman, M., & Briggs, A. R. (Eds.). (2012). *Research methods in educational leadership and management.* London: Sage.
2. Government of Pakistan, (2017) *The ninth five year plan 2017.* Islamabad: Planning Commission
3. Norton, M. S., Webb, L. D., Dlugosh, L. L., & Sybouts, W. (1996). *The school superintendency: New responsibilities, new leadership*. MA: Allyn & Bacon Publishing.
4. Rumble, G. (2019). *The planning and management of distance education.* NY: Routledge.

EDUC-7112 Organizational Theory and Behavior in Education 4(4+0)

Organizational behaviour studies organizations from multiple viewpoints, including behaviour within the organization and in relation to other organizations. It helps people building better relationship achieving organizational and social objectives. It covers a wide array of human resource like behaviour, training and development, change management, leadership, teams etc. It brings coordination which is the essence of management. Organizational behaviour is the study of how individuals and groups act within the confines of a larger system. Managing human resources effectively has become the key challenge to compete. Managers must understand and be able to apply innovative techniques to better manage their human resources. This is why the study and application of organizational theory and behaviour becomes so important. The purpose of one part of this course is to provide a strong conceptual framework for studying, understanding, and applying theory and practice of organization behaviour, while the other portion explores the nature of organizational behaviour. This course on organization theory and behaviour thus provides knowledge that helps people understand, diagnose, and respond to emerging organizational needs and problems of our educational institutions.

Objectives

After the completion of this course the trainee teachers would be able to:

- Understand and narrate the basic concepts and principles of organizational theory
- Recognize organizational phenomena that can be analyzed and interpreted in the light of the concepts and principles of organizational theory
- Review and evaluate the specific organizational conditions
- Understand and analyze organizational behavior of employees in work place conditions
- Comprehend and characterize effective leadership traits and behaviors in prevailing work place/organization conditions.

Contents

Unit-1: Organization and Organization Theory

1.1 Theory defined and described
1.2 Organization theory in action
1.3 Organization as a system
1.4 Dimensions of organization design: Structural and contextual dimensions
1.5 Evaluation of organization theory and design
1.6 Two major perspectives on educational organizations
  1.6.1 Bureaucratic view
  1.6.2 Human resource development view
1.7 The role of organizational theory and design: need and importance

Unit-2: Strategy, Organization Design and Effectiveness

2.1 Introduction: Basic concepts
2.2 The management strategies: New directions
2.3 Organizational purpose
2.4 Organizational effectiveness
2.5 Organizational strategies and design
2.6 Contingency effectiveness approaches
2.7 Balanced effectiveness approaches

Unit-3: The External Environment

3.1 Introduction: Basic concepts
3.2 Organizational ecosystems
3.3 Resource dependence

3.4 Collaborative networks
3.5 Population ecology
3.6 Institutionalism

Unit-4: Fundamentals of Organization Structure

4.1 Organizational structures: Basic concepts
4.2 Centralization and decentralization
4.3 Organizational design: Alternatives
4.4 Flat and tall (i.e. Horizontal and vertical) structures
4.5 Hybrid structure
4.6 Matrix structure
4.7 Departmentalization
4.8 Information processing perspectives on structure
4.9 Functional, divisional and geographical designs

Unit-5: Organization Technology, Size and Life Cycle

5.1 Introduction: Basic concepts
5.2 Information technology revolution
5.3 Strategic use of information technology
5.4 New options for organizational design and knowledge management
5.5 Organization size: Is bigger better or not?
5.6 Organizational life cycle
5.7 Organizational bureaucracy and control

Unit-6: Organizational Behavior

6.1 Introduction: Basic concepts
6.2 The history, nature and scope of organization behavior

Unit-7: Group Dynamics and Social Influence

7.1 The nature of groups: Types of groups
7.2 The dynamics of informal and formal groups
7.3 Positive and negative attributes of committees
7.4 Teams in the work place

Unit-8: Organizational Culture and Climate

8.1 The nature of organizational culture and climate Definition and characteristics
8.2 Uniformity of culture
8.3 Strong and weak types of culture
8.4 Creating and maintaining a positive culture
8.5 Desired and undesired characteristics of organizational climate

Unit-9: Innovation, Change and Development

9.1 Basic concepts: what is meant by change and innovation?
9.2 Levels and degrees of organizational change and development
9.3 Analyzing resistance to change
9.4 What is organizational development?
9.5 Situations appropriate for organizational development
9.6 A framework for describing and analyzing OD program

Unit-10: Communication

10.1 The definitions of communication
10.2 Communication models
10.3 Communication flow
10.4 Communication network
10.5 Communication skills
10.6 Barriers to effective communication

10.7 Communication technology
10.8 Communication in the computerized information age
10.9 Non -verbal communication and interpersonal communication

Unit-11: Occupational Stress

11.1 Meaning, definition and background of stress
11.2 The causes of stress and stressors
11.3 The effects of occupational stress
11.4 Coping strategies for stress
11.5 Managing occupational stress: Different strategies

Recommended Readings

1. Daft, R. L. (2015). *Organization theory and design*. Wadsworth CA: Cengage learning.
2. Robbins, S. P., & Judge, T. (2012). *Essentials of organizational behavior*. Upper Saddle River, NJ: Prentice Hall.

