COURSE OUTLINE BRIEFS

DEPARTMENT OF EDUCATION

SARGODHA UNIVERSITY
Pathway to Progress

FACULTY OF SOCIAL SCIENCES

OVERVIEW

Education is not only a field of study but also a subject about teaching and learning process. Education is most relevant to Teacher Education. Education as a subject always remains important in the Faculty of Social Sciences as it prepares human capital in the field of Education as teachers, educators, educational leaders and researchers.

The Department of Education in University of Sargodha has been among the pioneer departments of the University and was established in 2003.Presently the Department is offering BEd (Hons) Elementary, BS, MA, MPhil and PhD in Education. The Department strives to contribute towards the establishment of knowledge based economy with upward social mobility. The Department aims to produce reflective, critical and professional educators and managers who are academically sound, pedagogically skilled and responsive to the needs of youth and society in regional, national and global scenario.

The Department has liaison with all federal and provincial departments of education and all the public and private sector universities in Pakistan. The Department enjoys national recognition as HEC has declared it as Regional Resource Center for Faculty Development. To improve the quality of education the Department has initiated outreach training programs for in-service school teachers belonging to both public and private sectors.

The Department has the nine PhD and seven MPhil experienced faculty members. The Faculty of the Department is vibrant in research activities and has produced more than 150 national and international publications during the last few years. The Department has achieved another milestone in 2014 by publishing its own 'Journal of Educational Sciences and Research'. The Journal has earned the recognition from HEC Pakistan.

Academic Programs Offered

1. BS Education
2. B.Ed. (Hons) Elementary
3. MA Education
4. B.Ed. (1.5 Years)
5. B.Ed. Science (1.5 Years)
6. B.Ed. ELT (1.5 Years)
7. MPhil Education
8. PhD Education

BS Education

Eligibility: At least 45% marks in intermediate or equivalent.
Duration: 04 Year Program (08 Semesters)
Degree Requirements: Minimum 132 Credit Hours

Semester I

Course Code	Course Title	Credits Hours
URCE 5101	English I	3(3+0)
EDUC-5101	Introduction to Education	3(3+0)
EDUC-5102	Instructional Methods	3(3+0)
EDUC-5103	Computer Application in Education	4 (3+0)
URCP-5106	Pakistan Studies	2 (2+0)
Specialization: Any one the following three		
EDUC-5104	Fundamentals of Language & Linguistics	3 (3+0)
EDUC-5105	History of Muslim Rule in South Asia	3 (3+0)
EDUC-5106	Physics	3 (3+0)

Semester II

URCE-5102	English II	3 (3+0)
EDUC-5107	Mathematics	3 (3+0)
EDUC-5108	General Science	3 (3+0)
EDUC-5109	Education in Pakistan	3 (3+0)
URCI-5105	Islamic Studies	2 (2+0)
URCC-5110	Citizenship Education and Community Engagement	3 (1+2) Non-Credit
Specialization: Any one the following three		
EDUC-5110	Language Skill	3 (3+0)
EDUC-5111	Geography	3 (3+0)
EDUC-5112	Chemistry	3 (3+0)

Semester III

URCE-5103	English III	3(3+0)
EDUC-5113	Educational Technology & ICT	3(3+0)
EDUC-5114	Philosophy of Education	3(3+0)
EDUC-5115	Teaching of History & Geography (Professional I)	4(4+0)
EDUC-5116	Educational Psychology	3(3+0)
	Specialization: Any one the following three	
EDUC-5117	Computer Assisted Language Learning	3(3+0)
EDUC-5118	Development Studies	3 (3+0)
EDUC-5119	Biology	3 (3+0)

Semester IV

UECE-5104	English IV	3 (3+0)
EDUC-5120	Teaching of General Science (Professional II)	4 (4+0)
EDUC-5121	Teaching of English Language (Professional III)	4 (4+0)
EDUC-5122	Curriculum Development	3 (3+0)
EDUC-5123	Comparative Education	3 (3+0)

Semester V

EDUC-6124	Critical Thinking & Reflective Practices	3 (3+0)
EDUC-6125	Teaching of Mathematics (Professional IV)	4 (4+0)
EDUC-6126	Teaching Practice-I	6 (0+6)
	Specialization: Any one of the following three	
EDUC-6127	Second Language Acquisition	3 (3+0)
EDUC-6128	Human Rights Education	3 (3+0)
EDUC-6129	Computer Science	3 (3+0)

Semester VI

EDUC-6130	Economics and Financing of Education	3 (3+0)
EDUC-6131	Guidance and Counseling	3 (3+0)
EDUC-6132	Educational Assessment and Evaluation	3 (3+0)
EDUC-6133	Sociology of Education	3 (3+0)
EDUC-6134	Research Methods in Education	3 (3+0)
EDUC-6135	Educational Planning and Management	3 (3+0)

Semester VII

EDUC-6136	Statistics and Data Analysis	3 (3+0)
EDUC-6137	Inclusive Education	3 (3+0)
EDUC-6138	Teaching Practice II	9 (0+9)

Note: Second phase of teaching practice will start in 7th semester. This phase covers 09 credits in total. In this phase students will teach in schools. After teaching practice students will join the department and attend reflective sessions. Students will reflect upon their observations and experiences during teaching practice.

Semester VIII

EDUC-6139	Area I: Organizational Behavior	3 (3+0)
EDUC-6140	Area I: Human Resource Management	3 (3+0)
	OR	
EDUC-6141	Area II: Qualitative Research Methods in Education	3 (3+0)
EDUC-6142	Area II: Analysis and Interpretation of Data	3 (3+0)
	AND	
EDUC-6143	Thesis	6 (0+6)
	OR	
EDUC-6144	Term Paper	3 (3+0)
EDUC-6145	Seminar on Trends and Issues in Education	3 (3+0)

Thesis is compulsory for Students in groups.

B.Ed. (Hons.) (Elementary) 4 Years Degree Program

Eligibility: At least 45% marks in intermediate or equivalent.

Duration: 4 Years

Semesters: 8

Degree Requirements: Minimum 133 Credit Hours

Semester – I

Course Code	Course Title	Credits Hours
URCE-5101	Functional English-I (Compulsory)	3 (3+0)
URCI-5105	Islamic Studies/ Ethics (Compulsory)	2 (2+0)
EDUC-5201	Child Development (Foundation)	3 (3+0)
EDUC-5202	Urdu / Regional Languages (Content)	3 (3+0)
EDUC-5203	General Science (Content)	3 (3+0)
EDUC-5204	Methods of Teaching (Foundation)	3 (3+0)

Semester – II

Course Code	Course Title	Credits Hours
URCE-5102	English-II (Communication Skills	3 (3+0)
ICTC-5201	Computer Literacy (Compulsory)	3 (3+0)
EDUC-5205	Classroom Management (Foundation)	3 (3+0)
URCM-5207	General Mathematics (Compulsory)	3 (3+0)
URCP-5106	Pakistan Studies (Compulsory)	2 (2+0)
EDUC-5206	Methods of Teaching Islamic Studies	3 (3+0)
URCC-5110	Citizenship Education and Community Engagement	3 (1+2) Non-credit

Semester III

Course Code	Course Title	Credits Hours
EDUC-5207	Teaching Literacy Skills (Professional)	3 (3+0)
EDUC-5208	Art, Crafts and Calligraphy (Content)	3 (3+0)
EDUC-5209	Teaching of Urdu/Regional Languages (Professional)	3 (3+0)
EDUC-5210	Teaching of General Science (Professional)	3 (3+0)
EDUC-5211	Information and Communication Technology in Education	2 (2+0)
EDUC-5212	Teaching Practice (Short Term)	3 (0+3)

Semester – IV

Course Code	Course Title	Credits Hours
EDUC-5213	Classroom Assessment (Foundation)	3 (3+0)
EDUC-5214	Teaching of English (Professional)	3 (3+0)
EDUC-5215	Teaching of Mathematics (Professional)	3 (3+0)
EDUC-5216	School, community and Teacher	3 (2+1)
EDUC-5217	Teaching of Social Studies (Professional)	2 (2+0)
EDUC-5218	Teaching Practice	3 (0+3)

Semester – V

URCE-5103	English – III (Technical Writing & Presentation Skills) (Compulsory)	3 (3+0)
EDUC-6219	Foundations of Education (Foundation)	3 (3+0)
EDUC-6220	Content Course – I (from selected discipline)	3 (3+0)
EDUC-6221	Content Course – I (from selected discipline)	3 (3+0)
EDUC-6222	Curriculum Development (Foundation)	3 (3+0)
EDUC-6223	Educational Psychology (Foundation)	3 (3+0)

Semester – VI

EDUC-6224	Contemporary Issues and Trends in Education	3 (3+0)
EDUC-6225	Content Course – II (from selected discipline)	2 (2+0)
EDUC-6226	Content Course – II (from selected discipline)	3 (3+0)
EDUC-6227	Comparative Education (Professional)	3 (3+0)
EDUC-6228	Introduction to Guidance and Counseling (Professional)	3 (3+0)

Semester VII

EDUC-6229	Content Course – III (from selected discipline)	3 (3+0)
EDUC-6230	Content Course – III (from selected discipline)	3 (3+0)
EDUC-6231	Pedagogy – I (Methods of Teachings related to content area)	3 (3+0)
EDUC-6232	Pedagogy – II (Methods of teaching related to content area)	3 (3+0)
EDUC-6233	Research Methods in Education	3 (3+0)
EDUC-6234	Teaching Practice (Short Term)	3 (0+3)

Semester VIII

EDUC-6235	School Management (Professional)	3 (3+0)
EDUC-6236	Test Development and Evaluation	3 (3+0)
EDUC-6237	Teaching Practice (Long Term)	6 (0+6)
EDUC-6238	Research Project (Professional)	3 (3+0)

MA Education

Eligibility: Graduation or equivalent with minimum second division (45% marks)
Duration: 2 Years
Semester: 4
Degree Requirements: Minimum 68 Credit Hours

Semester I

Course Code	Course Title	Credit Hours
EDUC-6301	Introduction to Education	3(3+0)
EDUC-6302	Communication Skills in English	3(3+0)
EDUC-6303	Educational Psychology	3(3+0)
EDUC-6304	Computer Applications in Education	3(3+0)
EDUC-6305	Education in Pakistan	3(3+0)
EDUC-6306	Sociology of Education	3(3+0)

Semester II

Course Code	Course Title	Credit Hours
EDUC-6307	Educational Assessment and Evaluation	3(3+0)
EDUC-6308	Teaching Strategies and Educational Technology	4(4+0)
EDUC-6309	Research Methods in Education	3(3+0)
EDUC-6310	Teaching of English Language (Elective course I compulsory)	4(4+0)
EDUC-6311	Curriculum Development	3(3+0)

Semester III

Course Code	Course Title	Credit Hours
EDUC-6312	Educational Planning and Management	3(3+0)
EDUC-63xx	Elective course II (to be opted)	4(4+0)
EDUC-63xx	Area Course I (to be opted)	3(3+0)
EDUC-6313	Thesis (optional)	6(6+0)
(students who will not opt thesis will have to take following two courses)		
EDUC-6314	Institutional Improvement	3(3+0)
EDUC-6315	Seminars on Trends and Issues in Education	3(3+0)

Semester IV

Course Code	Course Title	Credit Hours
EDUC-6316	Child Development and Learning	3(3+0)
EDUC-6317	Comparative Education	3(3+0)
EDUC-63xx	Area course II (to be opted)	3(3+0)
EDUC-6318	Teaching Practice	8(0+8)

Elective Courses in Areas of Teaching Specialization
(a) Compulsory Course
Following course is compulsory for all students:

EDUC-6310	Teaching of English Language	4(4+0)

(b) Elective Courses

Students will elect ONE of the courses given below:

EDUC-6319	Teaching of Social studies	4(4+0)
EDUC-6320	Teaching of Mathematics	4(4+0)
EDUC-6321	Teaching of General Science	4(4+0)
EDUC-6322	Teaching of Physics	4(4+0)
EDUC-6323	Teaching of Chemistry	4(4+0)
EDUC-6324	Teaching of Biology	4(4+0)

(c) Areas of Specialization in Education:

Area-I: Educational Leadership and Management		
EDUC-6325	Organizational Behavior	3(3+0)
EDUC-6326	Economics & Financing of education	3(3+0)
EDUC-6327	Human Resource Management	3(3+0)
Area -II: Educational Research		
EDUC-6328	Qualitative Research Methods in Education	3(3+0)
EDUC-6329	Designing & Reporting Research in Education	3(3+0)
EDUC-6330	Analysis and Interpretation of Data	3(3+0)

(d)Teaching Practice

EDUC-6318	Teaching Practice	8(0+8)

B.Ed. (1.5 Years)

Eligibility: 16 Years of Education (Academic discipline other than education) with minimum second division
Duration: 1.5 Years
Semester: 3
Degree Requirements: Minimum 54 Credit Hours

Semester-1

Course Code	Course Title	Credit Hours
EDUC-6401	General Methods of Teaching	3(3+0)
EDUC-6402	Educational Assessment and Evaluation	3(3+0)
EDUC-6403	Curriculum Development	3(3+0)
EDUC-6404	Research Methods in Education	3(3+0)
EDUC-6405	Educational Leadership and Management	3(3+0)
EDUC-6406	Educational Psychology	3(3+0)

Semester-2

EDUC-6407	Philosophy of Education	3(3+0)
EDUC-6408	Critical Thinking and Reflective Practices	3(3+0)
EDUC-64xx	Teaching Specialization (Elective Course)	3(3+0)
EDUC-64xx	Area of Specialization (Course-I)	3(3+0)
EDUC-64xx	Area of Specialization (Course-II)	3(3+0)
EDUC-64xx	Area of Specialization (Course-III)	3(3+0)

Semester-3

EDUC-6409	Human Development and Learning	3(3+0)
EDUC-6410	Information and Communication Technology (ICT) in Education	3(3+0)
EDUC-6411	Teaching Practice I	6(0+6)
EDUC-6412	Teaching Practice II	6(0+6)

Teaching Specialization
(Elective Courses)
Only one of the following elective courses relevant to the subject area of the student may be opted.

EDUC-6413	Teaching of Social Studies	3(3+0)
EDUC-6414	Teaching of General Science	3(3+0)
EDUC-6415	Teaching of Physics	3(3+0)
EDUC-6416	Teaching of Chemistry	3(3+0)
EDUC-6417	Teaching of Biology	3(3+0)
EDUC-6418	Teaching of Mathematics	3(3+0)
EDUC-6419	Teaching of English Language	3(3+0)
EDUC-6420	Teaching of Urdu	3(3+0)

Area of Specification

Student will opt any one area of specialization from the following two areas

Area-I	Leadership and Management	
EDUC-6421	Educational Administration and Supervision	3(3+0)
EDUC-6422	Organizational Behaviour	3(3+0)
EDUC-6423	Instructional Leadership	3(3+0)
Area-II	Science Education	
EDUC-6424	Foundation of Science Education	3(3+0)
EDUC-6425	Assessment and Evaluation in Science Education	3(3+0)
EDUC-6426	Comparative Science Education	3(3+0)

B. Ed (1.5 Years) Specialization in Science Education

Eligibility: 16 Years of Education (Academic discipline other than education) with minimum second division
Duration: 1.5 Years
Semester: 3
Degree Requirements: Minimum 54 Credit Hours

Semester – I

Course Code	Course Title	Credits Hours
EDUC-6601	Foundations of Science Education	3(3+0)
EDUC-6602	Curriculum Development in Science Education	3(3+0)
EDUC-6603	Assessment in Science Education	3(3+0)
EDUC-6604	Leadership in Science Education	3(3+0)
EDUC-6605	Research Methods in Science Education	3(3+0)
EDUC-6606	Educational Psychology	3(3+0)

Semester – II

Course Code	Course Title	Credits Hours
EDUC-6607	Sociology of Education	3(3+0)
EDUC-6608	Statistics in Science Education	3(3+0)
EDUC-6609	Professionalism in Science Teaching	3(3+0)
EDUC-6610	Teaching strategies in Science Education	3(3+0)
EDUC-6611	ICT in Science Education	3(3+0)
EDUC-6612	Critical Thinking and Reflective Practices	3(3+0)

Semester – III

Course Code	Course Title	Credits Hours
EDUC-6613	Laboratory Organization and Management	3(3+0)
EDUC-6614	Academic Writing	3(3+0)
EDUC-6615	Teaching Practice (9+3 = 12)	12(0+12)

B.Ed. 1.5 Year Program (Specialization in ELT)

Eligibility: 16 years of Education; MA / BS in English in Minimum Second Division (in annual system) or Minimum CGPA 2.00 (in semester system).

Duration: 1.5 Years

Semester: 3

Degree Requirements: Minimum 54 Credit Hours

Semester-1

Course Code	Course Title	Credit Hours
EDUC-6501	Philosophy of Language Teaching	3(3+0)
EDUC-6502	Curriculum Development in ELT	3(3+0)
EDUC-6503	Assessment in ELT	3(3+0)
EDUC-6504	Educational Leadership	3(3+0)
EDUC-6505	Research Methods in ELT	3(3+0)
EDUC-6506	Educational Psychology	3(3+0)

Semester-2

Course Code	Course Title	Credit Hours
EDUC-6507	Teaching of Oral Skills	3(3+0)
EDUC-6508	Teaching of English Pronunciation	3(3+0)
EDUC-6509	Professionalism in Teacher Education in Pakistan	3(3+0)
EDUC-6510	Computer Assisted Language Learning (CALL)	3(3+0)
EDUC-6511	Academic Writing Skill	3(3+0)
EDUC-6512	Language Teaching Methods and Approaches	3(3+0)

Semester-3

Course Code	Course Title	Credit Hours
EDUC-6513	Trends and Issues in English Language Teaching	3(3+0)
EDUC-6514	Classroom Management and Micro-Teaching	3(3+0)
EDUC-6515	Teaching Practice for ELT	12(0+12)

MPhil Education

Eligibility: MA/ BEd (hons)/ BS 4-Years in Education (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.

Duration: 02 Year Program (04 Semesters)

Degree Requirements: 30 Credit Hours

Core Courses in Semester-1

Course Code	Course Title	Credit Hours
EDUC-7101	Research Methods in Education	3(3+0)
EDUC-7102	Statistics in Education	3(3+0)
EDUC-7103	Instrument Development and Data Analysis	3(3+0)
EDUC-7104	Policy Studies	3(3+0)

Optional Courses in Semester-2 (Select any one area of specialization)

Option I-Educational Assessment and Evaluation (select any three courses)

EDUC-7105	Assessment and Evaluation	4(4+0)
EDUC-7106	Test Theories and Design	4(4+0)
EDUC-7107	Test Construction and Standardization	4(4+0)
EDUC-7108	Seminar on Issues and Trends in Assessment	4(4+0)

Option II -Educational Planning and Management (select any three courses)

EDUC-7109	Instructional Leadership and Supervision	4(4+0)
EDUC-7110	Educational Planning and Management	4(4+0)
EDUC-7111	Organizational Theory and Behavior in Education	4(4+0)
EDUC-7112	Human Resource Management in Education	4(4+0)

Semester 3-4

EDUC-7113	Dissertation	6(0+6)

PhD Education

Eligibility: MPhil/MS Education or equivalent qualification in the relevant field from HEC recognized institution with at least CGPA 3.00 out of 4.00.

Duration: 03 Year Program (06 Semesters)

Degree Requirements: 18 Credit Hours Course Work + Dissertation

Semester-1

Course Code	Course Title	Credit Hours
EDUC-8101	Philosophical Paradigms of Education	3(3+0)
EDUC-8102	Advanced Research Methods	3(3+0)
EDUC-8103	Contemporary Trends in Education	3(3+0)

Semester-2

Course Code	Course Title	Credit Hours
EDUC-8104	Topical Seminar on Research Designs	3(3+0)
	Note: Scholars will select any two from the following courses	
EDUC-8105	Comparative Education	3(3+0)
EDUC-8106	Theories and Models of Curriculum Development	3(3+0)
EDUC-8107	Advanced Educational Psychology	3(3+0)
EDUC-8108	Teacher Education	3(3+0)
EDUC-8109	Advanced Educational Assessment and Evaluation Procedure	3(3+0)

Semester 3-4

EDUC-8110	Dissertation	

- Admission Test: As per policy of the University of Sargodha under the guidelines of HEC
- Rules and regulations: For assessment, promotion and comprehensive examination rules and regulations framed by the University of Sargodha relating to PhD are applicable.

URCE-5101   **ENGLISH I**   **3(3+0)**

The course introduces the students to the underlying rules to acquire and use language in academic context. The course aims at developing grammatical competence of the learners to use grammatical structures in context in order to make the experience of learning English more meaningful enabling the students to meet their real-life communication needs. The objectives of the course are to, reinforce the basics of grammar, understand the basic meaningful units of language, and introduce the functional aspects of grammatical categories and to comprehend language use by practically working on the grammatical aspects of language in academic settings. After studying the course, students would be able to use the language efficiently in academic and real-life situations and integrate the basic language skills in speaking and writing. The students would be able to work in a competitive environment at higher education level to cater with the long-term learners' needs.

Contents
1. Parts of speech
2. Noun and its types
3. Pronoun and its types
4. Adjective and its types
5. Verb and its types
6. Adverb and its types
7. Prepositions and its types
8. Conjunction and its types
9. Phrases and its different types
10. Clauses and its different types
11. Sentence, parts of sentence and types of sentence
12. Synthesis of sentence
13. Conditional sentences
14. Voices
15. Narration
16. Punctuation
17. Common grammatical errors and their corrections

Recommended Texts
1. Eastwood, J. (2011). *A Basic English grammar*. Oxford: Oxford University Press.
2. Swan, M. (2018). *Practical English usage* (8th ed.). Oxford: Oxford University Press.

Suggested Readings
1. Thomson, A. J., & Martinet, A. V. (1986). *A practical English grammar*. Oxford: Oxford University Press
2. Biber, D., Johansson, S., Leech, G., Conrad, S., Finegan, E., & Quirk, R. (1999). *Longman grammar of spoken and written English*. Harlow Essex: MIT Press.
3. Hunston, S., & Francis, G. (2000). *Pattern grammar: A corpus-driven approach to the lexicalgrammar of English*. Amsterdam: John Benjamins.

The purpose of this course is to examine the evolution of education in the Pakistan with a view to the ideological, philosophical and psychological foundations, historical trends, government involvement, and pedagogical movements. The course will focus on the introduction of basic concepts in education and the Ideological, Philosophical and Psychological foundations of education. The major focus will be on developing an understanding of the education and major terminologies. The course will also throw light on guidance and counseling as an essential component of education. Through this course emphasis will be given on analyzing various sociological, political, economic and ideological forces that influence the process of education in our cultural context. This course will also be used to develop the ability in prospective teachers to interpret knowledge with its historical, philosophical, ideological and social context, which will lead to produce critical aspects of education both within and outside the school. This course will also explore vital issues across all levels including teacher preparation, education theory, and role of society and community in education process.

Contents

1. Introduction to Education
2. Types and Modes of Education
3. Functions of Education
4. Elements of Education
5. Foundations of Education
6. Aims of Education and Curriculum
7. Society, Community and Education
8. Guidance and Counseling in Education
9. Learning and Methods of Learning
10. Education in Pakistan: Pre and Post-Independence
11. Structure of Education in Pakistan
12. Management of Education in Pakistan
13. Statistical Overview of Education in Pakistan

Recommended Texts

1. ASER-Pakistan (2019). *Annual Status of Education Report 2018*. Islamabad: Idara Taleem-O-Agahi

2. Bartlett, S., Burton, D. (2016). *Introduction to Education Studies. NY:* SAGE Publications Ltd.

Suggested Readings

1. Semel, S. F. (2018). *Foundations of Education: the Essentials text*. USA: Routledge
2. Shami, P. A. (2015). *Introduction to education*. Lahore: Ilmi Book House.
3. UNESCO (2007). *The Education System in Pakistan: Assessment of the National Education Census*. Retrieved from http://unesco.org.pk/education/documents/publications/The%20Education%20system%20in%20pakistan.pdf

EDUC-5102   **Instructional Methods**   **3 (3+0)**

This course is designed to help future teachers put instructional theory into practice. It will provide an integrated coverage of methods of classroom instruction, management and assessment. This course is designed to provide students with an opportunity to study, reflect, question, become knowledgeable about, and develop skills in selection and organization of instructional method. The course contains several lessons to include: selection of methods and materials, selection of lesson content, organizing content for effective learning, presenting lessons, and analyzing effectiveness of instruction. This course provides help to students in demonstrate the procedures and principles required for the planning and preparation of units of instruction, demonstrate the procedures and principles required to deliver the instructional process and analyze the teaching process in order to improve your own and others' instructional abilities. Different instructional models will provide the framework for acquiring skills in developing instruction to meet the needs of an increasingly diverse student population.

Contents

1. Introduction
2. Role of teacher for conducive learning Environment
3. Personal and Professional characteristics of an effective teacher
4. The concept of Teaching Methods, Strategies and Techniques
5. Lesson Planning in teaching
6. Steps in Lesson Planning
7. Pedagogy by Level
8. Inquiry Method
9. Activity Methods & cooperative learning
10. Demonstration Method
11. Discussion Method
12. Student Motivation
13. Teaching Skills
14. Teaching Tools

Recommended Texts

1. Arends, R. I. (2016) *Learning to Teach (7th ed.).* Boston: McGraw Hill International.
2. Borich, G. D. (1996). *Effective teaching methods*. New York: Practice- Hall

Suggested Readings

1. Allen, M. (2009). *Motivating Students Who Don't Care: Successful Techniques for Educators*. Amazon.com
2. Ellington, H., Percival, F. and Race, P. (2015). *Handbook of Educational Technology (3rd ed.)*. London: Kogan Page Limited.
3. Morrison, G., Ross, S. & Kemp, J. (2013). *Designing Effective Instruction (7th ed.)*. John Wiley & Sons, Inc. Hoboken, NJ. ISBN: 978-1-118-35999-0.

The purpose of this introductory course provides prospective teachers with the opportunity to gain an insight into the theory of the computer, practice using computer operating systems and its application in the field of teacher education. Prospective teachers will actively explore the fundamental concepts, knowledge, skills, and attitudes for applying technology in educational settings. They use graphic design applications, spreadsheets and the Internet. Students practice using command keys and formatting material for ease of reading and learn to use Microsoft Word, Excel and PowerPoint to create presentations, spreadsheets and text documents. They will also learn to develop skills like collaboration, higher-order thinking, problem solving, and self-direction through effective use of technology tools and resources, thus enabling them to be lifelong learners in the twenty-first century. They can communicate through computer with friends, and teachers in and outside the country and will be able to use computer for research, data analysis and presentations.

Contents

1. Fundamentals of Computer
2. Introduction to computer system and data processing
3. Types of Computer
4. Uses of computer in Education
5. Classification of computer
6. Computer networks
7. Windows operating system
8. Features of Windows
9. Word Processor
10. Spread sheet
11. Designing Presentations
12. Scheduling and Maintaining Personal Information
13. Searching for Information

Recommended Texts

1. Vermaat, M. E., Sebok, S. L., Frydenberg, M., & Campbell, J. T. (2016). *Enhanced Discovering Computers© 2017, Essentials*. Nelson Education.
2. Bucki, LA. (2014). *Teach Yourself Visually Microsoft Power Point 2007,* Canada: Willey Publishing, Inc.

Suggested Readings

1. Shelly, G.B & Vermaat, M.E. (2014). *Discovering Computers 2010: Living in Digital World Fundamental* (6th Ed.). US: Cangage Learning,inc
2. Sinha, P. K., & Sinha, P. (2010). *Computer fundamentals*. Delhi: BPB publications.
3. Lowe, D. (2015). *Networking all in one for Dummies (4th ed.).*Canada: Willy Publishing.

URCP-5106   **Pakistan Studies**   **2(2+0)**

The purpose of this course is to acquaint the students of BS Programs with the rationale of the creation of Pakistan. The students would be apprised of the emergence, growth and development of Muslim nationalism in South Asia and the struggle for freedom, which eventually led to the establishment of Pakistan. While highlighting the main objectives of national life, the course explains further the socio-economic, political and cultural aspects of Pakistan's endeavors to develop and progress in the contemporary world. For this purpose, the foreign policy objectives and Pakistan's foreign relations with neighboring and other countries are also included. This curriculum has been developed to help students analyze the socio-political problems of Pakistan while highlighting various phases of its history before and after the partition and to develop a vision in them to become knowledgeable citizens of their homeland. It enables students to identify various perspectives on current, persistent and controversial issues in Pakistan; identify their own position and be able to support it.

Contents

1. Contextualizing Pakistan Studies
2. Geography of Pakistan: Geo-Strategic Importance of Pakistan
3. Freedom Movement (1857-1947)
4. Pakistan Movement (1940-47)
5. Muslim Nationalism in South Asia
6. Two Nations Theory
7. Ideology of Pakistan
8. Initial Problems of Pakistan
9. Political and Constitutional Developments in Pakistan
10. Economy of Pakistan: Problems and Prospects

Recommended Texts

1. Kazimi, M. R. (2007). *Pakistan studies.* Karachi: Oxford University Press.
2. Sheikh, Javed Ahmad (2004). *Pakistan's political economic and diplomatic dynamics.* Lahore: Kitabistan Paper Products.

Suggested Readings

1. Hayat, Sikandar (2016). *Aspects of Pakistan movement.* Islamabad: National Institute of Historical and Cultural Research.
2. Kazimi, M. R (2009). *A concise history of Pakistan.* Karachi: Oxford University Press.
3. Talbot, Ian (1998). *Pakistan: A modern history.* London: Hurst and Company.

EDUC-5104　　　Specialization-I　　Fundamentals of Language & Linguistics　　3(3+0)

The purpose of this course is to provide the awareness to the students about the origins of European languages, branches of Linguistics; their introduction and relationship of language with society and culture. This course is designed to introduce students to general concepts of language & linguistics. The course is organized in a 'bottom up' fashion from smallest to largest segments of language by starting with an Introductory to Language, moving through Sound, Word, and ending with Sentence. Aspects of language origin & design will be examined as well as cross-linguistic language typologies. This introductory language course is primarily designed to allow students to gain a sufficient amount of 'Explicit' (conscious) Knowledge of Language and Linguistics and to provide students with the tools necessary for understanding language structure and will also enable students to identify patterns and systems in language and develop tools of analysis with which to examine language.

Contents

1. Meaning and Nature of Language
2. Functions of language
3. Classification of languages
4. Phonetics
5. Phonology: Distinctive feature, Phonological rules
6. Morphology
7. Syntax: Syntactic rules and sentence structure, Syntactic categories,
8. Word classes and word order.
9. Semantics and Pragmatics
10. Language, Society and Culture: Slang and Jargon, Taboos and Euphemism, Lingua Frances
11. Second Language Acquisition
12. Applied Linguistics
13. Relationship between theoretical linguistics and applied linguistics
14. Role of linguist in language teaching, Contrastive Analysis

Recommended Texts

1. Barber, C. L. (2018). *The Story of Language*. London: Pan.
2. Yule, G. (2016). *The study of language* (6th Ed.)*.* Cambridge: Cambridge University Press.

Suggested Readings

1. Crystal, D. (2015). *What is Linguistics*? London: Edward Arnold
2. H. G. (2015). *Linguistics*.Oxford: Oxford University Press
3. Radford, A, et al. (2012). *Linguistics: An introduction.* Cambridge: Cambridge University Press.

EDUC-5105   **Specialization-II   History of Muslim Rule in South Asia**   **3(3+0)**

The purpose of this course is to help prospective teachers to gain a foundational perspective of history of Muslim rule in South Asia. The present course describes the geographical, political, social religious and economic conditions of South Asia. This course is about to know the development and functioning of societies, polities, institutions, and thought in South Asia, when the bulk of the subcontinent was under Muslim rulers. This course covers the period from the establishment of Turkish rule in Delhi until the colonial takeover (ca. 1200-1800), and includes the Delhi Sultanates, Mughal Empire, the transition to British rule and their contemporaries. Whereas traditional historiography tends to focus on the history of the Indo-Gangetic Plains, this module expands the scope to include the subcontinent as a whole, examining the developments and responses to political change beyond this core region. This course will also help to identify the causes of Arab invasion and its political, cultural, religious and social impacts.

Contents

1. South Asia on the eve of Arab Conquest
2. Arab Muslim Conquers ~ Sultan Mahmud of Ghazna ~ Ghaznavides at Lahore: Sultan Shahab-ud-Din Muhammad Ghori
3. Ilburi Turk: Sultan Qutbuddin Aibak, Sultan Shams-ud-Din Iltutumish
4. Khilji Dynasty: Significance of Khalji Revolution,
5. Feroz khalji and his character
6. Sultan Alaudding Khalji, his reforms and conquests
7. Deccan policy
8. Malik Kafur, Qutbuddin Mubarik and end of the Khalji Dynasty.
9. Tughluq Dynasty: Ghiassuddin Tughluq; his administration and character: Muhammad bin Tughluq: his character and personality, mixture of two extremes, his plans and their failure, out-break of rebellions, his Decan policy. Sultan Feroz Shah Tughluq, his Timur's invasion, End of Tughluq dynasty
10. Sayyids: Khizar Khan: Character and achievements
11. Lodhis: Sikandar Lodhi: his administration and religious policy
12. Ibrahim Lodhi and end of the Delhi Sultanate.
13. Mughals: History and Development of Mughals
14. Fall of Mughals

Recommended Texts
1. lkram, S.M. (2018). *History of Muslim Civilization in India and Pakistan*. New York: Columbia University Press.

Suggested Readings
1. Habibullah, A.B.M. (2016). *The Foundation of Muslim Rule in India*. Dhakka: Allahabad Central Book Depot.
2. Abdul Qadir, (2015). *History of Indo-Pak*. Lahore: Haque Brothers.
3. Haig, W. (2015). *The Cambridge History of India*. Cambridge: Cambridge University Press.
4. Qurashi, I. H. (2015). *The Administration of the sultanate of Delhi*. Lahore: Sh. Muhammad Ashraf.

EDUC-5106　　　　**Specialization-III**　　　　**Physics**　　　　　　　　**3(3+0)**

Physics falls under a broader category of Science. Science is divided into three areas namely Biology, Physics and Chemistry. The main objective of these subjects is to study and try to understand the universe and everything in it. Physics is the branch of science which deals with matter and its relation to energy. It involves study of physical and natural phenomena around us. Examples of these phenomena are formation of rainbow, occurrence eclipse, the fall of things from up to down, the cause of sunset and sunrise, formation of shadow and many more. Advances in physics often enable advances in new technologies. For example, advances in the understanding of electromagnetism, solid-state physics, and nuclear physics led directly to the development of new products that have dramatically transformed modern-day society. After reading this course students would be aware of the basic concepts involved in Physics and make them able to apply the concepts of physics in daily life.

Content
1. Physical quantities and measurement
2. Kinematics
3. Dynamics
4. Turning effect of forces
5. Gravitation
6. Work and Energy
7. Properties of matter
8. Transfer of heat
9. Simple harmonic motion and waves
10. Sound
11. Geometrical optics
12. Electrostatics
13. Current electricity
14. Atomic and nuclear physics

Recommended Texts

1. Sang, D., Jones, G., Woodside, R., & Chadha, G. (2020). Cambridge International AS and A Level *Physics*. Retrieved from www.cambridge.org/education

Suggested Readings

1. Horner, M. et al (2017). *Grade 12 physical sciences*. Siyavula Education. Retrieved from http://creativecommons.org/licenses/by-nd/3.0/
2. Seng, T. K. (2016). *O' Level Physics Topical Revision Notes*. Singapore: Shinglee Publishers Pte Ltd. Retrieved from http://www.shinglee.com.sg
3. Punjab textbook Board (2019). *Physics for class 9th & 10th*. Lahore: Punjab Textbook Board

The course aims at developing linguistic competence by focusing on basic language skills in integration to make the use of language in context. It also aims at developing students' skills in reading and reading comprehension of written texts in various contexts. The course also provides assistance in developing students' vocabulary building skills as well as their critical thinking skills. The contents of the course are designed on the basis of these language skills: listening skills, pronunciation skills, comprehension skills and presentation skills. The course provides practice in accurate pronunciation, stress and intonation patterns and critical listening skills for different contexts. The students require a grasp of English language to comprehend texts as organic whole, to interact with reasonable ease in structured situations, and to comprehend and construct academic discourse. The course objectives are to enhance students' language skill management capacity, to comprehend text(s) in context, to respond to language in context, and to write structured response(s).

Contents

1. Listening skills
2. Listening to isolated sentences and speech extracts
3. Managing listening and overcoming barriers to listening
4. Expressing opinions (debating current events) and oral synthesis of thoughts and ideas
5. Pronunciation skills
6. Recognizing phonemes, phonemic symbols and syllables, pronouncing words correctly
7. Understanding and practicing stress patterns and intonation patterns in simple sentences
8. Comprehension skills
9. Readings strategies, summarizing, sequencing, inference, comparing and contrasting
10. Drawing conclusions, self-questioning, problem-solving, relating background knowledge
11. Distinguishing between fact and opinion, finding the main idea, and supporting details
12. Text organizational patterns, investigating implied ideas, purpose and tone of the text
13. Critical reading, SQ3R method

Recommended Texts

1 Mikulecky, B. S., & Jeffries, L. (2007). *Advanced reading power: Extensive reading, vocabulary building, comprehension skills, reading faster*. New York: Pearson.
2 Helgesen, M., & Brown, S. (2004). *Active listening: Building skills for understanding*. Cambridge: Cambridge University Press.

Suggested Readings

1 Roach, C. A., & Wyatt, N. (1988). *Successful listening*. New York: Harper & Row.
2 Horowitz, R., & Samuels, S. J. (1987). *Comprehending oral and written language*. San Diego: Academic Press.

EDUC-5107   **Mathematics**   **3(3+0)**

The purpose of this course is to help prospective teachers to gain a foundational perspective of mathematics. This course is designed for students who plan to major in elementary education and ultimately become teachers. The present course explores practical and daily life exploration of mathematics. This course will provide students with a thorough and rigorous foundation in arithmetic operations and problem solving. Prospective teachers will achieve a deeper and more meaningful understanding of the underlying structure of elementary mathematics and they learn to communicate the nuance of mathematics to an elementary level audience. The focus in this class is on developing a deeper understanding as to why the operations in arithmetic work as they do, and using these operations to develop algorithms and models for use in problem solving. Prospective students will be expected to make reasoned and rigorous mathematical arguments with a strong emphasis on communicating mathematical ideas in written and verbal form.

Contents

1. Introduction to Mathematics
2. Sets and Functions
3. System of Real Numbers, Exponents and Radicals
4. Exponents and Logarithms
5. Factorization, Algebraic Expression, Manipulations and Applications
6. Matrices
7. Fundamentals of Geometry, practical and Theoretical Geometry
8. Ratios & proportions
9. Basic Statistics
10. Trigonometry
11. Zakat, Ushr, Inheritance & Business mathematics
12. Linear equations and inequalities
13. Areas and Volumes

Recommended Texts

1. Punjab textbook Board (2019). *Mathematics for class 7th*.Lahore: Punjab textbook Board.
2. Punjab textbook Board (2019). *Mathematics for class 8th*. Lahore: Punjab textbook Board.

Suggested Readings

1. Punjab textbook Board (2019). *Mathematics for class 9th & 10th*. Lahore: Punjab textbook Board.
2. Smith, K. J. (2016). *Nature of mathematics*. USA: Cengage Learning.
3. Jourdain, P. E. (2018). *The nature of mathematics*. England: Courier Corporation.

EDUC-5108   **General Science**   **3(3+0)**

The purpose of this course is to increase prospective teachers understanding of basic scientific concepts. This course used to heighten student awareness of scientific issues affecting their lives and increase their interest in science. This course is designed to introduce prospective teachers to the concepts and practical applications of the physical sciences, so that they will become an informed citizen in an increasingly science and technology based society. The present course explores scientific method and its application in everyday life. The current course explores the various aspects of general science field in order to develop scientific vocabulary and enhance prospective teachers' comprehension of written scientific material from a variety of sources to increase ability to solve scientific problems and to enhance scientific inquiry skills through conducting scientific experiments and participating in hands on activities. This course will also enable students to apply appropriate methods and techniques for effective learning in Science.

Contents

1. Scientific Method
2. Matter and Forces
3. Elements and Compounds
4. Mixtures and Solutions
5. Molecular structure
6. Motion (Force, Speed, Velocity and Acceleration)
7. Equation of motion, Laws of Motion
8. Energy: Energy and Work, Types of Energy and Law of conversation of energy
9. Heat and Light: Measurement of Heat and its units, Sources and Reflection of Light,
10. Total internal reflection, Lenses, mirror and image formation, Measurement of Heat and its units
11. Structure of Cell: Structure of animal and plant cell, Cell division and Cell Theory
12. Human Systems
13. Metals and Non- Metals: Difference between metals and non-metals
14. Alloys, Gases and their Preparation, Hydrogen, Nitrogen and Halogens

Recommended Texts

1. Punjab Text Book Board (2019). *General Science IX & X*. Lahore: Punjab textbook Board.
2. Agha Khan University Examination Board (2002). *General Science IX- X (based on National Curriculum 2002).* Karachi: AGKEB

Suggested Readings

1. DeBoer, G. (2019). *A history of ideas in science education*. New York: Teachers College Press.
2. Pearl, J., & Mackenzie, D. (2018). *The book of why: the new science of cause and effect*. New York: Basic Books.
3. William, L. E. (2012). *The teaching of general science*, Chicago: The University of Chicago Press.

EDUC-5109   **Education in Pakistan**   **3(3+0)**

This course is designed to develop prospective teachers' awareness and understanding of education in Pakistan. Prospective teachers will develop their knowledge about different aspects of development of education keeping in view different aspects of development of education. Keeping in view different stages like preprimary education, elementary education, secondary education and higher education. In this process current policy and programs will also be studied. Teacher educator will ensure that different components of education like management etc, and statistical awareness, major issues and challenges are also taken into consideration. At the end of this course the students will be able to; understand schooling structure at different levels in Pakistan, decipher the nature and purpose of education in the pre and post-independence period, delineate the historic roots and subsequent development of pre service teacher education in Pakistan, evaluate education in Pakistan in the light of current educational policy, critically analyze educational development at different levels of education i.e. preprimary education, primary education, secondary education and evaluate the issues and challenges in higher education.