Suggested Readings

1. Daft, R. L., Murphy, J., & Willmott, H. (2010). *Organization theory and design*. Wadsworth CA: Cengage learning EMEA.
2. Jones, G. R. (2013). *Organizational theory, design, and change.* Upper Saddle River, NJ: Pearson.
3. Scandura, T. A. (2017). *Essentials of organizational behavior: An evidence-based approach*. Thousand Oaks, CA: Sage publications.
4. Timothy, J. & Robins, S. P. (2017). *Organizational behavior (5th ed.).* Boston: Pearson.

EDUC-7113 Human Resource Management in Education 4(4+0)

The general purpose of the human resource management in any educational organisation is to attract, develop, retain, and motivate personnel in order to achieve the institution's mission. This course illustrates that human resource management is more than just accepting employment applications and keeping records. It is a central organizational activity of increasing complexity and importance to institutional improvement. Scholars are to be made able to broaden their vision in theoretical foundations and to envision the implications of human resource management practices in educational institutions/departments successfully. Major objectives of this course are: to understand management framework of human resources and organizational development; to identify best practices, tools and models to implement an effective HRM; to develop a human resource plan and design a valid recruitment and selection system; to develop and implement a performance evaluation system; and to assess training needs of the various stakeholders in the educational ladder.

Objectives

After studying the course, the students will be able to:

- Understand the management framework of human resources and organizational development
- Identify best practices, tools and models to implement an effective HRM
- Develop a human resource plan and design a valid recruitment and selection system
- Develop and implement a performance evaluation system
- Assess training needs of the various stakeholders in the educational ladder

Contents

Unit-1: Human Resource Management (HRM): An Overview

1.1 The Origins of HRM
1.2 Aims of HRM
1.3 The Driving Forces for HRM
1.4 Issues of HRM

Unit-2: HRM Framework

2.1 A Productive Workforce
  2.2.1 Service delivery
  2.2.2 Clarity of responsibilities
  2.2.3 Organization of work
  2.2.4 Employment strategies
2.2 An Enabling Work Environment
  2.3.1 Supportive culture
  2.3.2 Respect for the individual
  2.3.3 Communication
  2.3.4 Well-being and safety
2.3 A Sustainable Workforce
  2.4.1 Human resources planning and analysis
  2.4.2 Learning and development
  2.4.3 Workload management
  2.4.4 Compensation

Unit-3: Models and Theories of HRMs

3.1 Harvard Model
3.2 Michigan Model
3.3 Human Resource Competencies Model
3.4 Diagnostic Approach Model
3.5 Training and Development Approach Model
3.6 Multiple Role Model

3.7 Sustainable Career Development Model
3.8 Integrated Performance Management Model
3.9 Other Models

Unit-4: Human Resources Planning

4.1 Origin and Evolution
4.2 Analyzing and Designing Job
4.3 Job analysis (collecting and analyzing job information)
4.4 Job description and personnel specifications
4.5 Recruitment
4.6 Source of recruitment
4.7 Planning for recruitment
4.8 Selection
4.9 Selection strategies
  4.9.1 Selection process
  4.9.2 Assessing the selection process
  4.9.3 Validity and reliability of selection methods
4.10 Placement and Separation
4.11 Promotion and Transfer

Unit-5: Performance Appraisal

5.1 Objectives of Performance Appraisal
5.2 Process of Performance Appraisal
5.3 Improving the Process of Appraisal
5.4 Developing a Performance Appraisal System
5.5 Performance Criteria
5.6 Benefits of Performance Appraisal
5.7 Pitfalls, Constraints
5.8 New Trends in Performance Appraisal Systems

Unit-6: Human Resource Development

6.1 Orientation, Training and Development
6.2 Training Evaluation
6.3 Approaches of Evaluation
6.4 Training the Trainers
6.5 Developing Effective Training Programme

Unit-7: Maintaining Effective Relationships

7.1 HRM communication
7.2 Labor Relations
7.3 Labor Unions
7.4 Conflicts
7.5 Conflict Resolution
7.6 HRM Skill; Negotiations

Unit-8: Seminar in Environmental Challenges in HRM

Recommended Readings

1. Armstrong, M., & Taylor, S. (2020). *Armstrong's handbook of human resource management practice*. London: Kogan Page Publishers.
2. Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2017). *Human resource management: Gaining a competitive advantage.* NY: McGraw-Hill Education.

Suggested Readings

1. Armstrong, M. (2013). *A handbook of human resource management practice*. London: Kogan Page.
2. Boxall, P., & Purcell, J. (2011). *Strategy and human resource management*. NY: Macmillan International Higher Education.
3. Dessler, G. (2014). *Human resource management*. New Dehli: Prentice-Hall.
4. Noe, R. A., *Hollenbeck*, J. R., Gerhart, B., & Wright, P. M. (2015). *Fundamentals of human resource management* (6th ed.). Boston: McGraw-Hill.