Content

1. Structure of Education
2. Religious Education
3. Technical and Vocational Education
4. Administration of Education and Decentralization
5. Management
6. Curriculum wing
7. Ministry of Education

Recommended Texts

1. Asian Development Bank (2019). School Education in Pakistan: A Sector Assessment. DOI: http://dx.doi.org/10.22617/TCS190039
2. John, S. Brubacher (2000). *Modern Philosophies of Education,* New Delhi: TATA McGraw Hill Publication Co.

Suggested Readings

1. Azeem, A. M., & Ismat, H. I. (2016). *Education and Development of Pakistan*: A Study of Current Situation of Education and Literacy in Pakistan. doi: 10.17265/2161-6248/2016.11.003
2. Shami, P. A. (2011) *Education in Pakistan*. Urdu Print.

URCI-5105   **Islamic Studies**   **2(2+0)**

Islamic Studies engages in the study of Islam as a textual tradition inscribed in the fundamental sources of Islam; Qur'an and Hadith, history and particular cultural contexts. The area seeks to provide an introduction to and a specialization in Islam through a large variety of expressions (literary, poetic, social, and political) and through a variety of methods (literary criticism, hermeneutics, history, sociology, and anthropology). It offers opportunities to get fully introductory foundational bases of Islam in fields that include Qur'anic studies, Hadith and Seerah of Prophet Muhammad (PBUH), Islamic philosophy, and Islamic law, culture and theology through the textual study of Qur'an and Sunnah.. Islamic Studies is the academic study of Islam and Islamic culture. It majorly comprises of the importance of life and that after death. It is one of the best systems of education, which makes an ethical groomed person with the qualities which he/she should have as a human being. The basic sources of the Islamic Studies are the Holy Qur'an and Sunnah or Hadith of the Holy Prophet Muhammadﷺ. The learning of the Qur'an and Sunnah guides the Muslims to live peacefully.

Contents

1. مطالعہ قرآن (تعارف قرآن، سورۃ البقرہ، سورۃ الحجرات، سورۃ الفرقان، سورۃ المومنون، سورۃ الانعام، سورۃ الصف ترجمہ و تفسیر)

2. معالعہ حدیث (متن حدیث ترجمہ و تشریح)

3. سیرت النبی ﷺ (مطالعہ سیرت کی ضرورت و اہمیت، تعمیر سیرت و شخصیت کا نبوی منہاج، اقامت دین، میثاق مدینہ، خطبہ حجۃ الوداع، اخلاقی تعلیمات)

4. اسلامی تہذیب و تمدن (اسلامی تہذیب کے ارکان و بنیادیں، خصوصیات، اسلامی تہذیب کے فکری، علمی، معاشرتی اور ساجی اثرات، عصری تہذیبی کشمکش اور اسلامی تہذیب، تہذیبی تصادم کے اثرات و نتائج)

1. Introduction to Qur'anic Studies
2. Basic Concepts of Qur'an
3. History of Quran
4. Uloom-ul-Quran
5. Basic Concepts of Hadith
6. History of Hadith
7. Kinds of Hadith
8. Uloom –ul-Hadith
9. Sunnah & Hadith
10. Legal Position of Sunnah
11. Islamic Culture & Civilization
12. Basic Concepts of Islamic Culture & Civilization
13. Historical Development of Islamic Culture & Civilization
14. Comparative Religions and Contemporary Issues

Recommend Texts

1. Zia-ul-Haq, Muhammad, Dr, (2001). *Introduction to Al Sharia Al Islamia*, Lahore: Aziz Publication.
2. Ahmad Hasan, (1993). *Principles of Islamic Jurisprudence,* India: Adam Publishers.

Suggested Readings

1. Hameed ullah Muhammad, (1957), *Introduction to Islam*, Lahore: Sh M Ashraf Publisher.
2. Hameed ullah Muhammad, (1980), *Emergence of Islam*, India: Adam Publisher.
3. Noor,M. F. (2009) *Islamiat for students of O' Levels, Ferozsons*, Encyclopedia of the Qur'an, (PVT) Limited.

URCC-5110　　　　**Citizenship Education and Community Engagement**　　　　**3 (1+2)**

In recent years, community engagement has become a central dimension of governance as well as policy development and service delivery. However, efforts to directly involve citizens in policy processes have been bedeviled by crude understandings of the issues involved, and by poor selection of techniques for engaging citizens. This course will provide a critical interrogation of the central conceptual issues as well as an examination of how to design a program of effective community engagement. This course begins by asking: Why involve citizens in planning and policymaking? This leads to an examination of the politics of planning, conceptualizations of "community" and, to the tension between local and professional knowledge in policy making. This course will also analyze different types of citizen engagement and examine how to design a program of public participation for policy making. Approaches to evaluating community engagement programs will also be a component of the course. Moreover, in order to secure the future of a society, citizens must train younger generations in civic engagement and participation. Citizenship education is education that provides the background knowledge necessary to create an ongoing stream of new citizens participating and engaging with the creation of a civilized society.

Contents

1. Introduction to Citizenship Education and Community Engagement: Orientation
2. Introduction to Active Citizenship: Overview of the ideas, Concepts, Philosophy and Skills
3. Identity, Culture and Social Harmony: Concepts and Development of Identity
4. Components of Culture and Social Harmony, Cultural & Religious Diversity
5. Multi-cultural society and inter-cultural dialogue: bridging the differences, promoting harmony
6. Significance of diversity and its impact, Importance and domains of inter-cultural harmony
7. Active Citizen: Locally active, Globally connected
8. Importance of active citizenship at national and global level
9. Understanding community, Identification of resources (human, natural and others)
10. Human rights, Constitutionalism and citizens' responsibilities: Introduction to human rights
11. Universalism vs relativism, Human rights in constitution of Pakistan
12. Public duties and responsibilities
13. Social Issues in Pakistan: Introduction to the concept of social problem, Causes and solutions
14. Social Issues in Pakistan (Poverty, Equal and Equitable access of resources, unemployment)
15. Social Issues in Pakistan (Agricultural problems, terrorism & militancy, governance issues)
16. Social action and project: Introduction and planning of social action project
17. Identification of problem, Ethical considerations related to project
18. Assessment of existing resources

Recommended Texts

1　Kennedy, J. K., & Brunold, A. (2016). *Regional context and citizenship education in Asia and Europe*. New York: Routledge Falmer.
2　Macionis, J. J., & Gerber, M. L. (2010). *Sociology*. New York: Pearson Education

Suggested Readings

1　British Council. (2017). *Active citizen's social action projects guide.* Scotland: British Council
2　Larsen, K. A., Sewpaul, V., & Hole, G. O. (Eds.). (2013). *Participation in community work: International perspectives.* New York: Routledge

EDUC-5110   **Specialization-I**   **Language Skills**   **3(3+0)**

This course emphasizes the fundamental language skills of reading, writing, speaking, listening, thinking, viewing and presenting. An emphasis on vocabulary and composition skills will be an on-going part of the program. The development of critical reading and writing skills is a major emphasis of the course. This course aims to enable the students to utilize English as a language of oral and written communication. This can only be possible through the integration of four language skills; listening, speaking, reading and writing. As students of Department of Education are trained to become teachers in the public and private sector schools, it is important to teach them in such a manner that they not only learn to practice language skills but also teach the skills to the students in their future professional career. To fulfill the purpose, students will be exposed to different approaches and methods of teaching language skills. They will also be assigned topics for presentations so that they can practice all four language skills during preparation and presentation of the topics.

Contents

1. Readings Skill
2. Types of Readings
3. Techniques for reading
4. Readings comprehension and summarizing
5. Approaches to teaching reading
6. Increasing Readings speed
7. Faulty reading habits
8. Listening Skill
9. Types of Listening
10. Productive Skills (Writing and Speaking)
11. Writing Skill
12. Creative and Imaginative writing
13. Report Writing
14. Speaking skill
15. Problem solving exercises

Recommended Texts

1. Broughton, G., Brumfit, C., Flavell, R., Hill, P., & Pincas, A. (2018). *Teaching English as a foreign language*, England: Routledge & Kegan Paul Ltd.
2. Bright, J.A. & Piggot, R. (2015). *Handwriting*. Cambridge: CUP

Suggested Readings

1. Richards, J.C. (2015). *Communicative Language Teaching Today*. Singapore: RELC.
2. Swan, M. (2015). *Practical English Usage*. Oxford: OUP.
3. John, H. (2017). *Introduction to English language Teaching*. NY: Longman.

EDUC-5111 **Specialization-II** **Geography** **3(3+0)**

The purpose of this course is to equip prospective teachers with knowledge of geography of Pakistan, soil formation and environmental challenges in the region. The course will cover a series of major themes of geographic enquiry. The dynamic nature of the physical environment will provide a foundation on which the human/cultural landscape has evolved. Specific areas of investigation will focus on an explanation of the parameters of geography: the role of maps and mapmakers: an awareness of some of the major forces of physical processes and resulting topography: a review of the dynamics of the atmosphere and subsequent climate types: the impact of population growth: and case studies that take an in depth look into a series of issues in economic, political, urban, and cultural geography. Students will explore the Earth's physical systems with an emphasis on weather and climate, water, ecosystems, geologic processes and landform development.

Contents

1. Physiographic: Western Highlands, The Indus Plains
2. Climate: climate and weather, climatic elements
3. Climatic zones, the seasons, temperature, rainfall
4. Effects of the climate on the lives and economic activates in different regions
5. Soil: factors of soil formation in Pakistan
6. Soil classification
7. Soil erosion
8. Environmental challenges: topographic constrains, climatic constrains, floods, desertification, earthquakes,
9. Population growth and recourses, salinity and water logging, urban growth and environmental problems, air pollution, water pollution
10. Population, growth and distribution
11. The growth of population, urbanization, distribution of urban places, distribution of rural places
12. Population composition: age compositions, labor force, languages, literacy, religion
13. Natural sources of economy: fishing, forests
14. Agricultural problems and solutions, crops and livestock, minerals and power resources
15. Industries foreign trade transportation

Recommended Texts

1. Punjab Text Book Board (2018). *Curriculum for Geography grades vi -viii.* Lahore: Punjab Text Book Board
2. Sit, V. (2002). *Integrated geography*. Hong Kong: Longman.

Suggested Readings

1. Khan, F.K. (2016). *Geography of Pakistan*. England: Oxford University Press.
2. Castree. N, et al. (2015). *A companion to environmental geography. Hong Kong: SNP Best-set Typesetter Ltd*. Retrieved from https://www.uv.mx/personal/fpanico/files/2011/04/AA.-VV.-
3. San, W. H. (2012). *Understanding Geography*, Hong Kong: Longman

EDUC-5112   **Specialization-III**   **Chemistry**   **3(3+0)**

Chemistry is the branch of science concerned with the substances of which matter is composed, the investigation of their properties and reactions, and the use of such reactions to form new substances. Chemistry is sometimes called "the central science," because it bridges physics with other natural sciences, such as geology and biology. Sub-domains of chemistry include: analytical chemistry, biochemistry, inorganic chemistry, organic chemistry, physical chemistry, and biophysical chemistry. Chemistry has the power to explain innumerable phenomena in the world, from the ordinary to the bizarre. Understanding chemistry is the key to understanding the world as we know it. Chemistry is the study of literally everything around us – the liquids that we drink, the gasses we breathe, the composition of everything from the plastic case on your phone to the earth beneath your feet. Moreover, chemistry is the study of the transformation of matter. After reading this course students would be aware of the concepts involved in chemistry, and make students able to apply the concepts of chemistry in daily life.

Content

1. Introduction to Chemistry
2. A brief history of Chemistry
3. Chemistry and Society
4. Branches of Chemistry
5. The Scientific Approach in Chemistry
6. Atomic Structure
7. Fundamentals of particles of an atom
8. Periodicity of Elements
9. Chemical Bonding
10. Electrochemistry
11. Acids, Bases and Salts
12. Hydrocarbons
13. Water
14. Chemical industries

Recommended Book:

1. Nicholls, L., Page, A., & Berry, S. (2020*). Cambridge International AS & A Level Chemistry Students' Book.* www.cambridge.org/education
2. Punjab textbook Board (2019). *Chemistry 9th*. Lahore: Punjab textbook Board.

Suggested Books:

1. Paul Flowers, P. et al. (2019*). Chemistry* 2e, England: OpenStax.
2. Allcock, H. R. (2019*). Introduction to Materials Chemistry*. (2nd Ed.), US: Willy E-book

Academic writing is a formal, structured and sophisticated writing to fulfill the requirements for a particular field of study. The course aims at providing understanding of writer's goal of writing (i.e. clear, organized and effective content) and to use that understanding and awareness for academic reading and writing. The objectives of the course are to make the students acquire and master the academic writing skills. The course would enable the students to develop argumentative writing techniques. The students would be able to the content logically to add specific details on the topics such as facts, examples and statistical or numerical values. The course will also provide insight to convey the knowledge and ideas in objective and persuasive manner. Furthermore, the course will also enhance the students' understanding of ethical considerations in writing academic assignments and topics including citation, plagiarism, formatting and referencing the sources as well as the technical aspects involved in referencing.

Contents

1   Academic vocabulary
2   Quoting, summarizing and paraphrasing texts
3   Process of academic writing
4   Developing argument
5   Rhetoric: persuasion and identification
6   Elements of rhetoric: Text, author, audience, purposes, setting
7   Sentence structure: Accuracy, variation, appropriateness, and conciseness
8   Appropriate use of active and passive voice
9   Paragraph and essay writing
10 Organization and structure of paragraph and essay
11 Logical reasoning
12 Transitional devices (word, phrase and expressions)
13 Development of ideas in writing
14 Styles of documentation (MLA and APA)
15 In-text citations
16 Plagiarism and strategies for avoiding it

Recommended Texts

1   Swales, J. M., & Feak, C. B. (2012). *Academic writing for graduate students: Essential tasks and skills* (3rd Ed.). Ann Arbor: The University of Michigan Press.
2   Bailey, S. (2011). *Academic writing: A handbook for international students* (3rd ed.). New York: Routledge.

Suggested Readings

1   Craswell, G. (2004). *Writing for academic success*. London: SAGE.
2   Johnson-Sheehan, R. (2019). *Writing today*. Don Mills: Pearson.
3   Silvia, P. J. (2019). *How to write a lot: A practical guide to productive academic writing*. Washington: American Psychological Association.

The purpose of this course is to provide help the students, understand, use, and apply a range of Information Communications Technologies (ICTs) such as computers and the Internet, other audio and video equipment, mobile phones, and online resources and tools as part of the teaching and learning process. This course will focus on how technology promotes, supports, and enhances all of these core components. The focus of this course is to provide with the knowledge and skills regarding how ICTs can be used to engage students in the learning process, improve understanding of content as well as instructional and assessment practices, and enhance communication and collaboration in the classroom. The course focuses on teaching with technology. Technology in this course largely means computers/laptops, though instruction is largely similar whether a teacher is using a laptop or cell phone and how technology can support content knowledge, instruction, assessment, and collaboration.

Contents

1. Introduction of Educational Technology and ICT
2. Origin of Educational Technology
3. History of Educational Technology
4. Types of Educational Technologies, Media and Their Uses in Learning Process
5. Components of Educational Technology
6. Classification of AV aids
7. Current types of the educational technology systems and their application
8. Teleconferencing
9. Personal Digital assistants (PADAs)
10. Laboratory and workshop instructions
11. Planning and implementation for effective technology integration in
12. Integrating Technology into the Curriculum and Instruction
13. Media and Teaching

Recommended Texts

1. Huang R., Spector J.M., Yang J. (2019). *Educational Technology. Lecture Notes in Educational Technology*. Springer, Singapore.https://link.springer.com/book/10.1007/978-981-13-6643-7
2. Huang, R. J., Spector, M., & Yang, J. (2019). *Educational Technology*. Springer Nature Singapore PTE Ltd. DOI: https://doi.org/10.1007/978-981-13-6643-7

Suggested Readings

1. Joyce, B., Weil, M., Calhoun, E. (2014). *Models of Teaching (9th Ed.),* New York*:* Pearson, ISBN 0133749304
2. Laurillard, D. (2013). *Teaching as a design science: Building pedagogical patterns for learning and technology*. New York: Routledge.
3. Feden, P. D. and Vogel, R. M. (2003). *Methods of teaching*. Boston: Mc-Graw Hill

EDUC-5114　　　　　　　　　**Philosophy of Education**　　　　　　　　　**3(3+0)**

The purpose of this course is to gain philosophical perspective of theory and practice which help the prospective teachers to relate their educational experiences with different western philosophies as well as philosophical thoughts of Muslim philosophers. Philosophy revolves around logic and conceptual analysis. This course will provide students with an opportunity to consider a variety of educational issues from a philosophical perspective. The course will explore general questions such as: What is the ultimate goal of education? How is education different from social indoctrination? Should education limit itself to imparting literacy, numeracy, and various kinds of skill and information, or should teachers also strive to influence the character and values of their students? In addition to these, various specific topics of current interest in the philosophy of education may be explored, such as: academic freedom; access to education; social and moral values, the ethics of education; religious values in individual and social life.

Contents

1. Philosophy: Definition and scope of Philosophy
2. Metaphysics ,Epistemology, Axiology, Logic: Deductive and Inductive
3. Western Philosophies of Education
4. Idealism: Its metaphysics, epistemology, axiology, educational implications. Proponents: Plato.
5. Realism: Its metaphysics, epistemology, axiology, educational implications. Proponents: Aquinas, Aristotle, Bacon, Locke.
6. Naturalism: Its metaphysics, epistemology, and axiology, educational implications Proponents: Rousseau.
7. Pragmatism (Experimentalism: Its metaphysics, epistemology, axiology, educational implications. Proponents: Dewey
8. Postmodernism: Its metaphysics, epistemology, axiology, educational implications.
9. Proponents: Derrida, Foucault.
10. Muslim Philosophical Pattern on Education
11. Theories of Education- Progressivism (rooted in pragmatism): Aims, Curriculum, and Educational Implications. Proponents: Dewey, Kilpatrick, Parker, Washburne.
12. Critical Theory rooted in neo Marxism and postmodernism): Aims, Curriculum, and Educational Implications. Proponents: McLaren, Giroux.
13. Perennialism (rooted in realism): Aims, Curriculum, and Educational Implications. Proponents: Adler, Bloom, Hutchins, Maritain.
14. Essentialism (rooted in idealism and realism): Aims, Curriculum, Educational implications. Proponents: Bagley,Bestor, Conant, Mor.
15. Role of Values in Education

Recommended Texts

1. Ornstein, Allan C. (2016). *Foundations of Education*. New York: Houghton Mifflin Company
2. Shami, P. (2015). *Educational Philosophy*. (Ed.). Sargodha: Ghazali Publisher..

Suggested Readings

1. Gutek, Gerald L. (2015). *Philosophical and Ideological Perspectives on Education, 2nd ed*. Boston, Allyn and Bacon.
2. Dewey, John. (1916). *The Child and the Curriculum*. New York: Macmillan
3. Arthur Zilversmith (1993). *Changing Schools: Progressive Education Theory and Practice, 1030- 1960*. Chicago: University of Chicago Press.

EDUC-5115   **Teaching of History & Geography**   **3(3+0)**

The purpose of this course outlines the nature of geographical concepts and the enquiry approach, and explains their significance in geographical learning. Teaching of history & geography is the integrated, coordinated and systematic study drawing upon disciplines of social sciences such as history, anthropology, economics, political science and sociology in relation to Pakistan. This course explains modes of creativity and the stages of the 'creative' process in geographical teaching and learning. This course will identify and explore some of the key issues around teaching geography in elementary and secondary schools. Through coming to understand these issues and debates, students will reflect on and develop practice as a geography teacher and develop a greater awareness of the wider context of geography education and how this affects geography in the elementary and secondary school curriculum. This course enables prospective teachers to teach the content effectively in the classroom by using appropriate teaching strategies and methods in history & geography.

Contents

1. Human settlements
2. Indus valley civilization
3. The Aryan Era
4. Socio-cultural development
5. Foundation and Socio-cultural state of Mughals
6. Earth as a planet: Globe, maps and their uses
7. Land features of Pakistan, Temperature of atmosphere
8. Agriculture
9. World population
10. Teaching of History & Geography: Use of A.V-aids in teaching history and geography
11. Lesson Planning
12. Imparting instruction
13. Expository method
14. Laboratorial or practical method
15. Demonstration, Discussion method, Problem solving method, Project method, Discovery and inquiry method, Activity based teaching

Recommended Texts

1. Punjab Text Book Board (2018). *Curriculum for Geography grades vi -viii.* Lahore: Punjab Text Book Board.
2. Mass, P. (2015) .*Oxford history for Pakistan* (book, I.II and III). Oxford: OUP.

Suggested Readings

1. Sit, V. (2016). *Integrated geography: Book -1, 2 and 3. (2nd Ed.)* Hong Kong: Longman. Hong Kong Education.
2. Smith, M. (Ed.). (2015). *Teaching of geography in secondary schools*. London: The Open University Press.
3. San, W.S., et al (2016). *Understanding geography.* (Book 1 &2). Singapore: Kogan Page

EDUC-5116   **Educational Psychology**   **3(3+0)**

Educational psychology both draws from and contributes to cognitive science and the learning sciences. Educational psychology has seen rapid growth and development as a profession in the last twenty years. Educational psychology has been built upon theories of operant conditioning, functionalism, structuralism, constructivism, humanistic psychology, Gestalt psychology, and information processing. Teaching and learning in which individuals had to think about individual differences, assessment, development, the nature of a subject being taught, problem solving, and transfer of learning was the beginning to the field of educational psychology. The course is designed to make students aware of how to bridge the gap between theory and practice. In other words, how they can use various concepts of educational psychology to improve their learning and teaching skills. It provides the study of learners and learning contexts both within and beyond traditional classrooms and evaluates ways in which factors such as age, culture, gender, and physical and social environments influence human learning. The course is intended to improve the reading, writing and communication skills of students.

Contents

1. Introduction
2. Learning and Instruction
3. Educational psychology and teaching
4. Objectives for learning
5. Mastery learning
6. Direct instruction
7. Expository learning &teaching
8. Constructivist & situated learning
9. Inquiry & problem –based learning
10. Group work & cooperation in learning
11. Motivation: Theory and Practice
12. Creating Learning Environments
13. Teaching for Learning (i.e. Effective Teaching)
14. Individual Differences / Variations
15. Intelligence and Personality Theories

Recommended Texts

1. Santrock, J. W. (2018). *Educational psychology*. Boston: McGraw –Hill.
2. Sprinthall, N.A., and Sprinthall, R.C., and Oja, S.N. (2014). *Educational psychology: A developmental approach*. New York: McGraw Hill Inc.

Suggested Readings

1. Iqbal, M. Z., & Shahid, S. M. (2016). *Educational psychology & guidance*. Islamabad: AIOU.
2. Rashid, M. (comp.) (2016). *Allied material of educational guidance and counseling*. Islamabad: AIOU.
3. Dash, B.N., Dash, N., and Rath, M.P. (2012). *A text book of educational psychology.* New Delhi: Dominant Publishers and Distributors.

EDUC-5117   Specialization-I   Computer Assisted Language Learning   3(3+0)

The purpose of this course is to provide students with a fundamental understanding of the principles underlying the use of computer technology in language learning and teaching as well as hands-on activities of designing and producing computer assisted language learning (CALL) programs and materials. This subject is design for language teaching and learning in which computer technology is used as aid to the presentation, reinforcement and assessment of the material to be learnt. In addition, students should develop favorable attitudes towards integrating educational technology into language learning and teaching, and critically evaluate language learning software and websites. They should develop expertise in using technology to teach and learn language skills, and design and produce simple computer assisted language learning activities. They should also be able to use a course management system such as Model in teaching and testing English; and designing e-portfolios. This course also will help to develop skills to use computer for language learning.

Contents

1. Introduction to Computer
2. Computer hardware
3. Computer software
4. Microsoft word
5. Microsoft windows
6. Microsoft Power Point
7. Microsoft Front Page
8. Introduction to CALL
9. CALL Hardware
10. World Wide Web Resources in CALL
11. Evaluation of CALL Software
12. Technology Integration Strategies for ELL and Foreign Language Instruction
13. Virtual Platforms of Communication

Recommended Texts

1. Ken Beatty, (2018). *Teaching and Researching Computer Assisted Language Learning, (3rd Ed.).* New York: Pearson Publications.
2. Barnbrook, G., (2015). *Language and Computers*. Scotland: Edinburgh University Press.

Suggested Readings

1. Kennedy, G., (2016). *An Introduction to Corpus Linguistics*. Longman: London.
2. Susan. H. (2015). *Corpora in Applied Linguistics Cambridge*: Cambridge University.
3. Hunston, S., (2014). *Corpora in Applied Linguistiss,* Cambridge: Cambridge University Press.

EDUC-5118 **Specialization-II** **Development Studies** **3(3+0)**

The purpose of this course is to introduce the students to basic concepts, facts, arguments, and causal theories about development. Development Studies (also known as 'international development studies' or 'international development') is a multi- and inter-disciplinary field of study rather than a single discipline. It seeks to understand the interplay between social, economic, political, technological, ecological, cultural and gendered aspects of societal change at the local, national, regional and global levels. This course provides an in-depth introduction to the multi-disciplinary field of development studies. It introduces students to key debates in development theory, to the history of development policy and practice, and to the range of multilateral, bilateral and NGO organizations that are currently engaged in the development enterprise. This course also looks at the main sectors in which development organizations engage, including: governance and security, health, education, environmental and natural resource management, urbanization and gender development and legal reform.

Contents

1. Development, the human person and resources
2. Development and its assets
3. Development and the common good
4. Development, capability and freedom
5. The role of the individual in development
6. Physical well-being and mental well-being
7. The nature and causes of poverty
8. Technology and the social effects of technological change
9. Socio-Economic indicators of growth and development
10. Urbanization and Development
11. Gender and Development
12. The nature, causes and consequences of Globalization

Recommended Texts

1. Nakagawa, J. (2016). *Managing Development Globalization, economic restructuring and social policy*, New York: Routledge.
2. Daly, H. E., & John B. C., (2016). From Individualism to Person-in-Community. Chapter 8 in *For the Common Good: Redirecting the Economy toward Community, the Environment and a Sustainable Future.* Boston: Beacon Press

Suggested Readings

1. Desai, V., & Potter, R. B. (2013). *The companion to development studies*.London: Routledge.
2. Stathakis, G. and G. Vaggi (2015). *Economic Development and Social Change Historical roots and modern perspectives*. London: Routledge.
3. Sen, A., (2015). Poverty as Capability Deprivation‖. Chapter 4 in *Development as Freedom*. New York: Anchor Books.

EDUC-5119   **Specialization-III**   **Biology**   **3(3+0)**

Biology is the natural science that studies life and living organisms, including their physical structure, chemical processes, molecular interactions, physiological mechanisms, development and evolution. Despite the complexity of the science, there are certain unifying concepts that consolidate it into a single, coherent field. Biology recognizes the cell as the basic unit of life, genes as the basic unit of heredity, and evolution as the engine that propels the creation and extinction of species. Living organisms are open systems that survive by transforming energy and decreasing their local entropy to maintain a stable and vital condition defined as homeostasis. The study of biology incorporates everything imaginable related to the life on Earth. It can be very broad and focus on details regarding the entire planet or it may be very specific and study microscopic structures such as bacteria or DNA. At the end of this course students will be able to understand concepts involved in biology and apply the concepts in real life situations.

Contents

1. Biological concepts
2. Gaseous exchange in plants
3. Homeostasis in plants
4. Coordination and control
5. Support and movement
6. Reproduction
7. Inheritance
8. Ecology
9. Applications of biology
10. Pharmacology

Recommended Texts

1. Clark, M. E. et al (2018). Biology 2e. Opens tax Rice University. Retrieved from
   https://d3bxy9euw4e147.cloudfront.net/oscms-prodcms/media/documents/Biology2e-OP.pdf
2. Punjab textbook Board (2019). *Biology for class 9th*. Lahore: Punjab textbook Board.

Suggested Readings:

1. Blystone, R., Barnard, K., & Golimowski, S. (2011). Special Book Section: Development of Biology Textbooks. DOI: 10.2307/1311267
2. Mary Jones, M. et al (2014). *Biology Course book*, Cambridge: Cambridge University Press

URCE-5104   **English IV**   **3 (3+0)**

The course is designed to provide the familiarity and comprehension of English literary pieces. The students may not be familiar or well-versed in the various genres of literature prior to taking this course. The course provides training and skills necessary to engage, understand, critically analyze, and enjoy the literary genres of literature: short story, poetry, novel and drama. The students will explore the basic concepts of literary technique, narrative, poetic, and dramatic structures and innovations to engage with the more advanced cognitive aspects of literature. In addition to these theoretical skills, students will also read below the surface of the texts for their historical, ethical, psychological, social, and philosophical value by developing insights in how literature gives us a window into both the experiences of others and wider appreciation for the human condition. The course explores literary production in English against local context in particular, by emphasizing shifts in thought as well as genre innovation, i.e. medieval to modern. It provides an introduction to key texts, authors and literary periods, exploring the relationship of texts to their contexts and considering multiple perspectives in the different literary genres.

Contents

1. Poems, Milton: *Book IX*, lines 897–959.
2. Shakespeare: All the World is a Stage.
3. Browning: My Last Duchess
4. Wordsworth: The Leech Gatherer
5. Keats: Ode to Autumn
6. Walter De La Mare: Tartary
7. Short Stories, *The Necklace*
8. The Woman Who had Imagination
9. Shadow in the Rose Garden
10. Essays, *My Tailor*
11. Whistling of the Birds
12. One Act Play, *Riders to the Sea*
13. Novel, *Animal Farm*

Recommended Readings

1. Kennedy, X.J. & Gioia, D. (2014). *Literature: An introduction to fiction, poetry, drama, and writing*. Boston: Pearson.
2. Mays, K. J. (2014). *The Norton introduction to literature*. New York: Norton.

Suggested Readings

1. Bausch, R & Cassill, R.V. (2006). *The Norton anthology of short fiction*. New York: Norton & Company.
2. Gardner, J. E., Lawn, B., Ridl, J., & Schakel, p. (2016). *Literature: A portable anthology*. Boston: Bedford St. Martins.
3. Guddon, J.A. (2010). *Dictionary of Literacy Terms and Literary Theory*. New York: Penguin

EDUC-5120   **Teaching of General Science**   **4(4+0)**

In this course emphasis is put on methods of teaching and lines of approach to the subject matter, rather than on the content of a syllabus. It is hoped that, by the use of good methods, the teacher will be able to lead his pupils towards an appreciation of scientific methods and all understanding of' Science. The study of General Science in Primary and Secondary school is linked to National prosperity and economic development. The course is designed for the effective interactive ways of teaching science. The course will highlight the power of observation and inquisitiveness in general sciences studies. It will also focus on how to relate facts, concepts, and theories to every day experience to develop highly knowledgeable, highly skilled teachers do make a difference in terms of student learning using low cost and no cost and traditional audio visual as well as ICT in teaching learning process.

Contents

1. Nature of Science
2. Aims / Objectives Teaching General Sciences
3. Methods of Teaching General Science
4. Approaches of Teaching General Science
5. Teaching Aids
6. Characteristics of effective Science Teaching
7. Evaluation
8. Designing a test
9. Administering & scoring a test
10. Interpreting test results
11. Content
12. Matter and Forces
13. Heat and Light
14. Structure of Cell
15. Human Systems

Recommended Texts

1. Terry Jennings (2019) Oxford Secondary Science Teaching Guide 1, Oxford: Oxford University Press
2. Feden, P.D. and Vogal, R.M. (2013). *Methods of teaching: Applying cognitive science to promote students learning.* Boston: McGraw-Hill.

Suggested Readings

1. William Lewis Eikenberry (2008). The teaching of general science, Chicago: The University of Chicago Press. Retrieved from https://elearn.gov.pk/books/techersGuide/6th7th8th/index.html
2. Hoong, T. L. Leng, H. P. (2014). *Lower Secondary Scienc,* Singapore: SNP Panpac Hoong.
3. Saleemi, F. (2003 b). *Science 7.* Lahore: Punjab Text Book Board.

The deteriorating standard and quality of education in general and at elementary & secondary level in particular are due to substandard and low quality of ELT. The major drawbacks of our students up to secondary level are their poor pronunciation, fluency, comprehension and creative writing. Moreover, their skills of reading, writing, speaking and listening are also deficient. The major reason for these deficiencies is our English teachers who are not well-trained only but are also non –professionals. And even if they are somewhat trained, their training is not up to the mark. Usually graduate teachers with B.Ed. are appointed as English teachers whose training lacks many things .Keeping in view all these limitations and demands of the 21st century education, we have designed these courses of ELT to meet the challenges of new-millennium. One of these two courses deals with the methods techniques and approaches to ELT. It focuses mainly on the latest methods & techniques especially the modern software's & simulations available in the market.

Contents

1. Teaching Writing
2. Approaches to teaching writing at elementary & secondary level
3. Simple sentence
4. Complex sentence
5. Paragraph writing
6. Essay writing
7. Report writing
8. Creative writing
9. Teaching Speaking; Approaches to teaching speaking
10.   Teaching Listening; Approaches to teaching listening
11.   Teaching Vocabulary
12.   Teaching Grammar
13.   English Language Teaching
14.   Methodologies of teaching second language
15.   Error Analysis

Recommended Texts

1. Richards, J. C. (2017). *Interchange,* Cambridge: Cambridge University Press. Retrieved from www.cambridge.org/interchange
2. Nuttall, C. (2013). *Teaching reading skills in a foreign language.* London: Heinemann

Suggested Readings

1. Donn, B. (2000). Wall pictures for language practice: Teacher's handbook. NY: Longman.
2. Broughton, G., Brumfit, C., Flavell, R. (2003). English as a Foreign Language (2nd ed.). USA: Routledge Education Books
3. Rost, M. (1990). *Listening in language learning*. NY. Longman

EDUC-5122   **Curriculum Development**   **3(3+0)**

Curriculum is one of the four basic components of education i.e., teacher, student, curriculum and school. Curriculum is the pathway through which the objectives of education are attained whereas instruction is how this curriculum (content) is communicated to the students. Today we talk about the school curriculum and curriculum guides which are documents from the results of planning and development. Curriculum is a key element in the educational process; its scope is extremely broad, and it touches virtually everyone who is involved with teaching and learning. The career and technical and technical curriculum focuses not only on the educational process but also on the tangible results of that process. This course focuses on curriculum within the context of career and technical education. This course also focuses primarily on content and areas related to it. It encompasses the macro or broadly based activities that impact on a wide range of programs, courses, and student experiences. In fact, the curriculum should define the institution's mission and goals.

Contents

1. Introduction of curriculum
2. Elements of curriculum
3. Basic components of curriculum and instruction, and their inter-relationship
4. Role of school leaders and teachers in curriculum development
5. Foundations of Curriculum
6. Curriculum Goals, Aims and Objective
7. Taxonomies of educational objectives
8. Cognitive domain
9. Affective domain
10. Psychomotor domain
11. Curriculum Theory and Practice: Various models:
12. Curriculum Development Process & Curriculum change in Pakistan
13. Curriculum Reforms in Pakistan
14. Curriculum Evaluation

Recommended Texts

1. Nicholls, A., & Nicholls, S. H. (2018). *Developing a curriculum: A practical guide*, USA: Routledge.
2. Rashid, M. (2012). *Allied material of curriculum development and instruction.* Islamabad: AIOU.

Suggested Readings

1. Oliva, P.F. (2015). *Developing the curriculum.* (4th Ed.). New York: Longman.
2. Limon E. K, (2014). Handbook of Curriculum Development. http://www.pdfbook.co.ke
3. Sharma, R. C. (2002). *Modern methods of curriculum organization.* New Delhi: Commonwealth.

EDUC-5123   **Comparative Education**   **3 (3+0)**

Education system in any country cannot be isolated from the education system of other countries. Keeping in view the requirement of equivalence in global world, it is important to compare the education system of Pakistan with other developing and developed countries. Comparative education is an educational science. Comparative Education is included as a professional course. The education system in a country cannot be isolated from the education systems of other countries. Keeping in view the requirement of equivalence in a global world, it is important to compare the education system of Pakistan with those of other developing and developed countries. Knowledge about the education systems of various countries assists policymakers in reflecting on education in the context of competition and excellence. This course provide the deep insight of different educational systems of variety of countries and enable students to make comparative critical analysis with special reference to Pakistan.

Contents

1. Introduction to Comparative Education
2. Purpose of comparative education
3. Methods & Comparative Education
4. Elements of Comparative Education (Both qualitative and quantitative dimensions)
5. Comparative View of Systems of Education in Pakistan
6. Private and Public
7. Madrassah and formal education
8. Formal vs. Distance and non-formal education
9. Comparative Education in Developed Countries
10. Comparative Education in Developing Countries
11. Global Issues in Comparative Perspective (focusing developing countries)
12. Quality Education
13. Education For All

Recommended Texts

1. Manzon, Maria (2017). Comparative Education: The Construction of a Field. SPRINGER.
2. Noah, H. and Eckstein, M. (2015) *Doing Comparative Education*: Three Decades of Collaboration. Comparative Education Research Centre, University of Hong Kong.

Suggested Readings

1. Isani, and Virk, M.L. (2018). *Higher Education in Pakistan*. Islamabad: National Book Foundation.
2. Noah, H. & Eckstein, M. (2015). *Doing Comparative Education: Three Decades of Collaboration,* Hong Kong: Comparative Education Research Centre, University of Hong Kong.
3. Thomas, R. M. (2012). *International comparative education*: Practices, Issues and prospects. Oxford: Pergamon Press.

EDUC-6124   **Critical Thinking & Reflective Practices**   **3(3+0)**

Critical Thinking and development of critical thinking skills is the address of every educational institute around the globe. This course is designed for undergraduate program of teacher preparation. It is expected that the teachers of twenty first century should be able to not only learn and review the current policies and practices in education but may also have the ability to think critically and reflect upon the current practices to bring positive changes. This course will introduce the prospective teachers to critical theory, and help them to become reflective practitioners. This course will also help them to initiate action research culture within education and strengthen the community of practice in the profession of teaching. This course helps learners develop higher-order thinking skills by prompting learners to relate new knowledge to prior understanding, think in both abstract and conceptual terms, apply specific strategies in novel tasks, and understand their own thinking and learning strategies.

Contents

1. Introduction: Critical Thinking and the Process of Analysis
2. Strategies and Techniques to develop critical Thinking
3. Critical Thinking and Art of Questioning
4. Critical Thinking and Socratic Questioning
5. Teaching Students to Ask Good Questions & Follow up the Implications of Thought
6. Teaching Students to narrate, analyze, and evaluate their own 'Points'
7. View of others
8. Open and close ended Questions
9. Critical Thinking and its Applications
10. Introduction to Reflection and Major Proponent
11. Process and Techniques of Reflection
12. Application of skills and approaches to reflection

Recommended Texts

1. Cottrell, S. (2017). *Critical thinking skills: Effective analysis, argument and reflection*, London: Macmillan International Higher Education.
2. Costa, A.L. & Lowery,L.F.(2014). *Techniques for teaching thinking*, Melbourne: Hawker Brownlow

Suggested Readings

1. Moon, J. (2007). *Critical thinking: An exploration of theory and practice*, USA: Routledge
2. McPeck, J. E. (2016). *Teaching critical thinking: Dialogue and dialectic*, USA: Routledge.

EDUC-6125   **Teaching of Mathematics**   **4(4+0)**

Teaching Mathematics requires specific knowledge, understanding and skills in interpreting the Mathematics Curriculum and developing a wide range of pedagogies and strategies. Teaching Mathematics requires specific knowledge, understanding and skills in interpreting the Mathematics Curriculum and developing a wide range of pedagogies and strategies. The course is designed to prepare pre-service teachers to be effective classroom teachers through a comprehensive introduction to the learning and teaching of Mathematics across the primary years. This course will equip prospective teachers with knowledge and skills to teach math to grades I through VIII. They will become familiar with the math curriculum and expected student learning outcomes. Prospective teachers will learn to use a variety of instructional methods that promote active learning of math, including making and using teaching and learning materials like AV-adis. They will also understand the concept and need of Mathematics Laboratory and its essentials and use in teaching of mathematics.

Contents

Part 1
1. Methods of Teaching Mathematics
2. Inductive Method
3. Deductive Method
4. Analytic method
5. Synthetic Method
6. Heuristic Method
7. Project Method
8. Problem Solving Method
9. Techniques of Teaching Mathematics
10. Teaching Aida and Mathematical Laboratory & How to use teaching aids and mathematics laboratory.

Contents

Part 2
1. Numeration systems; Concept of addition ,Subtraction ,Multiplication and division
2. Number Theory & Integers
3. Fractions; Set &Functions
4. Elementary Statistical concepts and Information Handling; Percentage, Ratio and Proportions
5. Algebraic Expression
6. Geometry and Trigonometry
7. Percentage, Ratio and Proportion

Recommended Texts

1. Punjab Textbook Bored (2019). *Mathematics book of class 9 & 10,* Lahore: Punjab textbook Board Punjab Pakistan.
2. Fauvel, J., & Jeremy G., (2016). *The History of Mathematics:* A Reader: London: Macmillan Press Ltd.

Suggested Readings

1. Thong, H.S. and Hong, K.N. (2015). New additional mathematics (for O' level). Karachi: paramount publishing Enterprise.
2. Bennett–Jr., A.B. and Nelson. L.T. (2014). Mathematics for elementary teachers: A conceptual approach. (6th Ed.). Boston: McGrew-Hill.