C) Educational Psychology **Credit Hours**

EDUC – 7114	Advance Educational Psychology	4(4+0)
EDUC – 7115	Cognitive Psychology	4(4+0)
EDUC – 7116	Psychological Testing	4(4+0)
EDUC – 7117	Social Psychology	4(4+0)

EDUC-7114 Advance Educational Psychology 4(4+0)

The purpose of this course of Educational Psychology is to provide M. Phil Scholars with essential background on child development, and other factors related to learning.
Successful completion of this course will develop their understanding of the psychology and dimensions of society especially how social influences affect individual and group perceptions, values, attitudes and behavior. It will also explore the insights of psychology as they apply to the educational experience. Particular emphasis will be on the contributions from several major areas and theories of psychology (development, cognition, learning and motivation) to the specific school-related issues such as classroom management and discipline, instructional techniques, individual differences and student assessment. Understanding the psychological basis of these theories will help students manage their classroom in a way that promotes learning and minimizes disruptions. It will be an effective tool for the students to be a better teacher.

Objectives:

On completion of this course M. Phil Scholars will be able to:

1. Apply the insights of psychology to issues related to learning and development
2. Understand the systems or Schools of Psychology and their bearing on Education
3. Comprehend the processes involved in students' development, thinking and learning.
4. Maintain an effective learning environment by understanding the classroom disrupting.
5. Understand the relationship between personality, intelligence, attitudes, aptitudes and student achievement.
6. Develop an awareness of important factors in behavior identifying the causes of behavior
7. Apply the knowledge in classroom setting to make the pupils learn and keep them motivated.

Contents

Unit 1: Psychology and education

- 1.1 Introduction to Educational Psychology: scope and significance
- 1.2 Teachers, teaching and Educational Psychology
- 1.3 Methods of psychology
- 1.4 Using research to understand and improve teaching and learning / Drawing conclusions from Psychological and Educational Research

Unit 2: learning theories and practice

- 2.1. The Behaviorists or Connectionists
  - 2.1.1. Classical Conditioning
  - 2.1.2. Operant Conditioning
- 2.2 Social Cognitive learning theory
- 2.3 The Humanists
- 2.4 The Cognitivists
  - 2.4.1 Jean Piaget
  - 2.4.2 Lev Vygostky
  - 2.4.3 Bruner
  - 2.4.4 Robert Gagne

Unit 3: Learning and Human intelligence

3.1 Approaches to learning
3.2 Cognition and Meta-cognition
3.3 Theories of intelligence
3.5 Intelligence testing
3.6 Learning difficulties and its management
3.7 Factors associated with learning (Ability, Capacity, Motivation, Purpose or Goals, Reward or Effect, Practice, Memory and Forgetting, Transfer of training)
3.8 Factors affecting learning (Psychological factors, Physiological Factors, Environmental Factors, Methodology of instruction, Personal Factors, Forms of Social support, Quality of tasks and challenges)

Unit 4: Human motivation, its management & teaching

4.1 Motivation
4.2 Types of motivation: Extrinsic and intrinsic motivation
4.3 Motivation theories
4.4 Drive and need theories
4.5 Cognitive theories
4.6 Common ground b/w theories
4.7 Motivation applied in education
4.8 Achievement and motivation
4.9 Expectancy

Unit 5: Personality, learning & teaching styles

5.1 Theories of personality
5.2 Psychoanalytic theories
5.3 Trait theories
5.4 Personality Measurement

Unit 6: Attitude & Aptitude development

6.1 Attitude; its characteristics
6.2 Nature & Change in Attitude
6.3 Factors responsible to Change Attitude
6.4 Attitude and Academic Performance
6.6 Aptitude
6.7 Attitude and aptitude measurement

Unit 7: **Effective classroom strategies**

7.1 Models of learning
7.2 Discovery, guided discovery, problem solving & expository methods of teaching
7.3 Behavior modification: social & academic learning
7.4 Reinforcement
7.5 Modeling
7.6 Shaping techniques
7.7 Applied behavioral methods in classroom management
7.8 Class management strategies
7.9 Exercising control
7.10 Group management strategies

Unit 8: Higher order thinking

8.1 Creativity
8.2 Thinking reasoning; General and Scientific reasoning
8.3 Problem solving; General and Domain specific

Recommended Readings

1. Ormrod, J. E. (2013). Educational Psychology: Developing Learners (8th Ed.). Pearson Education.
2. Woolfolk, A. E. (2013). *Educational Psychology : Active Learning Edition (12th ed.).* New York: Pearson.
3. Henson, K., and Eller, B. (2012). Educational Psychology for Effective Teaching. Kendall Hunt Publishing Co. www.kendallhunt.com/henson-eller

Suggested Reading

1. Santrock, J. W. (2011). *Educational psychology (5th ed.).* New York: McGraw-Hill.
2. Fennell, M. (2011). *Transforming Teaching: Connecting Professional Responsibility with Student Learning.* Commission on effective teachers and teaching. Retrieved from www.nea.org/assets/docs/Transformingteaching2012.pdf
3. Mangal, S. K. (2005). *Advanced educational psychology* (2nd ed.). New Delhi: Prentice Hall of India Private Ltd.
4. Child, D. (2004). *Psychology and the teacher (7th ed.).* New York: Continuum.
5. Feldman, R. S. (2003). *Essentials of Understanding Psychology (5th ed.).* New York: Mc-Graw Hill Companies, Inc.