3. Saleemi, F. (2003). *Mathematics.* (from class 1 to 8). Lahore: P T B.

EDUC-6126   **Teaching Practice I**   **6 (0+6)**

Teaching practice is a period that a student teacher spends teaching at a school as part of his or her training. Teaching practice is not a waste of time rather it helps to inculcate the professional traits in student teachers, preparing them for the real classroom and school situation. It is an important component towards becoming a teacher. It provides experiences to student teachers in the actual teaching and learning environment. During teaching practice, a student-teacher is given the opportunity to try the art of teaching before actually getting into the real world of the teaching profession Some form of assistance (financial or material) should be given to prospective teachers in developing and using teaching aids and guidance for teaching practice at school. Student teachers perceived teaching practice as an important tool of learning to teach because it promote the development of teaching experience and prepare them for the real world of work.

Steps

1. Orientation of teaching practice
2. Contact to school managements for accommodation of student teachers for teaching practice
3. Allocation of male & female schools to student
4. Allocation of supervisors for each school
5. Preparing schedule for Final Model Lesson
6. Allotment of evaluators for final model lesson.

Recommended Texts

1. Cohen, L., Manion, L., Morrison, K. & Wyse, D. (2016). *A guide to teaching Practice*. USA: Routledge.

Suggested Readings

1. Fry, H., Ketteridge, S., & Marshall, S. (2018). *A Handbook for Teaching and Learning in Higher Education*, USA: Routledge

2. Souza, B. (2017). *Teaching Practice: A Handbook for Student Teachers*. Retrieved from file:///C:/Users/MuhammadSultan/Downloads/BENSOUZATeachingPractice.pdf

EDUC-6127　　　　**Specialization-I**　　　　**Second Language Acquisition**　　　　**3(3+0)**

Language is the method of expressing ideas and emotions in the form of signs and symbols. These signs and symbols are used to encode and decode the information. There are many languages spoken in the world. The first language learned by a baby is his or her mother tongue. It is the language, which he or she listens to from his or her birth. Any other language learned or acquired is known as the second language. Second language acquisition, or SLA, has two meanings. In a general sense it is a term to describe learning a second language. This is mainly a subconscious process which happens while we focus on communication. It can be compared with second language learning, which describes how formal language education helps us learn language through more conscious processes. Implications for the language classroom include the ideas that the teacher can create contexts for communication which facilitate acquisition, that there is a natural order of acquisition of language, that there are affective filters which inhibit acquisition, especially for adults, and that comprehensible input is very important. This course will help students to understand pedagogy of English as second language and effectively communicate in second language.

Contents

1. Introducing Second Language Acquisition
2. Diversity in learning and learners
3. The world of second languages
4. The nature of language learning
5. L1 versus L2 learning
6. The logical problem of language learning
7. Frameworks for SLA
8. Foundations of Second Language Acquisition
9. The Linguistics of Second Language Acquisition
10. L2 Learning and Teaching
11. Integrating perspectives
12. Approaching near-native competence
13. Implications for L2 learning and teaching

Recommended Texts

1. Saville-Troike, M. (2018). *Introducing Second Language Acquisition*. Cambridge. Cambridge University Press.
2. Bloomfield, L. (2015). Language. New York: Holt, Rinehart & Winston.

Suggested Readings

1. Carter, R. & Nunan, D. (eds.) (2017). The Cambridge Guide to Teaching English to Speakers of Other Languages. Cambridge: Cambridge University Press.
2. McLaughlin, B. (2016). Theories of Second Language Learning. London: Arnold.
3. Bialystok, E. (2017). *Communication Strategies: A Psychological Analysis of Second-Language Use*. Oxford: Blackwell.

Human rights education is defined as the learning process that builds up the required knowledge, values, and proficiency of human rights of which the objective is to develop an acceptable human rights culture. This type of learning teaches students to examine their experiences from the human rights point of view enabling them to integrate these concepts into their values and decision-making. UN is urging and supporting all member states to make knowledge about human rights available to everyone through both the formal school system and through popular and adult education. Learning for human rights, by developing skills, attitudes and values for the learners to apply human rights values in their lives and to take action, alone or with others, for promoting and defending human rights. The goal of this course is to help prospective teachers to gain knowledge and understanding about their Human Rights in the field of education.

Contents

1. Historical basis of Human Right Education
2. Determinants of education of human right
3. Rationale for Human Rights Education
4. Framework of Education policies in India
5. Principles of human Rights Education
6. Co- curricular activities for Human Rights Education
7. Creating Human Rights awareness in children
8. International Instruments on parents ,students and Teachers
9. Human rights Education and Training of teacher
10. The need for Including Human Rights Education in teacher training Course
11. Objectives and specifications of Human Rights Education
12. The content of Human Rights Teaching
13. Human Rights Environment in school
14. Role of teacher educators
15. Problems Faced by teachers of human rights
16. Suggestions to solve the problems

Recommended Texts

1. Ruane (2016). Human Rights Education: Reflections on Theory and Practice. Liffey Pr.
2. Andreopoulos, George J. (2014). *Human Rights Education for the Twenty-First Century,* Pennsylvania*: University* of Pennsylvania.

Suggested Readings

1. Osler, Audrey. (2015). *Teachers and Human Rights Education,* Trentham Books Fionnuala Waldron & Brian.
2. Bloomfield, L. (2015). Language. New York: Holt, Rinehart & Winston.

EDUC- 6129   **Specialization-III   Computer Science**   **3 (3+0)**

Computer science is a discipline - also can be described as a branch of knowledge. This course includes a brief history of software, and show how human thought are related to computer. It begins with the fundamentals of information encoding, data storage, and computer architecture; progress to the study of operating system and computer networks; investigates the topics of algorithms, programming languages, and software development; explores techniques for enhancing the accessibility of information; considers some major applications of computer technology. Course objectives are to; define computer terminology, identify the basic components of a computer and describe the function of each, use the keyboard to interact with the computer, describe different applications of computers in education, develop skills to use computer in educational settings and communicate through computer with friends, and teachers in and outside the country. After this course prospective teachers would be able to use computer in classroom teaching effectively.

Contents

1.   Introduction to computer
2.   Computer components
3.   Number system
4.   Boolean Algebra
5.   Computer software
6.   Problem solving
7.   Data types, Assignment and input/output statements
8.   Control structure
9.   Arrays
10. Sub-program and file handling

Recommended Texts

1. Stansifer, R. (2017). *Introduction to Computer Science*. Florida Institute of Technology. Retrieved from
   https://cs.fit.edu/~ryan/cse1002/lectures/introduction.pdf

Suggested Readings:

1. Langfield, S. & Duddell, D. (2015). *AS and A level Computer Science Course book*, Cambridge: Cambridge University Press.

2. Schneider, G. M., & Gersting, J. (2017). *Invitation to Computer Science*, USA: CENGAGE Learning Custom Publishing.

EDUC-6130   **Economics and Financing of Education**   **3(3+0)**

Economics plays a key role in our daily life. It depicts the economic and financial position of any country, an organization or an individual. Economics and financing of education is a very important part of the educational system. Recently various new trends have emerged in the field of financing of education at various levels. Unfortunately our all financing of education so far has been in the hands of experts of economics and financing who were not experts in the educational matters. So there is a dire need of experts in educational economics and financing. Furthermore, our educational administrators (from headmasters to EDO Education) do not have any professional education and training in Economics and Financing of Education. This course is intended to provide the foundation for this purpose. The basic aim is to introduce students with the concepts, theories and principles of economics and financing and their application in our educational setup.

Contents

1. An Introduction to the Economics of Education
2. Four Factors of Production
3. The Economics value of education
4. Investment Mechanisms
5. Concepts and Assumptions in the Economics
6. Individual Demand for Education
7. The Social Rate of Return Approach
8. Manpower Planning
9. Educational Outputs
10. Educational Costs
11. The Costing of educational projects
12. Financing Education in Pakistan
13. Economics of life long Education

Recommended Texts

1. Saeed, K.A. (2016). *Economy of Pakistan*. Karachi: Oxford University Press.
2. Siddiqui, S.A. (Compiler). (2013). *Trends and issues in education*. Islamabad: AIOU.

Suggested Readings

1. Nasir, M. S. and Hyder, S. K. (2015).*Economics of Pakistan for B.Com & B.A*. Lahore: Imtiaz Book Depot.
2. Niazi, H.K. (2016). *Economics and Financing of Education*. Islamabad: AIOU.
3. Beckford , J. (2011). *Quality: A critical introduction*. London: Routledge

EDUC-6131   **Guidance & Counseling**   **3(3+0)**

This course has been designed to introduce the concept, scope, and theories that govern the process of guidance and counseling in education. It will enable students to identify areas of guidance and counseling at the elementary level. Through the knowledge and skills acquired from this course, they will be well equipped to explore the talents and potential of their students, while preparing them for life in the 21st century. The course will include both theoretical knowledge of guidance and counseling and the development of students' counseling skills. It will strengthen their ability to exercise active listening skills, reflect on students' problems, and help them choose potential solutions to their problems. The course will also enable students to design school-wide guidance and counseling programs. This course demonstrates knowledge of the importance of guidance and counselling to teachers and students and critically analyses the concepts, scope, and theories that govern the process of guidance and counseling.

Contents

1. Introduction to Guidance and Counselling
2. Objectives of Guidance
3. Principles of Guidance
4. The role of guidance and counselling personnel
5. Techniques of Guidance
6. Basic skills of Counselling
7. Services of Guidance
8. Evaluation of the guidance program
9. Nature and purpose of the Cumulative Record
10. Card (CRC)
11. Advantages of the CRC
12. Design of CRC

Recommended Texts

1. Rao, V.K. & Reddy, R.S. (2017). *Academic Environment: Advice, Counsel and Activities*. New Delhi: Ashish Publishing

Suggested Readings

1. Gupta Sarla. (2015). *Career and Counselling Education*, Dehli: Hardy Publishers.
2. Sharma, V.K. (2015). *Administration and Training of Educational and Vocational Guidance*. New Delhi: Publications

EDUC-6132   **Educational Assessment & Evaluation**   **3(3+0)**

The purpose of this course is to provide basic understanding of fundamental concepts of Educational Assessment and Evaluation. The course is designed to assist students in developing a knowledge base of what teachers should know and be able to do in relation to educational assessment. Upon completing this course the students will be expected to develop, administer, score and report an achievement test with considering the evidences of reliability and validity. Students will be able to construct and a valid and reliable achievement test for assessing classroom teaching. Further, students will become familiar with the alternate assessment techniques and ultimate soring and reporting in appropriate way. The focus of this course will be on practical application of the assessment and evaluation procedures in class room teaching context. This will enable the students to know how to develop relevant educational assessment, describe fundamental aspects on the quality of assessment procedures, evaluate tests and items using statistical and qualitative methods, incorporate meaning into test score scales using both norm-referenced and criterion-referenced procedures and use the results of standardized tests to help make decisions about students and educational systems.

 Contents

1. Introduction
2. Role of assessment in teaching and learning process
3. Types of assessment procedures
4. General principles of assessment
5. Assessment and instructional process
6. Instructional objectives
7. Planning and Developing Classroom Tests and assessment
8. Test construction and Qualities of good tests
9. Evaluating Typical Behavior / Affective Domain
10. Analysis and interpretation of Test Results / Scores
11. Reporting and Grading of Results
12. Practical work

Recommended Texts

1. Butler, S. M., & McMunn, N. D. (2018). *A Teacher's Guide to Classroom Assessment*: Understanding and Using Assessment to Improve Student Learning, San Francisco: Jossey-Bass.
2. Dann, R. (2012). *Promoting assessment in learning --- Improving the learning process.* London: Routledge.

Suggested Readings

1. Arends, R. I. (2004). *Learning to teach*. Boston: McGraw Hill
2. Broich, G. and Kubiszun , T. (2003). *Education Testing & Mesurement.* Snigapore : John Wiley and Sons.
3. Managal , S.K. (2012). *Statistics in Psychology & Education*. New Delhi :Prentice Hall of India

EDUC-6133   **Sociology of Education**   **3(3+0)**

The course offers general understanding of sociology and its' implications in education. The course develops insight into the social processes with in educational institutions, and how schools and educational institutions play their role in socialization of the learners and playing effective role in social development of the people in the society. Social and environmental changes through time in these educational institutions are therefore reviewed. This course will examine the relationships between education and society by reviewing a variety of theoretical perspectives of education. This course aims to introduce students learn and teachers how to teach, so that teachers are able to integrate the findings of psycho-sociological education in teaching and giving their various disciplines. Three main components are involved: students, learning, and teaching. Topics for students are developing theories and teaching students and teaching characteristics, personal differences. Topics learning theories are learning and promoting learning. Topics are teaching models and learning projects.

Contents

1. Society, Community and Culture
2. Group and Group Dynamics
3. Socialization
4. Social Institutions: Economic institutions, Play and recreational institutions
5. The family
6. Economic institutions
7. Religious institutions
8. Educational institutions
9. Play and recreational institutions
10. School and Community: Relationship and analyses of effective role in Pakistani community
11. Social Control
12. Teacher, School and Students
13. Technological Change

Recommended Texts

1. Alias, N. (2015). *Educational Sociology and Philosophy*. Malaysia: Open university of Malaysia.
2. Chandra, S. S & Sharma, R. K. (2014). *Sociology of Education.* India: Atlantic Publishers and Distributor New Delhi.

Suggested Readings

1. Chandra, S. S & Sharma, R. K. (2016). *Sociology of Education*. New Delhi, India: Atlantic Publishers and Distributor.
2. Sharma, Y.K. (2018). *Foundations in Sociology of Education*. New Delhi, India: Kanishka Publishers
3. Hallinian, M.T. (2016). *Handbook of the Sociology of Education*. USA: Springer Distributors.

The aims and objectives of this course are to introduce BS students to the basic concepts of language which have immediate relation to their ordinary as well as academic life. To sensitize students to the various shades and aspects of language, to show that it is not a monolithic whole but something that can be looked at in detail. The core concepts of research in linguistics will particularly be discussed. The students will further be taught and hand on practice will be given about the citation and on line research. The other objective of this course is to develop a research orientation among the students and to acquaint them with fundamentals of research methods. Further, the course aims at introducing them to the basic concepts used in research and to scientific social research methods and their approach. Some other objectives of the course are to develop an understanding of various research designs and techniques and to identify various sources of information for literature review and data collection. Lastly the aims of the course are to develop an understanding of the ethical dimensions of conducting applied research.

Contents

1. The Nature of Educational Research
2. Concepts, Constructs and Variables
3. Hypotheses and Research Questions
4. Hypothesis and Types of hypotheses
5. Testing the Hypothesis
6. Objectives and hypotheses
7. Data Collection Tools
8. Validity and Reliability
9. Data collection procedure
10. Pilot testing
11. Types of Educational Research: Types of Research: Qualitative and quantitative
12. Literature Review
13. Methodology
14. Data Analysis
15. Research Proposal & Report Writing

Recommended Texts

1. Geoffrey E. Mills, L. R. Gay (2019). *Educational research: Competencies for analysis and applications.* (12th Ed.). N.Y: Merrill- Prentice Hall.
2. Creswell, J. W (2011). *Research Design",* London: Sage Publications.

Suggested Readings

1. Fraenkel, J. & Norman, E. (2011). *How to Design and Evaluate Research* (8th ed.). London: SAGE Publications.
2. John W Creswell (2018). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*, (6th Ed.), New York: Pearson Education. Retrieved from http://www.sxf.uevora.pt/wp-content/uploads/2013/03/Creswell_2012.pdf
3. Gay, L.R. (2008). *Educational research: Competencies for analysis and applications.* (5th ed.) N.Y: Merrill- Prentice Hall

EDUC-6135   **Educational Planning and Management**   **3(3+0)**

Formal education is an organized one and trained teachers to teach in the educational institutions. Further, buildings and many facilities have to be put up in order to have educational institutions function effectively. The students taught in schools, teacher training colleges and universities have to meet the needs of the society. Educational planning is 'the process of setting out in advance, strategies, policies, procedures, programs and standards through which an educational objective (or set of objectives) can be achieved. Educational plans are designed to avoid imbalances and enormous wastes and replenish the steadily aggravated shortage of teachers. This course introduces some theoretical perspectives on educational planning and management and examines a number of key concepts and principles. We believe that a deeper understanding of the nature of educational planning and management will enable the student teachers to improve the practices as a school manager. Produce educational planners, managers and supervisors who are well informed of the national and regional constitutions, thereby assuming leadership positions and responsibilities; they would be able to generate, manage and utilize educational resources effectively and efficiently; They would also be able to initiate educational changes, innovations and developments by addressing local and regional needs and realities.

Content

1. Introduction
2. Difference between administration, supervision & management
3. Educational administration and school administration
4. Nature, aims, objectives and principles of school Administration
5. Supervision and Inspection
6. Nature and Scope of Educational Management
7. Administrative Functions in Education.
8. Organizing
9. Leading
10. Motivating:
11. Controlling
12. Decision Making.
13. The School Discipline.
14. Organizational Structure of our education system
15. Characteristics of Good Head Teachers and Teachers
16. Key Issues in Educational Management

Recommended Texts

1. Abbasi, M. N. K. (2016). *Educational Planning and Management*, Peshawar: Institute of Education & Research University of Peshawar. Retrieved from file:///C:/Users/MuhammadSultan/Downloads/doku.pub_educational-planning-management.pdf
2. Robbins, S. P. (2013). *Management*. SanDiego: SanDiego State University.

Suggested Readings

1. Akpan, C. P. (2018). *Types of Educational Planning/Reasons for Planning Education.* Retrieved from file:///C:/Users/MuhammadSultan/Downloads/Types_ of_Educational_ Planning_Reasons_fo.pdf
2. Bell, L. and Bush, T. (2002). The principles and practices of educational management. London: Paul Chapman Publishing.
3**.** Robbins, S. P. (2016). *The administrative process.* Sandiego: SanDiego State University.

This course conveys the essential concepts and tools needed to develop and nurture statistical thinking. It presents descriptive, inductive and explorative statistical methods and guides the reader through the process of quantitative data analysis. In the experimental sciences and interdisciplinary research, data analysis has become an integral part of any scientific study. Issues such as judging the credibility of data, analyzing the data, evaluating the reliability of the obtained results and finally drawing the correct and appropriate conclusions from the results are vital. This course would provide a step-by-step introduction for statistics, data analysis, or research methods classes using statistical software. Concise descriptions emphasize the concepts behind statistics rather than the derivations of the formulas. After reading this course students will be able to; Basic concept of statistics and data analysis, application of descriptive and differential statistics and will be able to identify the nature of statistical data and then by using SPSS they can apply different statistical tests to reach conclusions about data.

Contents

1. Introduction to Statistics
2. Scope or applications of statistics in education
3. Types and branches of statistics
4. (Parametric, now parametric and inferential
5. Scales of Measurement and their use in Statistics
6. Nominal Scale
7. Ordinal Scale
8. Interval Scale
9. Ratio Scale
10. Descriptive Statistics
11. The frequency distribution
12. Measures of central tendency: mean, median, mode
13. Measures of variability Range, the quartile deviation, the average deviation, standard deviation.
14. Correlation & Analysis of variance
15. Data and Data Analysis through SPSS & Nvivo

Recommended Texts

1. Daniels, L., & Minot, N. (2019). *An Introduction to Statistics and Data Analysis Using Stata*, London: SAGE Publishing. Retrieved from www.sagepub.com
2. Ferguson, G.A and Takane, Y. (2015). *Statistical analysis in psychology and education.* NY: McGraw-Hill.

Suggested Readings

1. Heumann, C., & Shalabh, M. S. (2016). *Introduction to Statistics and Data Analysis*, Switzerland: Springer International Publishing Switzerland. Retrieved from https://link.springer.com/content/pdf/10.1007%2F978-3-319-46162-5.pdf
2. Vaus, D. (2002). *Analyzing social science data*. London: SAGE Publications.
3. Sinha, B.L. (Ed.). (2011). *Statistics in psychology and education.* New Delhi: Anmol Publications.

EDUC-6137   **Inclusive Education**   **3(3+0)**

Inclusion has more to do with social equity and applies to all kids, not just kids with disabilities for example kids with second language issues, gifted kids, and kids who qualify for programs because of circumstances of poverty. Inclusive education is about looking at the ways our schools, classrooms, programs and lessons are designed so that all children can participate and learn. Inclusion is also about finding different ways of teaching so that classrooms actively involve all children. Inclusive education is when all students, regardless of any challenges they may have, are placed in age-appropriate general education classes that are in their own neighborhood schools to receive high-quality instruction, interventions, and supports that enable them to meet success in the core curriculum. This course is designed for learning environment for all students and promotes a sense of belonging and ensures student progress toward appropriate personal, social, emotional and academic goals.

Contents

1. An Overview of inclusive Education
2. Global and local perspective
3. An Introduction to Special Needs Education
4. Approaches to the Education of Children with Special Needs
5. Rationale of including special needs students in ordinary schools
6. Assessing Children with Special Needs
7. Curriculum Adaptations and Teaching Strategies
8. Collaboration and Teamwork for School Improvement
9. Building community participation

Recommended Texts

1. Ontario Ministry of Education (2016). *Special Education Companion*, Ontario: The Ontario Curriculum Unit Planner. Ministry of Education.
2. Hutchinson, N. (2002). *Inclusion of Exceptional Learners in Canadian Schools: A Practical Handbook for Teachers*. Toronto, ON: Prentice Hall. Weber.