EDUC-7115 Cognitive Psychology 4(4+0)

Human have brain which help him to understand the world and other fellow beings. The functions of human brain are attention, language use, memory, perception, problem solving, creativity, and thinking. These are called cognitive functions. Cognitive psychology helps in understanding the functions of man. In this way cognitive psychology plays its role in education. This course of 'cognitive psychology' will make the students able to comprehend the learning, understanding and cognitive development of learners, also in applying that knowledge to produce a conducive learning environment for the learners and conduct research to find out the new horizons of cognitive functioning of human brain.

Objectives:

On completion of this course students will be able to:

i. Comprehend the insights of cognitive psychology to the problems related to learning, understanding and cognitive development
ii. Become effective researcher and teacher by applying the knowledge of cognitive processes involved in students thinking and learning
iii. Minimize disruptions in classroom by understanding cognitive process of human mind and applying it in maintaining active learning environment
iv. Develop an awareness of important cognitive factors in brain functions e.g. memory, retrieval, reasoning, problem solving and creativity and the implication of this knowledge in classroom learning

Contents

Unit 1: Introduction to Cognitive Psychology

1.1 A definition of cognitive psychology
1.2 Cognitive Processes
1.3 Stages of cognitive processing
1.4 Approaches to the study of cognition

Unit 2: History of Cognitive Psychology

2.1 Early discussions in the Psychology of Cognition: structuralism, introspection, functionalism, pragmatism and associationism: An integrative synthesis
2.2 Early role of Psychobiology: Karl S. Lashley (location of memory), Donald Hebb (cell assemblies) & Noam Chomsky (Language acquisition device "LAD")
2.3 Expansion of Technology: Engineering and computation; Re-emergence of Cognitive Psychology after 1955; Artificial intelligence (AI)
2.4 The first cognitive psychologists
2.5 The rise and fall of behaviourism
2.6 Gestalt and schema theories

Unit 3: Research Methods in Cognitive Psychology

3.1 Goals of Research
3.2 Distinctive Research Methods: Experiments on human behavior; Psychobiological research; Self-Report, Case studies, and naturalistic observation and Computer Simulations and Artificial Intelligence

Unit 4: Computer models of information processing

4.1 The computer analogy
4.2 Computer modelling of brain function

4.3 The limited-capacity processor model

Unit 5: Cognitive neuropsychology

5.1 The structure and function of the brain; The effects of brain damage on cognition & Information storage in the brain

5.2 Minds, brains and computers: The brain as an information processing device; Top-down and bottom-up processing; Automatic and controlled processing; Conscious awareness & integrating the main approaches to cognition

Unit 6: Cognitive Process

6.1 Perception and attention: process of perception & visual system

6.1.1 The role of attention in perception

6.1.2 Disorders of perception and attention

6.2 Memory: Working memory, short- and long-term memory, Disorders of memory; amnesia

6.3 Input Processing and Encoding

6.4 Retrieval: Retrieval mechanisms in Recall and Recognition

6.5 Thinking & Disorders of thinking

6.6 Problem-Solving and creativity

6.7 Reasoning and decision making

6.8 Language & Language system

Unit 7: Theories of Cognition and Constructive Learning Environments

7.1 Piaget's cognitive developmental theory: Schema, Assimilation, Accommodation, and Equilibrium

7.2 Vygotsky's social learning theory

7.3 Neo-Piagetian cognitive theories: Bruner theory; Enactive, Iconic & Symbolic

7.4 Application of cognitive theories to models of teaching

7.4.1 Inquiry training

7.4.2 Discovery learning

7.4.3 Simulations and other modern teaching methods

Recommended Readings

1. Wright, A. J. (2014). *Conducting Psychological Assessment*. John Wiley & Sons, Inc. DOI: 10.1002/9781118001899.fmatter.
2. Robert M. Kaplan, Dennis P. Saccuzzo (2012). *Psychological Testing: Principles, Applications, and Issues*. Cengage Learning. https://books.google.com.pk/books?id=vfIKAAAAQBAJ
3. Fennell, M. (2011). *Transforming Teaching: Connecting Professional Responsibility with Student Learning.* Commission on effective teachers and teaching. Retrieved from www.nea.org/assets/docs/Transformingteaching2012.pdf

Suggested Readings

1. Sternberg, R. J. and Sternberg, K. (2009). Cognitive Psychology. (6th Ed.). Wadsworth, Cengage Learning. www.cengage.com
2. Solso, R. L. (2006). *Cognitive psychology* (6th ed.). Delhi: Dorling Kindersley licensees of Pearson Education.
3. Medin, D. L., Ross, B. H.,& Markman, A. B. (2005). *Cognitive psychology (4th* ed.). U.S.A.: John Wiley & Sons, Inc.
4. Sternberg, R. J. (2003). Cognitive Psychology. Australia: Thomson Wadsworth.

EDUC-7116 Psychological Testing 4(4+0)

Psychological testing is a field in which psychological construct(s), such as cognitive and emotional functioning, about an individual can be assessed. In using this individual performing tasks are observed and usually been prescribed beforehand, which often means scores on a test. These responses are often compiled into statistical tables that allow the evaluator to compare the behavior of the individual being tested to the responses of a norm group.

The goals of this course are to introduce students the basic issues and principles of testing and measurement in psychology and to get hands-on experience in developing and evaluating a test. Students will learn about the history of psychological testing, about sources of information about tests, the design of typical and maximum performance tests, item analysis, reliability and validity analyses, and about applied issues of testing in educational, clinical, and counseling settings. Students will be able to design and administer a pilot-version of a psychological test and to examine some of its psychometric qualities.

Objectives:

The objectives of this course are to:

i. Introduce students the basic issues and principles of testing and measurement in psychology
ii. Learn about the history of psychological testing, about sources of information about tests, the design of typical and maximum performance tests, item analysis, reliability and validity analyses
iii. Apply knowledge of psychological testing in educational, and counseling settings.
iv. Design and administer a pilot-version of a psychological test and to examine its psychometric qualities.

Contents

Unit 1: Introduction to Psychological Testing

1.1 Introduction to psychological testing,
1.2 The historical perspective
1.3 Major categories of tests, uses and users of tests,
1.4 Assumptions and Questions regarding psychological testing
1.5 Major factors and trends affecting psychological testing

Unit 2: Norms and Meaning of Test Scores

2.1. Test Norms: purpose of norms
2.2 Statistical bases of Norms
2.3 Review of statistics variables, types of scales,
2.4 Review of scores and shapes of distributions.
2.5. Norms and Types of Norms
2.6 Percentile ranks, Raw scores, Standard score, T-score, SATs, GREs,
2.7. Deviation IQR's.

Unit 3: Reliability theories

3.1. Review of statistics: correlation and prediction,
3.2. Reliability and major sources of unreliability,
3.2.1. Conceptual framework:
3.3. True score theory,
3.4. Methods of determining reliability, how high should reliability be?
3.5. Reliability and Item response theory,
3.6. Generalizability theory, factors affecting reliability
3.7. Validity basic concepts and terms, construct validity: Content validity, criterion-related validity and other forms of validity and decision theory

Unit 4: Test Theories and types of tests

4.1. Test Development and item analysis in CTT and IRT:
4.2. Types of test items, item analysis, item tryout, item statistics, item selection.
4.3. Testing
    4.3.1. Ability testing: individual tests
    4.3.2. Ability testing: Group Testing
    4.3.3. Personality Testing: Self-report personality Inventories
    4.3.4. Personality Testing: measuring Interests and Attitudes
    4.3.5. Personality testing: projective Techniques

Unit 5: Intelligence and ability testing

5.1. Intelligence testing, theories and issues; two classical theories, hierarchical Model, developmental theories, information processing and biological theories
5.2. Group differences in intelligences; difference by sex, age, SES, racial and ethnicity,
5.3. Heredity and environmental effect on intelligence
5.4. Tests of intelligence, characteristics, uses and types
5.5. individually administered tests and group tests
5.6 Tests of specific mental ability
5.7. infants and early childhood testing

Unit 6: Types of tests and issues & problems in testing

6.1. Achievement tests, test batteries, single area achievement tests
6.2. Test Bias: Why is test bias controversial?:
6.2. Test Fairness and the law, The traditional defense of testing,
6.3. licensing and certification tests
6.4. National and international tests
6.5. Non test indicators and achievement
6.6. Issues and problems in testing and suggestions for solutions of problems in testing

Unit 7: Personality testing

7.1. Personality testing; domains, classification, characteristics, uses and major inventories
7.2. Major approaches; content method, criterion keying approach, factor analysis, theory driven approach, combined approach.
7.3. Projective techniques of personality testing; uses, administration of scoring and types of projective techniques
7.4. future of projective techniques

Unit 8: Approaches in testing

8.1. Interests and Attitude Testing
8.2. Orientation to career interest testing; Strong and Kuder, traditional approach, uses of career interest tests
8.3. Basic inventories; Strong, Kuder, Self-directed search
8.4. Issues related to career interest assessment
8.5. Attitude measuring scales; Likert scales, Thurston scale, Guttmann scales, public opinion polls and consumer research etc.