Suggested Readings

1. Alur & Timmons (2015). *Inclusive Education Across Cultures: Crossing Boundaries, sharing Idea*s. University of Regina, Canada.
2. Mehnaz Aziz (2015). *School and Family Partnership*. Islamabad: Children's Global Network Pakistan.
3. Ministry of Education (2001). Special Education. A Guide for Educators. P. Baber web. Page on http://www.edu.Gov.on.ca/eng/general/elemsoc/speed/guide.html

EDUC-6138   **Teaching Practice II**   **6(0+6)**

Teaching practice is a period that a student teacher spends teaching at a school as part of his or her training. Teaching practice is not a waste of time rather it helps to inculcate the professional traits in student teachers, preparing them for the real classroom and school situation. It is an important component towards becoming a teacher. It provides experiences to student teachers in the actual teaching and learning environment. During teaching practice, a student-teacher is given the opportunity to try the art of teaching before actually getting into the real world of the teaching profession Some form of assistance (financial or material) should be given to prospective teachers in developing and using teaching aids and guidance for teaching practice at school. Student teachers perceived teaching practice as an important tool of learning to teach because it promote the development of teaching experience and prepare them for the real world of work.

Steps

1. Orientation of teaching practice
2. Contact to school managements for accommodation of student teachers for teaching practice
3. Allocation of male & female schools to student
4. Allocation of supervisors for each school
5. Preparing schedule for Final Model Lesson
6. Allotment of evaluators for final model lesson.

Recommended Texts

1. Cohen, L., Manion, L., Morrison, K. & Wyse, D. (2016). *A guide to teaching Practice*, London: Routledge.

Suggested Readings

1. Fry, H., Ketteridge, S., & Marshall, S. (2018). *A Handbook for Teaching and Learning in Higher Education*, London: Routledge

2. Souza, B. (2017). *Teaching Practice: A Handbook for Student Teachers*. Retrieved from file:///C:/Users/MuhammadSultan/Downloads/BENSOUZATeachingPractice.pdf

AREA - I

EDUC-6139   **Organizational Behavior**   **3(3+0)**

Organizational behavior is the study of human behavior in organizational settings, the interface between human behavior and the organization, and the organization itself. One of the main goals of organizational behavior is to revitalize organizational theory and develop a better conceptualization of organizational life. Organizations are deeply affected by the external environment. They need to maintain a good organization-environment fit by anticipating and adjusting to changes in society. The field of organizational behavior uses scientific research to discover systematic relationships, which give us a valuable foundation for comprehending organizational life. It helps us predict and anticipate future events so we can get along with others, achieve our goals, and minimize unnecessary career risks. The purpose of this course is to provide a strong conceptual framework for studying, understanding, and applying theory and practice of organization behavior while the other portion explores the nature of organization and organization theory.

Contents

1. Introduction
2. The Evolution of Organizational Behavior
3. Contributing disciplines to the OB field
4. Basic OB Model
5. Organizational System Level
6. Fundamentals of Individual Behavior : Individual Difference – Personality & Ability
7. Perception and Individual Decision Making
8. Basic Motivation Concepts
9. Foundation of Group Behavior
10. Contemporary Theories of Motivation
11. ERG theory
12. Goal-setting theory
13. McClelland's Theory of needs
14. Cognitive Evaluation theory
15. Organization Change and Stress Management

Recommended Texts

1. Judge, T. A., & Robbins, S. P. (2017). *Essentials of organizational behavior*. Pearson Education (us).
2. Luthans, F. (1995). *Organizational behavior.* (7th ed.) New York: McGraw-Hill.

Suggested Readings

1. Robins, S. P. (2013). *Organizational behavior* (5th Ed.). Boston: IRWIN McGraw HILL
2. Daft, R. L. (2012). *Organizational theory and design*. NY: West Publishing Co.
3. Kreitner, R. & Kinicki, A. (2001). *Organizational behavior*. (5th ed.). Boston: McGRAW-HILL,

<div align="center">**AREA - I**</div>

EDUC-6140　　　　　　　**Human Resource Management**　　　　　　　**3(3+0)**

Managing human resources effectively has become the key challenge not only to compete, but to survive. Managers must understand and be able to apply innovative techniques to better manage their human resources. The broad purpose of the human resource management function in any educational organization is to attract, develop, retain, and motivate personnel in order to achieve the school's mission. As education personnel's are the major instrument for achieving educational goals and consequently, national development. Human resources are the key to rapid socio-economic development and efficient service delivery. This course is designed to inculcate three major issues in student teachers such as assessing the need for staff, satisfying the need for staff and maintaining and improving the staff services. Prospective teachers will be prepared to play their strategic role such as committed to the job, remain dedicated and productive in the education system and operational role like equal employment, observation of laws, oriented to the organizations, cooperation with supervisor, resolve safety problems etc.

Contents

1. Introduction
2. Strategic Human resource Management; Building Human Resource Management.
3. Work flow analysis
4. Organizational structure
5. Job analysis: Elements, Methods
6. Job Design: approaches
7. Job enrichment recruitment selection and Placement
8. Rewarding people
9. Government regulation of compensation
10. Issues related to compensation in education sector
11. How does pay influence individual employee
12. Managing employee retention and turnover
13. Evaluation and improving human resource function

Recommended Texts

1. Bratton, J., & Gold, J. (2017). *Human resource management: theory and practice*, UK: Palgrave.
2. Vida, G., S. (Editior) (2018). *The handbook of human resource management education: Promoting an effective and efficient curriculum, New York:* Sage Publication InC

Suggested Readings

1. Ezenne A. N. (2015). *Human Resource Management in Education*. (Developing Courtiers Perspectives)
2. Mercer, Justime., Barker, Banart.,& Bird, Richard (2014). *Human Resource Management in Education Contests, Themes and Impact*. New York: Rutledge.
3. Riches, Colin R. & Morgan, Colin (2013). *Human Resource Management in Education*, UK: Open University Press.

AREA II

EDUC-6141   **Qualitative Research Methods in Education**   **3(3+0)**

Qualitative approach describes events, persons and so forth scientifically without the use of numerical data. Qualitative research typically deals with the study of many variables intensely, over an extended period of time. Its basic purpose is to find out the way things are or were, how and why they come to be that way, and what this entire means. Qualitative approaches are not value free and involve inductive inquiry. The use of qualitative research methods in educational research has a long and distinguished history and ongoing debates and various issues about qualitative methods and the contribution they make to understanding educational issues. This course is designed to be an introduction to qualitative research in education. The central goals are a) to enable you to become a critical reader of qualitative research; b) to assist you in developing an understanding of the purposes, tools, assumptions and limitations of qualitative research; and c) to prepare you for further study and engagement in qualitative research.

 Contents

1. Introduction
2. Some Theoretical Affiliations and Classifications of Qualitative Inquiry
3. Some Important Concepts in Qualitative Research
4. Stages in Qualitative Research
5. Techniques of Data Collection in Qualitative Research
6. Field Work & Evaluation and Pedagogical Uses of Qualitative Research
7. Evaluation of qualitative research: Trustworthiness in qualitative research
8. Evaluation and policy research in qualitative perspective: Planning and getting funds.
9. Relations between the researcher and contractor : Research site; feedback; working in teams; the audience; time tables
10. Future of the qualitative evaluation and policy research
11. Pedagogical uses of qualitative research (QR)
12. Use of QR in effective teaching

Recommended Texts

1. Cropley, A. J. (2019). *Qualitative research methods: A practice-oriented introduction for students of psychology and education*. Riga, Latvia: Zinātne. doi: 10.13140/RG.2.1.3095.6888.
2. Burdens, K.S. & Abbot, B.B. (2002). *Research design and methods: A process approach.* (5th ed.) . Boston: McGraw-Hill.

Suggested Readings

1. Hammarberg, K., Kirkman, M., & de Lacey, S. (2016). *Qualitative research methods: when to use them and how to judge them. Human Reproduction*.   https://doi.org/10.1093/humrep/dev334
2. Laurillard, D. (2013). *Teaching as a design science: Building pedagogical patterns for learning and technology*. New York: Routledge.
3. Merriam, S.B. et al (2002*). Qualitative research in practice.* San Francisco: Jossey-Bass

EDUC-6142	**Analysis & Interpretation of Data**	3(3+0)

Data analysis is, therefore, a process that involves examining, and molding collected data for interpretation to discover relevant information, draw or propose conclusions and support decision-making to solve a research problem. While data interpretation refers to the implementation of processes through which data is reviewed for the purpose of arriving at an informed conclusion to answer research questions and making research findings be ready for dissemination. The interpretation of data assigns a meaning to the information analyzed and determines its signification and implications. Analyze and interpretation of data is carried out to arriving at empirical solution to the problem. This course is designed for digital age tools for big data, different methods for determining appropriate analytic procedures occurs early in the research process and should not be an afterthought and interpreting the results in general form. Moreover, what is qualitative data and how qualitative data is analyzed. This course also helps the students to use computer and software for quantitative and qualitative data analysis.

Contents

1. Data Analysis
2. Statistical concepts
3. Descriptive statistics
4. Measures of central tendency and variability
5. Inferential statistics (correlation + regression)
6. Hypothesis testing ; the null hypothesis; one and two tailed tests ; use of null hypotheses
7. Parametric vs. nonparametric techniques
8. Carrying out parametric statistical tests: t-distribution, z-test, ANOVA and ANCOVA.
9. Carrying out non-parametric statistical tests: Chi Square test
10. The role of statistical analysis
11. Selecting an appropriate statistical analysis
12. Coding, roistering and inputting data
13. Analysis of Quantitative data through
14. Qualitative Data: Types and Forms
15. Data Analysis in Qualitative Research

Recommended Texts

1. Mattina D., H.E. Erdogan, I. Wheeler, N.D. Crossman, R. Cumani, S. Minelli. (2018). *Default data methods and interpretation. A guidance document for the 2018 UNCCD reporting*. United Nations Convention to Combat Desertification (UNCCD), Bonn, Germany.
2. Flick, U. (2002). *An introduction to qualitative research.* London: SAGE Publications.

Suggested Readings

1. Wiley. Hammarberg, K., Kirkman, M., & de Lacey, S. (2016). *Qualitative research methods: when to use them and how to judge them. Human Reproduction*, Volume 31, Issue
https://doi.org/10.1093/humrep/dev334
2. Julie.,P. (2011). *SPSS Survival Manual A step by step guide to data analysis using SPSS for Windows,* Philadelphia: Open University Press Buckingham

Thesis or dissertation is the partial fulfillment of the degree. A dissertation or thesis is a long piece of academic writing based on original research, submitted as part of a doctoral, master's, or bachelor's degree. A thesis is usually associated with master's degrees, although these terms can be interchangeable. The theory-oriented approach to the final thesis in higher education is still dominant at the Master as well as Bachelor level. However, that at the Bachelor level a practice-oriented approach would be more appropriate. Bachelor's thesis is claimed to be a bridge between education and the job market. The essential objective of the thesis is to contribute to theory building within a specific field of study through scientific research and thus it is predominantly theoretical in nature. The idea is that a qualified student teacher has to be capable of conducting scientific research on a modest scale. This approach aims to prepare students for the 'real world'. A dissertation or thesis is likely to be the longest and most difficult piece of work a student has ever completed. It can, however, also be a very rewarding piece of work since, unlike essays and other assignments. The student is able to pick a topic of special interest and work on their own initiative.

Steps:

1. Students are given choice to opt the thesis
2. Students are allocated supervisors
3. Research topic for thesis are discussed in research committee
4. Research committee also finalized the evaluators
5. After finalization of thesis, students work under the supervisor
6. On completion thesis is submitted after the approval of supervisor
7. After evaluation of thesis form evaluator, viva is conducted.

Recommended Texts

1. Halyna M., Kornuta, R., & Germaine, W. (2019). *A concise guide to writing a thesis or dissertation: educational research and beyond*, London: Routledge. https://doi.org/10.4324/9780429056888

Suggested Readings

1. Masanja, N. M. (2019). *Practical Handbook to Dissertation and Thesis Writing*. Retrieved from https://uomustansiriyah.edu.iq/media/lectures/6/6_2020_03_03!08_53_23_AM.pdf

2. Bell, D. J., Foster, S. L., & John D. C. (2019). *Dissertations and Theses From Start to Finish: Psychology and Related Fields*. (3rd Ed.). Retrieved from https://www.apa.org/pubs/books/4316188

EDUC-6144   **Term Paper**   **3(3+0)**

A term paper is a research paper written by students over an academic term, accounting for a large part of a grade. Merriam-Webster defines it as "a major written assignment in a school or college course representative of a student's achievement during a term". Term papers are generally intended to describe an event, a concept, or argue a point. It is a written original work discussing a topic in detail, usually several typed pages in length, and is often due at the end of a semester. A term paper is originally a written assignment (usually a research based paper) that was due at the end of the "term". Term papers date back to the beginning of the 19th century when print could be reproduced cheaply and written texts of all types (reports, memoranda, specifications, and scholarly articles) could be easily produced and disseminated.

Note: The students, who will opt term paper, will work on their research projects under the guidance of professor and will submit a report of 8000 to 10000 words with proper referencing in APA style. (Plagiarism certificate must be attached; maximum 30 % similarity would be acceptable).

Recommended Texts

1. APA Writing Sample (2010). Purdue OWL Engagement. Retrieved from
    http://owl.english.purdue.edu/owl/owlprint/560/

Suggested Readings

1. OECD (2018). The future of education and skills Education 2030. Retrieved from
    https://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf
2. Xiao, Y., & Watson, M. (2017). Guidance on Conducting a Systematic Literature Review.
    https://doi.org/10.1177/0739456X17723971

EDUC-6145 **Seminar on Trends and Issues in Education** **3(3+0)**

The word justifies about the tendency of a system. With several educational options available to students today, newer trends are emerging in this field which has completely changed the traditional held perceptions about education. Several career options that were earlier not considered to be traditional have emerged as the most sought after education and career options. At the end of this course, the students will be able to: Argue on the positive and negative impact of the information explosion; Explore the gap between *Madrassah* and mainstream education and identify appropriate government responses; Identify barriers to the achievement of universal literacy and how these may be removed at the local level; Discuss the gradually reducing gender disparity in education in Pakistan and its likely consequences; Analyze the relationship between national curriculum structure and career opportunities; Consider how best environmental awareness can be enhanced through schools and Consider the consequence of the growing privatization of education.

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.

Contents

1. Education as a Complex Enterprise
2. Diversity of aims and approaches in education.
3. Variety of philosophical approaches to education.
4. Education in different periods and societies
5. Madrassah Education
6. Universal Literacy
7. Gender Disparity
8. Population Education:
9. Environmental Awareness
10. Privatization of Education
11. Information in Education
12. New concept of information explosion
13. Expanding learning resources

Recommended Texts

1. OECD (2019). Trends Shaping Education 2019. Centre for Educational Research and Innovation. https://doi.org/10.1787/trends_edu-2019-en
2. AIOU (2006) *Population Education Course MA EPM 584*, Islamabad: AIOU.

Suggested Readings

1. Moncrieffe, M. (2018). Emerging issues and trends in education. DOI:10.1080/00131911.2018.1507302
2. Higher Education Commission (2012). *Contemporary Issues and Trends in Education.* Islamabad: HEC. Retrieved from file:///C:/Users/MuhammadSultan/Downloads/contemporary-issues-and- trends-in-education.pdf
3. Ministry of Education, Curriculum Wing (2010), 13 Modules on Various Core Themes of Population Education, Islamabad.

B.Ed (Hons) ELEMENTARY

URCE-5101   **Functional English-I (Compulsory)**   **3 (3+0)**

The purpose of this course is to develop the English language proficiency of prospective elementary school teachers, and to help them become confident in reading, writing, speaking and listening to the English language. Instead of teaching grammar in isolation and at sentence-level only, this course is based on developing language abilities among student teachers through an integrated approach that provides opportunities to develop their listening, speaking, reading and writing skills. With a focus on social interaction, the course draws specific attention to accurate use of structures, improved pronunciation and to developing active vocabulary in descriptive, narrative and instructional texts. After studying the course, students would be able to use the language efficiently in academic and real life situations and integrate the basic language skills in speaking and writing. The students would be able to work in a competitive environment at higher education level to cater with the long term learners' needs.

Contents

1. Introductions
2. Social Interaction
3. Giving and Following Directions
4. Designing instruction manuals
5. Sharing Experience
6. Functioning in English
7. Voices
8. Narration
9. Punctuation
10. Common grammatical errors and their corrections
11. Writing styles
12. Writing mechanics

Recommended Texts

1. Carver, T.K. & Fortinos-Riggs, S. (2016). *Conversation book II – English in everyday life*. New York: Pearson Education Limited.
2. Swan, M. (2018). *Practical English usage (8ᵗʰ ed.)*. Oxford: Oxford University Press.

Suggested Readings

1. HEC (2012). *Functional English – I. Course guide*. Retrieved form https://www.hec.gov.pk/english/services/universities/RevisedCurricula/Documents/2011-2012/Education/English1_Sept13.pdf
2. Mendler, A. (2009). *Motivating students who don't care: successful techniques for educators*. Amazon.com Eastwood, J. (2015) Oxford Practice Grammar, Karachi: Oxford University Press.

URCI-5105   **Islamic Studies (Compulsory)**   **2 (2+0)**

This course is aimed to provide basic information about Islamic Studies and enhance understanding of the students regarding Islamic Civilization. It majorly comprises of the importance of life and that after death. It is one of the best systems of education, which makes an ethical groomed person with the qualities which he/she should have as a human being. The basic sources of the Islamic Studies are the Holy Qur'an and Sunnah or Hadith of the Holy Prophet Muhammadﷺ. The learning of the Qur'an and Sunnah guides the Muslims to live peacefully. This subject will improve student's skill to perform prayers and other worships and will enhance the skill of the students for understanding of issues related to faith and religious life. The course remains totally indifferent to the personal beliefs of the students, to any sectarian identity they espouse, and any doctrinal point of view they hold. Its overriding aim is to introduce the student to the academic study of Islam—Islam here denoting both a religious system, grounded upon certain normative revealed sources, as well as a civilization unfolding over time as a complex network of cultures shaped by historical contingencies.

Content

1. Introduction to Quranic Studies: Basics, history and Uloom-ul-Quran
2. Study of Selected Text of Holly Quran: Verses of Surah AlBaqra (284-86), Al-Hujrat (1-18), Al-Mumanoon (1-11), Al-Furqan (63-77) and Al-Inam (152-54)
3. Study of Selected Text of Holy Quran: Al-Ihzab (Verse No.6, 21, 40, 56, 57, 58), Al-Hashar (18-20), Al-Saf (1-14).
4. Seerat of Holy Prophet (S.A.W) in Makkah (Before Prophet Hood)
5. Seerat of Holy Prophet (S.A.W) II in Madina
6. Introduction To Sunnah: basic concept, history, kinds andlegal position of Sunnah
7. Selected Study from Text of Hadith: Islamic Law & Jurisprudence
8. Islamic Culture & Civilization: Basic Concepts, Historical Development and contemporary issues
9. Islam & Science: Basic Concepts of Islam & Science, Quranic & Science
10. Islamic Economic System
11. Political System of Islam: Khlaft-E-Rashida, Ummayyads & Abbasids
13. Social System of Islam: Basic Concepts, Elements of Family & Ethical Values

Recommended Texts

1. Hameed ullah M. (2016). *Muslim conduct of state*. Islamabad: Hussain Hamid
2. M. Farkhanda Noor (2009) *Islamiat for students of O' levels*. Lahore: Ferozsons Limited.

Suggested Readings

1. Wael B. Hallaq, W. B. (2013). *An introduction to Islamic law*. England: Cambridge University Press.   https://doi.org/10.1093/jis/ets090
2. Zia-ul-Haq, M. (2001). *Introduction to Al Sharia Al Islamia*. Islamabad: Allama Iqbal Open University

EDUC-5201   **Child Development (Foundation)**   **3 (3+0)**

This course provides prospective teachers with an overview of child development and growth as a holistic process. Development of language and cognition as well as emotional, social, and physical characteristics of children will be explored. Students will form their own child development theory. Implications of child development theory for schools, teachers, and society will be considered. Student will be provided with real experiences to study/observe children at different levels of development. They will have an opportunity to enhance their understanding of how people learn individual differences and learning styles, and how theories of learning and development relate to classroom learning and teaching. The primary focus of this course is learning about children in order to become an effective teacher. It provides prospective teachers with an overview of child development and growth as an holistic process. The latest research and thinking with regard to the conditions that affect children's learning and development will be addressed across developmental domains and stages of development. Development of language and cognition as well as emotional, social, and physical characteristics of children will be explored. Implications of child development theory for schools, teachers, and society will be considered. Student will be provided with real experiences to study/observe children at different levels of development.

Content

1. Introduction to Growth and Development
2. Early Childhood Development
3. Elementary School-Age Child Development
4. Adolescence and Development: overview & theories
5. Differences in Development and Special Needs
6. The Influence of Society on Child Development
7. The Influence of Culture on Child Development
8. Schools, families and communities as partners in child development
9. Development, the human person and resources
10. Physical well-being and mental well-being
11. Socio-Economic indicators of growth and development
12. Urbanization and Development
13. Gender and Development

Recommended Texts

1.   Nakagawa, J. (Ed.). (2006). *Managing development: Globalization, economic restructuring and social policy.* New York: Routledge.