Unit 9: Future of Psychological Testing

9.1. The Future of Psychological Testing
9.2. Issues shaping the field of testing,

9.3 Ethical, legal and social consideration in testing
9.4 Current trends and future trends.

Recommended Readings

1. Urbina, S. (2014). *Essentials of Psychological Testing*, (2nd Ed.). John Wiley & Sons, Inc.
2. Shultz, and Kenneth S. (2013). *Measurement Theory in Action: Case Studies and Exercises*, (2nd Ed.). Routledge. Retrieved from http://www.knetbooks.com/measurement-theory-action-case-studies/
3. Kaplan, R. M., and Saccuzzo. D. P. (2013). *Psychological Testing: Principles, Applications, and Issues.* (8th Ed.). Jon-David Hague, www.cengage.com/highered

Suggested Reading

1. Antony, M. M., and Barlow, D. H. (2010). *Handbook of assessment and treatment planning for psychological disorders*. (2nd Ed.). New York: The Guilford Press. Retrieved from www.guilford.com
2. Hogan, T.P. (2004). *Psychological Testing: A Practical Introduction*, New York: John Wiley & Sons.
3. Kaplan, R.M. and Saccuzzo, D.P. (2001) *Psychological Testing: Principles, application, and issues* (5th Ed.), Belmont: Wadsworth.

EDUC-7117 Social Psychology 4(4+0)

Societal characteristics include norms, rules, conformity, and complementary social roles of people. To understand the social characteristics of people and deal them accordingly is the main aim of the social psychology. It also helps in knowing that how and *why* people influence one another. Behaviour of people as individual and in groups and causes of that behaviour is equally important in understanding the social characteristics.

Students and teachers are from the society and have all social characteristics. Social psychology helps the teachers to deal with the students, people, and society. It also helps in understanding the social identity, attitude & its change, prejudice, social influence, and aggression. This knowledge of social psychology not only help in developing classroom environment and influencing the students to make them learn but it also helps in understanding the factors influencing the social characteristics and their role in the field of education.

Objectives:

On completion of this course students will be able to:

i. Comprehend the insights of social psychology to the problems related to learning, psycho-social and social development
ii. Become effective researcher and teacher by applying the knowledge of social aspects involved in students learning and development
iii. Minimize disruptions in classroom by establishing and maintaining an effective group learning environment
iv. Understand the relationship among personality and various psycho-social elements e.g. attitudes, prejudice, aggression, social influence etc. on group and individuals.
v. Enable the students to identify and quantify various aspects of social behaviorin cultural context.

Contents

Unit 1: Introduction of social psychology

1.1 Introduction to foundations of Social Psychology
1.2 Social psychology in new millennium: new perspectives, new methods
1.3 Difference between sociology and social psychology
1.4 Social psychology in educational context

Unit 2: Research methods in social psychology

2.1 Research Methods in Social Psychology
2.2 Systematic observation
2.3 Survey and Correlation
2.4 The experimental method
2.5 Interpreting research results

Unit 3: Understanding self and others

1.1 The Self and understanding others
1.2 Social identity: Self-Esteem, Self-Serving Biases &self-functioning, Gender role
1.3 Social cognition: representativeness, availability, automatic processing in social thoughts
1.4 Sources of error in social cognition: Negativity bias, optimistic bias, potential cost of thinking too much, counterfactual thinking & magical thinking
1.5 Language of expression: Non-verbal communication

1.6 Attribution: the understanding the causes of others' behavior, theories of attribution
1.7 Impression formation and impression management

Unit 4: Attitude and Behaviour

4.1 Attitude, change in attitude and its link with behavior
4.2 Attitude and Attitude formation
4.3 Attitude change: Persuasion, cognitive approach to persuasion
4.4 Resistance to persuasion: reactance, forewarning, selective avoidance, active defense, biased assimilation and attitude polarization

Unit 5: Prejudice and its role society

5.1 Prejudice: causes, effects and curse
5.2 Prejudice and discrimination: the face of tolerance, prejudice in action
5.3 Direct intergroup conflict, competition
5.4 Early experiences, social categorization, cognitive sources, cognitive mechanism
5.5 Techniques for countering its effects: Breaking the cycle, direct intergroup contrast, re-categorization, cognitive intervention

Unit 6: Social and pro-social behaviour

6.1 Social Influence
6.2 Changing others' behaviour: conformity: group influence in action,
6.3 Compliance: to ask something is to receive
6.4 Extreme forms of social influence: obedience, authority and intense indoctrination
6.5 Pro-social behaviour: Helping others; responding to emergence, situational factors, attraction, attribution, and pro-social model; self interest, moral integrity and moral hypocrisy.
6.6 The helpers and those who receive help

Unit 7: Aggression and its control

7.1 What is aggression
7.2 Theoretical perspectives on aggression
7.3 Determinants of human aggression: social, personal & situational
7.4 Bullying, work place violence
7.5 Prevention and control of aggression

Unit 8: Group and individuals

8.1 What is Group and individuals
8.2 Groups: what they are and how they form
8.3 Affects of groups on individual performance from social facilitation to social loafing
8.4 Coordination in groups, cooperation or conflict
8.5 Perceived fairness in groups: nature and effects
8.6 Decision making by groups: its occurrence and consequences

Recommended Readings

1. Stangor, C. (2012). Social Psychology Principles (v. 1.0). Retrieved from http://2012books.lardbucket.org/
2. DeLamater, J. D., & Myers, D. J. (2011). Social Psychology (7th ed.). Belmont, CA: Wadsworth.

3. Aronson, E., Wilson, T. D., &Akert, R. M. (2010). Social Psychology (7th ed.). Upper Saddle River, NJ: Prentice Hall.

Suggested Reading

1. Baumeister, R. F., & Bushman, B. J. (2010). Social Psychology and Human Nature (2nd ed.). Belmont, CA: Thomson/Wadsworth.
2. Crisp, R. J., & Turner, R. N. (2010). Essential Social Psychology (2nd ed.). Thousand Oaks, CA: Sage Publications.
3. Kendrick, D.T., Neuberg, S.L., &Cialdini, R.B. (2010). *Social Psychology*: Goals in Interaction (5th Ed.). Boston, MA: Pearson Education Publishing as Allyn& Bacon.
4. Tylor, S. E., Peplu, L. A., & Sears, D. O. (2006). *Social psychology*. Delhi: Pearson Education Inc.
5. Alcock, J. E., Carment, D. W., &Sadava, S. W. (2005). A Textbook of Social Psychology (6th ed). Scarborough, Ontario: Prentice-Hall Canada.
6. Baron, R. A., & Byrne, D. (2004). *Social Psychology*. New Delhi: Prentice Hall

Courses in lieu of Thesis

EDUC – 7119 Introduction to Academic Writing 3 (3+0)

The course Introduction to Academic Writing focuses on the skills and basic elements of academic writing. The aim of this course is to increase student's agency as writers by acquiring both the theoretical knowledge and practical skills necessary to produce texts for the interdisciplinary academic discourses. More specifically, students will have an opportunity to practice critical reading and writing through summarising, analysing, evaluating and synthesising ideas. Students will also learn how to engage with scholarly sources effectively and incorporate them into their own texts. The main focus will be the argumentative essay as the building block of most genres of academic writing. Basic research writing skills including: conducting research, note taking, paraphrase, summary, direct quotation, positioning, and MLA or APA style citation will be introduced. The course will place equal or greater emphasis on macro-level composition skills such as: essay structure, paragraph structure, coherence, unity; and micro-level skills such as: sentence structure, grammar, vocabulary, spelling and mechanics.

Learning Outcomes

By the end of the course, students will be able to:

- Demonstrate and apply knowledge of basic essay structure, including introduction, body and conclusion
- Employ the various stages of the writing process, including pre-writing, writing and re-writing
- Employ descriptive, narrative and expository modes
- Demonstrate ability to write for an academic audience
- Demonstrate understanding of and apply the principles of effective paragraph structure;
- Write concise sentences
- Employ quotation, paraphrase and summary
- Employ socially appropriate language
- Identify effective writing techniques in his or her own work and in peer writing.
- Employ correct MLA or APA citation style, including parenthetical, in-text citation and works-cited pages
- Evaluate sources for relevance and reliability
- Avoid plagiarism

Course Contents

Unit-1: Overview of the course and Diagnostic Writing Test

Introducing the course syllabus, aims and requirements; gauging the students' level of language proficiency

Unit-2: Writing process: pre-writing, drafting, revising

The writing process: pre-writing, organizing one's writing: outlining, proofreading & peer-editing; unity and coherence.

Unit-3: Academic Language, Style and Syntax. Paragraph structure.

Paragraph structure: theory, group practice, peer review. 4-step/unification writing task introduction

Unit-4: Reading as part of writing Reading &summarizing

Reading rhetorically, identifying text structure, logical order patterns

Unit-5: Evaluating print & online sources APA citation and referencing

Evaluating print & online sources for currency, credibility and relevancy; registering sources in APA format

Unit-6: Using evidence from sources. Referenced paragraph

Finding and evaluating from various sources; using evidence as supporting details in students' writing

Unit-7: Writing in different disciplines. Essay types: factual vs argumentative

Forms of college Writing and curricular divisions: writing in the Humanities, the Social Sciences and the Natural Sciences; overview and characteristics of definition, classification, process, comparison/contrast, cause/effect, and problem/solution logical patterns

Unit-8: Essay structure

Planning the essay: body paragraphs; paragraph sequence; transitions between paragraphs. Avoiding common errors in introductions and conclusions

Unit-9: Text Organization

Overall coherence and cohesion; choosing a logical pattern for the text structure; developing by examples

Unit-10: Arguments and Argumentation Logical fallacies in Argumentation

Strategies for argumentation and persuasion; understanding arguments: structuring arguments, engaging the opposition arguments; arguing through appeals; recognizing logical fallacies in argumentation