Suggested Readings

1. Howes, C. (2012). *Culture and child development in early childhood programs: Practices for quality education and care.* New York: Teachers College Press.
2. UNECF (2015). *Early childhood development KIT*. NewYork: UNICEF House. Retrieved from https://www.unicef.org/videoaudio/PDFs/Activity_Guide_EnglishFINAL.pdf

تعارف: یہ کورس خاص طور پر زیر تربیت اساتذہ کے لیے ترتیب دیا گیا ہے تا کہ مستقبل کے اساتذہ بنیادی لسانی مہارتوں (سننا، بولنا، پڑھنا، لکھنا، سمجھنا) میں کمال حاصل کر سکیں۔ ان مہارتوں میں دسترس حاصل کرنے کے لیے عملی طریقوں کا استعمال کیا جائے گا۔ ان طریقوں کے ذریعے زبان کی کے سیاق و سباق یا سانچے پر خاص توجہ دی جائے گی تا کہ زیر تربیت اساتذہ نظم و نثر میں فکری، فنی اور عملی سطح کی مہارت حاصل کر سکیں۔

حاصلاتِ کورس(Objectives)

اس کورس کی تکمیل کے بعد زیر تربیت اساتذہ اس قابل ہو جائیں گے کہ وہ

1۔ اردو زبان کی ساخت، وسعت اور اہلیت سے آگاہی حاصل کر سکیں۔

2۔ ادبیات کو زبان کے عملی تناظر میں زندگی کے حوالے سے سمجھ سکیں۔

3۔ مختلف موضوعات کو عملی و تحریری انداز میں بیان کر سکیں۔

4۔ اردو کے ابلاغ میں جدید رجحانات کے تحت نئی جہتوں پر عمل کر سکیں۔

5۔ زبان کے استاد کی حیثیت سے اپنی صلاحیتوں کو تنظیم نو کر سکیں۔

6۔ تدریس زبان کے عملی پہلو کو ابتدائی اور درمیانی جماعتوں میں استعمال کر سکیں

یونٹ– 1: تعارف زبان

یونٹ– 2: اصنافِ ادب

یونٹ– 3: اصنافِ سخن (نظم و غزل)

یونٹ– 4: انشا پردازی

یونٹ– 5: اردو کے جدید رجحانات

شفارش کردہ کتاب

1۔ ریاض احمد (2018)۔ ڈاکٹر اردو تدریس۔ جدید طریقے اور تقاضے مع کتبہ جامعہ لمیٹڈ نئی دہلی، انڈیا

تجویز کردہ کتب:

1۔ بادشاہ منیر بخاری (2015)۔ ڈاکٹر اردو زبان کے غیر آریائی نظریات بخاری پبلشرز پشاور

2۔ شان الحق حقی (2011)۔ فرہنگِ تلفظ مرتبہ (مقتدرہ قومی زبان اسلام آباد

EDUC-5203   **General Science (Content)**   **3(3+0)**

This course will refresh and strengthen prospective teachers' subject matter knowledge. The course covers core concepts in physical science, life science, and earth science. Also covered are the teaching strategies and instructional approaches that best support the development of conceptual understanding of science. The study of General Science in Primary school is linked to National prosperity and economic development. The course will highlight the power of observation and inquisitiveness in general sciences studies. It will also focus on how to relate facts, concepts, and theories to every day experience. The present course explores scientific method and its application in everyday life. The current course explores the various aspects of general science field in order to develop scientific vocabulary and enhance prospective teachers' comprehension of written scientific material from a variety of sources to increase ability to solve scientific problems and to enhance scientific inquiry skills through conducting scientific experiments and participating in hands - on activities.

Content

1. Overview of Science
2. Populations and Ecosystems
3. Diversity and Adaptations
4. Earth – Earth the Blue Planet
5. Force and Motion
6. Properties and Matter
7. Matter and Forces
8. Energy
9. Heat and Light
10. Structure of Cell
11. Human Systems
12. Metals and Non- Metals
13. Teaching of Science in elementary grades

Recommended Texts

1. Ali. P. A. (2018). *Amazing science (Revised Edition)*. Oxford University Press. Retrieved from https://oup.com.pk/school-textbooks/science/oxford-secondary-science-teaching-guide-2.html
2. *General science for IX & X*. (2019). Lahore: Punjab Textbook Board.

Suggested Readings

1. Team, GK (2019). *General science a complete study material*. Retrieved from https://www.jagranjosh.com/general-knowledge/general-science-a-complete-study-material-1465217638-1
2. William Lewis Eikenberry (2008). *The teaching of general science.* Chicago: The University of Chicago Press

3.   Qureshi, A. M. et al (2003). *General science*. Lahore: Punjab Text Book Board.

EDUC-5204   **Methods of Teaching (Foundation)**   **3(3+0)**

This course is an introduction to teaching methods used in elementary schools. The content and structure of the course is based on two strong claims about learning. First, learning results from what the student already knows, thinks, and does and *only* from these actions of the student's mind. A teacher enables students to learn by influencing what the student *does to learn* but the student has to *do* it. Second, as students' progress through school they should learn to become their own teachers. That is, students should learn *how to learn* using their teachers as models. This course is an introduction to teaching methods used in elementary schools. Since you have been an elementary school student, you will recognize some of the methods but you know them from a student's perspective rather than a teacher's perspective. Teaching methods are often divided into two broad categories: teacher-centred methods (also called Direct Instruction) and learner-centred methods (also called Indirect Instruction or Inquiry Learning). An effective teacher knows several methods, some teacher-directed and others learner-directed. He or she would choose, from among these, the one method or combination of methods most likely to achieve a particular lesson's objectives with a particular group of students.

Content

1. Teaching and Learning in School
2. Classrooms are Busy Places
3. Teacher-centered and Student-cantered methods; Model lessons
4. Lecture, Demonstration, Discussion, Questions, and Cooperative Learning
5. Designing Instruction: Goals and Objectives; Assessment; Plans; and Materials
6. Self-Regulated Learning
7. Mastery learning goals and performance learning goals

Recommended Texts

1. Boekarts, M. (2018). *Motivation to learn*. Geneva: International Bureau of Education. Retrieve from http://www.ibe.unesco.org/en/services/online materials/publications/educational- practices.html
2. Rosenshine, B. (2016). *Principles of instruction*. Geneva: Retrieve from http://www.ibe.unesco.org/en/services/online- materials/publications/educational-practices.html

Suggested Readings

1. Vosniadou, S. (2015). *How children learn*. Geneva: International Bureau of Education. Retrieve from http://www.ibe.unesco.org/en/services/online-materials / publications / educational practices.html
2. Feden, P. D. and Vogel, R. M. (2003). *Methods of teaching*. Boston: Mc-Graw Hill.
3. Rashid, M. (Ed.). (2001). *Allied material on teaching strategies*. Islamabad: AIOU.

URCE-5102   **English - II (Communication Skills)**   **3(3+0)**

This is the second English course for prospective elementary school teachers. It aims to develop skills for effective communication and presentation using clear and appropriate English. The course comprises five units which focus on developing effective communication strategies, making oral presentations, understanding intonation patterns and their role in determining the meaning of a message or text, and how to present information in speech and writing. The first five weeks are devoted to developing student teacher language confidence and interpersonal skills. This is followed by task-based projects which incorporate all four language skills in order to develop their proficiency in English language. To make student teachers independent users of language, it is essential to involve them in the learning process. The course requires an integrated approach to language teaching which enables learning of all the four skills of language (i.e. listening, speaking, reading and writing) in natural settings. The learning and teaching approach should be balanced so that student teachers not only learn about language, but also how to use English in different contexts.

Content

1. Effective Communication
2. Making Oral Presentations
3. Sound Patterns, Tone and Purpose
4. Persuading Audience
5. Public speaking
6. Persuasive writing
7. Collecting & Presenting Information

Recommended Texts

1. Eastwood, J. (2018). *Oxford practice grammar*. Karachi: Oxford University Press.
2. Swan, M. (2018). *Practical English usage (8th ed.)*. Oxford: Oxford University Press.

Suggested Readings

1. Howe, D.H. & Kilpatrick, L. (2018). *English for undergraduates*. Oxford: Oxford University Press
2. Thomson, A. J., Martinet, A. V., & Draycott, E. (1986). *A practical English grammar*. Oxford: Oxford University Press
3. Howe, D.H. & Kilpatrick, L. (2008). English for undergraduates. Oxford: Oxford University Press

ICTCM-5201   **Computer Literacy (Compulsory)**   **3(3+0)**

This course will prepare teachers to understand, use and apply technologies (computer, digital camera, mobile phones) in an effective, efficient and ethical ways. Advance technologies are more pervasive today than they have ever been, and their uses are expanding continually. ICT is significantly enhancing and altering human activity, and enabling us to live, work and think in ways that most of us never thought possible. Prospective teachers will explore fundamental concepts, knowledge, skills, and attitudes for applying technology in educational settings. They will also learn to develop skills like collaboration, higher-order thinking, problem solving, and self-direction through effective use of technology tools and resources thus, enabling them to be a lifelong learner in 21st century. This is a skills-focused/practical course and it is expected that all the sessions would be implemented practically in the computer lab. The course is based on interactive exploration approach using lecture demonstration method with various teaching techniques.

Content

1. Introduction to Computer: history, soft ware & hardware
2. Learning Computer Basics and Internet
3. Using Productivity Applications (Word Processing) (Microsoft Word, Office)
4. Using Productivity Applications: Microsoft Excel
5. Using Productivity Application (Multimedia) Microsoft PowerPoint,
6. Making Connections; Communicating through Internet
7. Using multimedia digital devices with a computer
8. Use of computer in daily life & Computer ethics
9. Computer-Assisted Instruction (CAI)

Recommended Texts

1. Panigrahi, M. R. (2018). *ICT integrated teacher education*. New Delhi: Commonwealth Educational Media Centre for Asia. Retrieved fromhttp://oasis.col.org/bitstream/handle/11599/2447/2016_Panigrahi
2. Ellington, H., Percival, F. and Race, P. (2015). *Handbook of educational technology* (5th Edition). London: Kogan Page Limited.

Suggested Readings

1. HEC (2012). *Information and communication technologies in education*. Islamabad. Retrieved from https://hec.gov.pk › services › Documents › Education › ICTsEdu_Sept13
2. Hennessy, S., & Onguko, B. (2016). Developing the use of information and communication technology to enhance teaching and learning in East African schools: Review of the literature. *Centre for Commonwealth Education & Aga Khan University Institute for Educational Development–Eastern Africa Research Report.* https://www.educ.cam.ac.uk/centres/archive/cce/publications/CCE_Report1_LitRev.pdf
3. Norton, P. & Sprague, D. (2011). *Technology for teaching.* Boston: Allyn & Bacon.

EDUC-5205　　　　　　　　**Classroom Management (Foundation)**　　　　　**3(3+0)**

One of the reasons cited for teacher burnout is the challenge of classroom management. This comes as little surprise since classrooms are crowded, busy places in which students of diverse backgrounds and learning styles must be organized, directed and actively involved in learning. Many events need to occur simultaneously, the course of these events is often unpredictable and teachers must react often and immediately to evolving problems and needs. Teaching in such settings requires a highly developed ability to manage people, space, time and activity. In this course, prospective teachers will be encouraged to explore their own beliefs about teaching and learning to arrive at a philosophy of classroom management that places 'learning' as an ultimate goal. Prospective teachers will be given the chance to explore curricular concerns of 'what to teach' and 'how to teach it' and view lesson planning as the consequence of these decisions. They will also study research and best practices on differentiation of instruction, classroom structures, routines, procedures and community-building.

Content

1. Learning Theories and Classroom Management
2. Curriculum and Classroom Management
3. Routines, Schedules and Time Management in Diverse Classrooms
4. Creating Shared Values and Community
5. Planning the Classroom Environment
6. How to Create the Classroom I Want?
7. Assertive discipline
8. Community-Building
9. Developing Classroom Norms
10. Classroom management for elementary teachers

Recommended Texts

1. Evertson, C. M., & Emmer, E. T. (2019). *Classroom management for elementary teachers (9ᵗʰ Ed.).* Upper Saddle River, NJ: Pearson.
2. Marzano, R. J. (2013). *Classroom management that works: Research-based strategies for every teacher.* Alexandria, VA: Association for Supervision and Curriculum Development.

Suggested Readings

1. Canter, L. (2018). *Assertive discipline: More than names on the board and marbles in a jar.* Retrieved from http://campus.dyc.edu/~drwaltz/FoundLearnTheory/FLT_readings/Canter.htm

2. Evertson, C., Poole, I., & IRIS (2016). *Norms and expectations.* Retrieved from http://iris.peabody.vanderbilt.edu/instructors/guides/case_studies/ICS-003- ICpdf

URCM-5207   **General Mathematics (Compulsory)**   **3(3+0)**

This course provides opportunities for prospective elementary teachers to strengthen their mathematical knowledge and skills and to gain confidence in their understanding of mathematics. An important outcome of this course is for prospective teachers to be able to teach mathematics successfully in the elementary grades. Research-based knowledge about good math instruction provides a solid base of information for educators to use as they identify mathematics skills students need to develop, as well as teaching strategies and instructional approaches that best support the development of these skills. The course will also examine how children learn and develop mathematical understanding and skills and how the way children think influences the teaching of mathematics in the primary, elementary, and middle grades. The General Mathematics course is a comprehensive effort to build and deepen math's content knowledge, to learn and use high-quality instructional practices, and to study ways in which young students' approach and learn mathematics.

Content

1. Numbers and Operations
2. Algebra
3. Order of Operations
4. Square expressions and equations
5. Symbol manipulation
6. Geometry and Geometric Measurement
7. Ratios & proportions
8. Basic Statistics
9. Information Handling
10. Trigonometry
11. Zakat, Ushr, Inheritance & Business mathematics
12. Linear equations and inequalities
13. Areas and Volumes

Recommended Texts
1. Van de Walle, J. A, Karp, K., & Bay-Williams, J. (2019). *Elementary and middle school mathematics: Teaching developmentally. (10ᵗʰ Ed.).* Pearson Education. NJ: Upper Saddle River.
2. Punjab textbook Board (2019). *Mathematics for class 9th & 10th*. Punjab textbook Board, Punjab Pakistan

Suggested Readings
1. Basserear, T. (2018). *Mathematics for elementary school teachers*. Brooks Cole. Retrieved from https://www.cengage.com/c/mathematics-for-elementary-school-teachers-7e bassarear/9781337629966/
2. Haylock, D. (2017). *Mathematics explained for primary teachers.* SAGE Publications.
3. Punjab textbook Board (2019). *Mathematics for class 7ᵗʰ*. Punjab textbook Board, Punjab Pakistan
4. Punjab textbook Board (2019). *Mathematics for class 8ᵗʰ*. Punjab textbook Board, Punjab Pakistan

URCP-5106 **Pakistan Studies** **2(2+0)**

The Pakistan Studies course is designed keeping in mind aims/objectives of the National Curriculum for Pakistan Studies. This course endeavors to prepare students to be active, conscientious citizens who take informed decisions and make contributions for positive change in society. While highlighting the main objectives of national life, the course explains further the socio-economic, political and cultural aspects of Pakistan's endeavors to develop and progress in the contemporary world. For this purpose, the foreign policy objectives and Pakistan's foreign relations with neighboring and other countries are also included. This curriculum has been developed to help students analyze the socio-political problems of Pakistan while highlighting various phases of its history before and after the partition and to develop a vision in them to become knowledgeable citizens of their homeland. The Pakistan Studies course is designed keeping in mind aims/objectives of the National Curriculum for Pakistan Studies and the topics outlined in the curriculum. This course endeavors to prepare students to be active, conscientious citizens who take informed decisions and make contributions for positive change in society.

Content

1. Contextualizing Pakistan Studies
2. Geography of Pakistan: Geo-Strategic Importance of Pakistan
3. Freedom Movement (1857-1947)
4. Pakistan Movement (1940-47)
5. Muslim Nationalism in South Asia
6. Two Nations Theory
7. Ideology of Pakistan
8. Initial Problems of Pakistan
9. Political and Constitutional Developments in Pakistan
10. Economy of Pakistan: Problems and Prospects
11. Society and Culture of Pakistan
12. Foreign Policy Objectives of Pakistan and Diplomatic Relations
13. Current and Contemporary Issues of Pakistan
14. Human Rights: Issues of Human Rights in Pakistan

Recommended Texts

1. Hayat, Sikandar (2016). *Aspects of Pakistan movement.* Islamabad: National Institute of Historical and Cultural Research.
2. Kazimi, M. R. (2007). *Pakistan studies.* Karachi: Oxford University Press.

Suggested Readings

1. Shahid. M. (2016). *Pakistan's foreign policy: A Reappraisal*. Karachi: Oxford University Press.
2. Syed, A. (2017). *Issues and realities of Pakistani politics.* Lahore: Research Society of Pakistan, University of the Punjab.

3. Kazimi, M. R (2009). *A concise history of Pakistan.* Karachi: Oxford University Press.
4. Talbot, Ian (1998). *Pakistan: A modern history.* London: Hurst and Company.

EDUC-5206 **Methods of Teaching Islamic Studies** **3(3+0)**

Islamic Studies engages in the study of Islam as a textual tradition inscribed in the fundamental sources of Islam; Qur'an and Hadith, history and particular cultural contexts. The area seeks to provide an introduction to and a specialization in Islam through a large variety of expressions (literary, poetic, social, and political) and through a variety of methods (literary criticism, hermeneutics, history, sociology, and anthropology). It offers opportunities to get fully introductory foundational bases of Islam in fields that include Qur'anic studies, Hadith and Seerah of Prophet Muhammad (PBUH), Islamic philosophy, and Islamic law, culture and theology through the textual study of Qur'an and Sunnah. This course will help to understand the nature and characteristics of Islamic Studies. It will help to design and use modern means and techniques in the implementation of the lessons in Islamic Studies. It will make capable to create effective assessment tools in Islamic education.

Content

1. Introduction to Islamic studies
2. Objectives of teaching Islamic studies
3. An overview of teaching skills
4. Teaching methods and learning Activities
5. Teaching of Quran
6. Teaching of Seerat ul Nabi (SAW) and Sunnah
7. Islamic culture, society and values
8. Using technology and A.V aids in teaching Islamic studies
9. Assessment in Islamic studies

Recommended Texts

1. Amer, F. (2015). *Teaching for Arabic and Islamic education. (2nd Ed.)* Cairo: Aalam Al Kutub.
2. Zia-ul-Haq, M. (2018). *Introduction to Al Sharia Al Islamia*. Islamabad: Allama Iqbal Open University

Suggested Readings

1. Aziz, A. A., Ibrahim, M. A., Shaker, M. H., & Nor, A. M. (2016). Teaching Technique of Islamic Studies in Higher Learning Institutions for Non-Arabic Speakers: Experience of Faculty of Quranic and Sunnah Studies and Tamhidi Centre, Universiti Sains Islam Malaysia. *Universal Journal of Educational Research*, 4(4), 755-760..
2. Hassan, A. (1990). *Principles of Islamic jurisprudence*. New Dehli: Adam Publishers.
3. Zia-ul-Haq, M. (2001). *Introduction to al-Sharia al-Islamia*. Lahore: Aziz Publication

URCC-5110   **Citizenship Education and Community Engagement**   **3 (1+2)**

In recent years, community engagement has become a central dimension of governance as well as policy development and service delivery. However, efforts to directly involve citizens in policy processes have been bedeviled by crude understandings of the issues involved, and by poor selection of techniques for engaging citizens. This course will provide a critical interrogation of the central conceptual issues as well as an examination of how to design a program of effective community engagement. This course begins by asking: Why involve citizens in planning and policymaking? This leads to an examination of the politics of planning, conceptualizations of "community" and, to the tension between local and professional knowledge in policy making. This course will also analyze different types of citizen engagement and examine how to design a program of public participation for policy making. Approaches to evaluating community engagement programs will also be a component of the course. Moreover, in order to secure the future of a society, citizens must train younger generations in civic engagement and participation. Citizenship education is education that provides the background knowledge necessary to create an ongoing stream of new citizens participating and engaging with the creation of a civilized society.