Unit-11: Research before Writing

Getting started: from planning research to evaluating sources; the research process: getting focused, developing a research plan; exploring information sources, creating a working bibliography; developing a note- taking system

Unit-12: Referencing Standards and Avoiding Plagiarism

Building credibility through sources use: recognizing plagiarism, understanding why plagiarism is serious, avoiding plagiarism and other source abuses; using APA style for in- text citations and references in longer texts

Unit-13: Self-Editing Strategies

The importance of proofreading; proofreading strategies for editing and revising that can improve the final draft; the importance of peer review; common language and grammar mistakes

Unit-14: Rhetorical situation and Academic Conventions

Rhetorical situation elements; basic features of academic writing; formality, efficiency, modesty, clarity; paragraph as a structural unit of academic texts; effective topic sentence

Recommended Readings

1 Bailey, S. (2017). Academic Writing: A Handbook for International Students (Vol. Fifth edition). London: Routledge. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&site=eds-live&db=edsebk&AN=1650435

2 Swales, J. M., & Feak, C. B. (2004). *Academic writing for graduate students: Essential tasks and skills*. MI: University of Michigan Press.

Suggested Readings

1 Tusting, K., McCulloch, S., Bhatt, I., Hamilton, M., & Barton, D. (2019). Academics Writing: The Dynamics of Knowledge Creation. Abingdon, Oxon: Routledge. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&site=eds-live&db=edsebk&AN=2138179

2 Strongman, L. (2013). Academic Writing. Newcastle upon Tyne: Cambridge Scholars Publishing. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&site=eds-live&db=edsebk&AN=816736

3 Craswell, G. (2004). *Writing for academic success*. Thousand Oaks: CA. SAGE.

4 Sant, T. (2003). Chapter 13: Writing Research Proposals and Proposals for Grants. In Persuasive Business Proposals (pp. 174–186). American Management Association International. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&site=eds-live&db=bsu&AN=32726071

EDUC-7120 Qualitative Research Method in Education 3 (3+0)

Qualitative research is a multi-method approach to studying social interaction and deriving meaning from individuals' experiences. This course is designed for students to understanding the characteristics, roles, importance, and ethical issues in research in education. This course will engage students in critically analyzing qualitative methodologies for studying pressing problems in education. Special emphasis will be placed on the role of conceptual frameworks in organizing various facets of qualitative inquiry, such as: articulating a researchable problem, the development of research questions, collecting/ analyzing data, creating data analytic techniques, analyzing data, considering threats to validity, and communicating findings. This course will use to help students to acquire skills in qualitative data collection and analysis methods, including use of NVivo; Develop the ability to select, justify and execute qualitative methods appropriate to central research questions.

Learning Outcomes

By the end of the course, students will be able to:

- Differentiate between quantitative and qualitative research methods.
- Identify and explain the role of paradigms and theories in research design.
- Identify the key ethical principles that structure social science research.
- Identify and describe key steps in the qualitative research design process.
- Identify and distinguish between the different approaches social scientists use to select research participants and objects.
- Develop skills around how to collect, manage, analyze, and interpret qualitative research data
- Formulate research questions and choose a qualitative research design to examine those questions
- Recognize the theoretical and practical considerations behind the range of techniques, including interviewing, focus groups, and participant observation, ethnographic field observations, and textual analysis.
- Use appropriate techniques for analyzing and reporting qualitative research.

Course Contents

Unit – 1: Introduction to Qualitative research
Unit – 2: Role of Philosophy and theory in qualitative research
Unit – 3: Qualitative Research Methodologies
Unit – 4: Data Collection Instruments and Sampling techniques
Unit – 5: Ethical considerations in qualitative research
Unit – 6: Key issues in qualitative data analysis in qualitative research.
Unit – 7: Thematic analysis; introduction to NVivo.
Unit – 8: Report writing

Recommended Readings

1. Durdella, N. (2019). Qualitative dissertation methodology: A guide for research design and methods. Thousand Oaks, CA: Sage.
2. This course draws heavily from Alan Bryman's Social Research Methods. https://bookstore.uwo.ca/textbooksearch?campus=UWO&term=W2021A&courses%5B0%5D=001_UW/SOC3307F

Suggested Readings

1. Bhattacharya, Kakali (2017). Fundamentals of Qualitative Research: A Practical Guide.
2. Flick, Uwe (2013). The SAGE Handbook of Qualitative Data Analysis.

3. Hannes, Karin and Lockwood, Craig (2011). Synthesizing Qualitative Research: Choosing the Right Approach.
4. Margolis, Eric M. and Pauwels, Luc (2011). The SAGE Handbook of Visual Research Methods.
5. Merriam, Sharan B. (2009). Qualitative Research: A Guide to Design and Implementation.
6. Tracy, Sarah J (2013). Qualitative Research Methods: Collecting Evidence, Crafting Analysis, Communicating Impact.
7. Wiles, Rose (2012). What are Qualitative Research Ethics