Contents

1. Introduction to Citizenship Education and Community Engagement: Orientation
2. Introduction to Active Citizenship: Overview of the ideas, Concepts, Philosophy and Skills
3. Identity, Culture and Social Harmony: Concepts and Development of Identity
4. Components of Culture and Social Harmony, Cultural & Religious Diversity
5. Multi-cultural society and inter-cultural dialogue: bridging the differences, promoting harmony
6. Significance of diversity and its impact, Importance and domains of inter-cultural harmony
7. Active Citizen: Locally active, globally connected
8. Importance of active citizenship at national and global level
9. Understanding community, Identification of resources (human, natural and others)
10. Human rights, Constitutionalism and citizens' responsibilities: Introduction to human rights
11. Universalism vs relativism, Human rights in constitution of Pakistan
12. Public duties and responsibilities
13. Social Issues in Pakistan: Introduction to the concept of social problem, Causes and solutions

Recommended Texts

1. Kennedy, J. K., & Brunold, A. (2016). *Regional context and citizenship education in Asia and Europe*. New York: Routledge Falmer.
2. Macionis, J. J., & Gerber, M. L. (2010). *Sociology*. New York: Pearson Education

Suggested Readings

1. British Council. (2017). *Active citizen's social action projects guide.* Scotland: British Council
2. Larsen, K. A., Sewpaul, V., & Hole, G. O. (Eds.). (2013). *Participation in community work: International perspectives.* New York: Routledge

EDUC-5207   **Teaching Literacy Skills (Professional)**   **3(3+0)**

The purpose of this course is to help prospective teachers understand the theory and practice of teaching early reading and writing. Readings and writing are seen as related, integrated meaning-making processes, which are reciprocal with the oral language processes, listening and speaking. Like oral language, reading and writing develop over time through the child's active interaction with print and the environment, with support and facilitation by the teacher. Adopting effective strategies that foster success and a love of reading is a key to supporting all children as they engage in the process of becoming readers and writers. The course will provide learners with a grounding in what it means to be a reader and early reading development, which is the foundation for the continuation of literacy development. A major goal is to develop the learners' understanding that reading is a complex process of constructing meaning through the interaction of a reader's existing knowledge, the information in the text, and the context of the reading. Students will also understand the connection between reading and writing and the important role of writing in early literacy development.

Content

1. What is Readings and Writing
2. Components of Readings
3. Oral Language as the Foundation of Readings
4. Phases and Models of Readings and Spelling Development
5. Stages of Writing Development
6. Growing Up to Read and Write: Early Readings and Writing
7. Literacy-Rich Classroom Environment
8. Differentiating instruction in a print-rich classroom.
9. Becoming Readers
10. Becoming Writers
11. Literacy and language
12. Instruction Strategies for Fluency
13. Instructional Strategies for Vocabulary
14. Instructional Strategies for Comprehension

Recommended Texts

1. M.S.Burns, P. Griffin, and C.E. Snow (1999). *Starting out right: A guide to promoting children's reading success.* Washington, DC: National Research Council. Available on line: http://www.nap.edu/catalog.php?record_id=6014

Suggested Readings

1. Dickinson, D. K. (2012). Shifting images of developmentally appropriate practice as seen through different lenses. Educational Researcher, 31(1), 26-32.
2. Saracho, O. N. (2017). *Literacy and language: new developments in research, theory, and*

practice. https://doi.org/10.1080/03004430.2017.1282235

EDUC-5208   **Arts Crafts and Calligraphy (Content)**   **3(3+0)**

The Art, Crafts, and Calligraphy course will help prepare Student Teachers to teach these subjects in the elementary grades. It provides Student Teachers with an opportunity to develop their knowledge and understanding of art, crafts, and calligraphy (with a focus on Pakistani artists, calligraphers, and craftsmen and women) and to practice making their own works using a variety of techniques. Given that this is a teacher education course, Student Teachers also examine the role of art in child development; the importance of art, craft, and calligraphy in the curriculum; and the links between art, crafts, and calligraphy and other subjects such as science, math, and social studies. Student Teachers will have learned about lesson planning, classroom assessment, and classroom management in other courses; in this course they will focus on these three skills as they apply to teaching and learning art, crafts, and calligraphy in the elementary grades. This course will develop and broaden critical and creative thinking skills, understanding of and appreciation for the visual arts and culture and increase participant's proficiency in visual art techniques and processes. Participants will get an opportunity to explore various visual art forms and techniques in this course through the elements and principles of art and design.

Content

1. Introduction to Arts, Crafts & Calligraphy
2. History and Culture
3. Elements of Art & Principle of Design
4. Use of Space and value in 2D and 3D art Texture Natural and man- made)
5. Introduction of Principle of Design (unity, variety, balance, contrast, emphasis, and pattern and proportion)
6. Landscape, Stick Drawing
7. What is assessment in art curriculum?
8. How and why we assess creativity?
9. Review the recommendations proposed in the national curriculum grades
10. Design rubric/checklist for portfolio
11. Set criteria for presentation/display/ peer and self-assessment etc.
12. Conclusion and review of whole unit

Recommended Texts

1 . Razzak, A. (2018). *Children and Art- Status of art education in Pakistan.* Germany: VDM.

Suggested Readings

1. Craig Roland, C. (2016). *Young in art: A developmental look at child art*. Retrieved from www.artjunction.org
2. Menzer, M. (2015). *The arts in early childhood: social and emotional benefits of arts participation. national endowment for the arts.* Retrieved from https://www.arts.gov/sites/default/files/arts-in-early-childhood-dec2015-rev.pdf

نصاب اردو

اس کورس میں زیرِ تربیت اساتذہ نظریہ آموزش زبان اور اردو زبان کے متنوع ماحول کے حوالے سے تدریس زبان کو سمجھیں گے۔ماہرین زبان کا کہنا ہے کہ زبان کا فطری سافٹ ویئر پیدائش سے قبل ہی ہمارے دماغ میں موجود ہوتا ہے اور یہ پروگرام یونیورسل گرائمر کہلاتا ہے۔بچے اپنی معصوم عمر ہی میں ہم سے اچھے زبان کے متعلم ہوتے ہیں۔اس نظریے کے تحت اس کورس میں ابتدائی اور وسطانی جماعتوں کی درجہ بندی کی گئی ہے۔لسانی مہارتوں کو جماعت بندی کے تحت عملی تدریسی طریقے (سننا، بولنا اور سمجھنا) اور عملی تدریسی طریقے (پڑھنا اور لکھنا) میں تقسیم کیا گیا ہے۔علاوہ ازیں ان مہارتوں پر دسترس کے نقطۂ نظر سے آڈیولنگوئل اور ٹوٹل فزیکل جیسے عملی طریقوں سے استفادہ کیا گیا ہے۔

حاصلاتِ کورس

اس کورس کی تکمیل کے بعد زیرِ تربیت اساتذہ اس قابل ہو جائیں گے کہ وہ:

1۔ نظریہء آموزش کے فطری تقاضوں کو سمجھ سکیں۔

2۔ اردو زبان شناسی پر عبور حاصل کر سکیں۔

3۔ سن کر لہجے، تلفظ کی ادائیگی اور الفاظ کے آہنگ کا لطف لے سکیں۔

4۔ پڑھ کر جملہ سازی کی تحریری مشق کر سکیں۔

5۔ پڑھ کر زندگی سے متعلق مختلف موضوعات پر عمدہ تحریریں پیش کر سکیں۔

6۔ طریقہ ہائے تدریس میں عملی کام کا مظاہرہ کر سکیں۔

7۔ ابتدائی سے وسطانی سطح کے تدریسی کورس پر سمعی بصری معاونات و سمعی اشارات تیار کر سکیں۔

مشمولات (Contents)

یونٹ 1: نظریہء زبان

یونٹ 2: تحت عملی تدریسی طریقے (سننا، بولنا اور سمجھنا)

یونٹ 3: اور عملی تدریسی طریقے (پڑھنا اور لکھنا)

یونٹ 4: جائزہ اور آزمائش

سفارش کردہ کتاب

1. Aziz-ur-REhman (2016). *Teach yourself Urdu in two month*. Idar Ishaat-e-Diniyat.
    Retrievved from https://archive.org/details/TeachYourselfUrduInTwoMonths/page/n2

1. Amanulla M.B. (2016). *Teaching of Urdu: Problems and Prospects*. Dept. of Arabic, Persian and Urdu, University of Madras, Chennai
2. Shah, A. (2016). *Teaching of Urdu: Problems and Prospects*.

EDUC-5210   **Teaching of General Science (Professional)**   **3(3+0)**

This course will strengthen prospective elementary teachers' subject matter knowledge. It provides further opportunity to deepen the pedagogical science content knowledge required to effectively teach general science in elementary school. The course covers core concepts in physical science, life science, and earth science. It also covers teaching strategies and instructional approaches that best support the development of a conceptual understanding of science. The Instructor will adopt innovative teaching approaches dominated by the inquiry approach along with cooperative learning and problem-solving, which involve Student Teachers in the active learning process. In this syllabus, the use of inquiry-based pedagogy in the paradigm of the constructivist approach should help Student Teachers experience making meaning in science, and help them relate science learning with their daily experiences. courses are designed to prepare prospective elementary teachers to teach inquiry science in grades 1-5. Their (pedagogical) content knowledge is chosen accordingly. It is recommended that prospective science teachers who want to teach science in higher elementary grades (6-8) deepen their science knowledge further by attending additional science classes offered in Year 3 and Year 4 of the B.Ed. (Hons) program.

Content

1. Nature of Science
2. Aims / Objectives Teaching General Sciences
3. Methods of Teaching General Science
4. Approaches of Teaching General Science
5. Teaching Aids
6. Characteristics of effective Science Teaching
7. Evaluation
8. Energy Transfer, Transformations, and Conservation
9. Interactions of Energy and Matter
10. Earth's Systems Undergoing Constant Change
11. Solar System and the Universe
12. Human Body as a System

Recommended Texts

1. Obe, W. H. (2018). *The teaching of science in primary schools*. UK: Routledge.
2. Terry, J. (2019). *Oxford secondary science teaching guide 1*. Oxford: Oxford University Press

Suggested Readings

1. Yeung, Y. Y. (2015). *General Science Teacher Education*. DOI: https://doi.org/10.1007/978-94-007-2150-0_219
2. Eikenberry, W. L. (2008). *The teaching of general science.* Chicago: The University of Chicago Press. Retrieved from https://elearn.gov.pk/books/techersGuide/6th7th8th/index.html

EDUC-5211   Information and Communication Technology in Education   2(2+0)

Information and Communication Technologies (ICTs) in Education is a broad and constantly changing subject. This course will prepare teachers to understand, use and apply a range of technologies and platforms in teaching and learning, in line with international standards. With the changing face of technologies and related application, this course will primarily focus on using technologies for learning 'how to learn' to cope with change. It will provide opportunities to prospective teachers to collaborate with students, educators, peers, parents, and global community using digital tools and resources to support learning, success and innovation. Course topics include supporting policies and guidelines for ICTs integration, computer- mediated learning, telecommunications and multimedia resources, online teaching and learning, problems of classroom integration, and computer support for professional development and administration. Teachers-in-training will engage with the design and creation of exciting intellectually challenging and authentic learning environments in which ICT changes not only what students learn but also how they learn, as we move forward in the 21st century. Trainees in this course will examine how ICT might be used to both enhance and transform learning.

Content

1. Introduction to ICTs
2. ICTs Integrated into Curriculum and Instruction
3. Collaborative Learning using ICTs
4. ICTs for Life-long Learning and Teacher Professional Development
5. Evaluating ICT Tools and Resources for Use
6. Assessing quality of websites
7. Assessing quality of Internet applications,
8. Assessing quality of educational games,
9. Policy Guidelines for Use of ICTs in Education

Recommended Texts

1. Huang, R. J., Spector, M., & Yang, J. (2019). *Educational technology*. Singapore: PTE Ltd. DOI: https://doi.org/10.1007/978-981-13-6643-7
2. Abdelkaf, H. N. (2018). *Understanding ICT standardization: Principles and practice*. ETSI 2018. Retrieved from https://www.etsi.org/images/files/Education/Understanding_ICT_Standardization_LoResPrint_20190125.pdf

Suggested Readings

1. Panigrahi, M. R. (2016). *Resource book on ICT integrated teacher education*. New Delhi: Commonwealth Educational Media Centre for Asia.
2. Lim C.P., Oakley G. (2013). *Information and communication technologies (ICT) in primary education.* In: TAY L.Y., LIM C.P. (eds) Creating Holistic Technology-Enhanced Learning Experiences. Sense

Publishers, Rotterdam. DOI: https://doi.org/10.1007/978-94-6209-086-6_1

3. Joyce, B., Weil, M., Calhoun, E. (2014). *Models of teaching (9th Ed.).* Upper Saddle River NJ: Pearson Education. ISBN 0133749304

EDUC-5212   **Teaching Practice (Short Term)**   **3(3+0)**

The total number of hours required in the semester for this course is 3 credits x 3 hours x 16 weeks equals 144 hours. It is recommended that Student Teachers spend around 120 hours in the classroom and the rest of the hours will be spent in seminar meetings and working on assignments. Student Teachers are expected to make regular visits to schools throughout their program, starting in the first few weeks of Semester 1. The Semester 3 Developmental Practicum is an extension of these visits and should not be the first time students are at school.

Course Outcomes

Student Teachers will be able to:
1. Reflect on and learn from connecting theory and their teaching practice.
2. Collaborate with peers, Cooperating Teacher, other School Staff, and College/University Supervisor, establishing professional relationships.
3. Invite, accept, and utilize formative feedback from the Cooperating Teaching peers, and the College/University Supervisor in a non-defensive manner.
4. Produce instructional plans unit plans,
5. Utilize appropriate instruments or techniques for informally and formally assessing student learning and learning needs.
6. Recognize cognitive and affective needs of students and establish learning environments and use activities appropriate to meeting those needs.

Course Description

This course includes two important parts:
a. A school placement in an elementary school. (6 weeks)
b. A seminar that meets regularly.

Course Assignments

Assignments will be listed on a separate handout. These assignments will be designed to help you achieve course outcomes. Some will take place in the classroom and others outside of the classroom.

Grading Policy

Grading for this course follows the university's policies. This will be explained by the Instructor early in the course and will include both coursework and examinations. Grades for the Practicum Experience will be assigned in collaboration with the Cooperating Teacher, college supervisor and Practicum Instructor

EDUC-5213   **Classroom Assessment (Foundation)**   **3(3+0)**

The emphasis in this course is on interactions between instruction, assessment, and learning. Assessment plays a vital role promoting educational activities. Same is the case with educational measurement and evaluation of students' achievement and progress. It is an essential part of teaching learning process and without it all educational process is meaningless. It is because without doing this we cannot judge the degree or extent to which we have been successful in teaching learning process. This course is intended to introduce students with various techniques, instruments, and approaches to measure and evaluate students' achievement in classroom. The goal of the course is to persuade you that integrating assessment activities into lesson plans improves learning. You will practice writing assessment criteria and assessment methods into lesson plans. You will study and critique links between assessment and instruction. This will enable the students to know how to develop relevant educational assessment, describe fundamental aspects on the quality of assessment procedures, evaluate tests and items using statistical and qualitative methods, incorporate meaning into test score scales using both norm-referenced and criterion-referenced procedures and use the results of standardized tests to help make decisions about students and educational systems.

Content

1. Introduction to classroom assessment: concepts and context
2. Assessment is the bridge between teaching and learning
3. Essays - One way to assess complex learning and achievement
4. Cultures of testing and assessment
5. Instructional objectives
6. Planning and Developing Classroom Tests and assessment
7. Test construction and Qualities of good tests
8. Evaluating Typical Behavior / Affective Domain
9. Analysis and interpretation of Test Results / Scores
10. Reporting and Grading of Results

Recommended Texts

1. Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2018). *Assessment for learning: Putting it into practice.* Berkshire, UK: Open University Press.

Suggested Readings

1. McMillan, J. H. (2016). *Classroom assessment: Principles and practice for effective standards-based instruction (5ᵗʰ Ed).* Boston: Pearson.
2. Broich , G. and Kubiszun , T. (2003).*Education testing & measurement* . Singapore: John Wiley and Sons.
3. Miller, M.D., Linn, R.L., & Gronlund, N.E. (2015). *Measurement and assessment in teaching (10ᵗʰ Ed).* Upper Saddle River, NJ: Pearson.

4. Arends, R. I. (2004). *Learning to teach.* Boston: McGraw Hill.

EDUC-5214   **Teaching of English (Professional)**   **3(3+0)**

The course aims to be comprehensive in its coverage and depth so that, on its completion, participants will have gained both a theoretical understanding of the basic principles of Second Language Acquisition and the practical knowledge of how to apply these principles effectively in the language classroom. The course focuses on ways of teaching young learners the four skills of listening, reading, speaking and writing to enable them to reach a basic level of communicative competence in both spoken and written English. In addition to learning how to teach and integrate the four skills in an interactive, learner-centered manner, participants will gain an understanding of how grammar awareness raising and vocabulary acquisition can be incorporated into a communicative teaching approach. Finally, student teachers will learn how to design and develop their own teaching materials and activities, and how to assess and test their students' language proficiency and progress. By the end of the course, student teachers should be in a position to select the methods, strategies and techniques which are most relevant and appropriate for teaching their students to communicate successfully in speech and writing.

Content

1. Introduction to Second Language Acquisition
2. Receptive Skills (Listening & Readings)
3. Productive Skills - Speaking and Writing
4. Teaching Grammar Communicatively
5. Teaching Vocabulary Effectively
9. Methodologies of teaching second language
10. Error Analysis
11. Assessing Language Performance
12. Micro-teaching in groups and evaluation of the testing materials by the class
13. Basic principles for assessing children's language learning
14. Conflicts between classroom learning and classroom testing and ways of reducing these conflicts

Recommended Texts

1. Goh, C. M. (2017) *Teaching speaking in the language classroom*. Singapore: SEAMEO-RELC.

Suggested Readings

1. Cameron, L. (2015) *Teaching languages to young learners*. Cambridge: CUP.
2. Richards, J.C. (2015) *Communicative language teaching today*. Singapore: RELC.
3. Swan, M. (2005) Practical English sage. Oxford: OUP.

EDUC-5215   **Teaching of Mathematics (Professional)**   **3(3+0)**

Prospective teachers will become familiar with Pakistan's National Mathematics Curriculum and expected student learning outcomes. Prospective teachers will learn to use a variety of instructional methods that promote active learning of math, including making and using teaching and learning materials. They will plan mathematics lessons and activities, and engage in practice teaching of math. This course will equip prospective teachers with knowledge and skills to teach math to grades I through VIII. They will become familiar with the math curriculum and expected student learning outcomes. Prospective teachers will learn to use a variety of instructional methods that promote active learning of math, including making and using teaching and learning materials. They will plan math lessons and activities and practice teaching math with peers. Prospective teachers will learn to use a variety of instructional methods that promote active learning of math, including making and using teaching and learning materials like AV-adis. They will also understand the concept and need of Mathematics Laboratory and its essentials and use in teaching of mathematics.

Content

1. Prime & Composite Numbers, GCD, LCM & Prime factorization
2. Operations with Fractions (1)
3. Geometric Ratios
4. Data: Estimation & Large Numbers
5. Mathematics Education
6. Methods of Teaching Mathematics
7. Techniques of Teaching Mathematics
8. Teaching Aida and Mathematical Laboratory & How to use teaching aids and mathematics laboratory
9. Measuring Achievements in Mathematics
10. Planning Mathematics Learning
11. Introduction and/or Review of Seminal Islamic Thinkers in Mathematics

Recommended Texts

1. *Basserear, T. (2017). Mathematics for elementary school teachers.* Belmont, CA: Brooks/ Cole

Suggested Readings

1. Haylock, D. (2016). *Mathematics explained for primary teachers*, 4th ed. Thousand Oaks, CA: SAGE Publications.
2. Thong, H.S. and Hong, K.N. (2015). *New additional mathematics (for O' level).* Karachi: paramount publishing Enterprise.
3. Bennett–Jr., A.B. and Nelson. L.T. (2014). *Mathematics for elementary teachers: A conceptual approach. (6th Ed.)*. Boston: McGrew-Hill.

EDUC-5216   **School, Community and Teacher**   **3(2+1)**

The purpose of this course is to provide prospective teachers with a strong foundation for understanding the relationship between and among teachers, the school and the families and community that support the school. Basic conceptualizations of institutions that educate and the role of the teacher in relating to these institutions will be considered. Students will also explore how cultural, social, and historical forces have shaped understanding of the relationship teachers have with schools, communities and families in Pakistan. The course will explore the social context of schooling, examining how the work of teachers is nested within school and community. It will provide orientation to the process of socialization in schools and how social factors affect education. Practical application of the course will be emphasized as students explore the teaching and learning within both school and community. They will identify strategies, practices, and relationships that have proven fruitful within the contexts with which they are familiar and learn how to identify and respond to challenges in school, community and teacher relationships. Students will identify how culture, gender, special needs, equity and equality and collaborative working conditions affect the school and community.

Content

1. Society, Community and Education
2. Understanding Social Interaction in Schools and Communities
3. School and Culture
4. Relationships between School and Community
5. Social Institutions
6. Critical analysis of the role of Social Institutions in Pakistani school
7. Teacher's Role in School and Community
8. Teacher as an integral part of community
9. Teacher as a change agent in Community
10. Teacher as a change agent in School
   11. Effects of teachers and schools on individual and group behavior
12. Working Context of Pakistani Teacher

Recommended Texts
1. Marshall, L & Rowland, F. (2019). *A guide to learning independently*, *(4th Ed.).*French Forest, NSW: Pearson Longman

Suggested Readings
1. Bashiruddin, A. & Retallick, J, (eds), (2018). *Becoming teacher educators* Institute of Educational Development, Karachi: Aga Khan University.
2. Shaaban, M. & Qureshi, R. (2017). *Teacher leaders: Experiences of Pakistani teachers in leading school improvement activities*. Quality in Education: Teaching and Leadership in Challenging Times. Vol. 2, 558.

EDUC-5217   **Teaching of Social Studies (Professional)**   **2(2+0)**

This course will acquaint teachers with an understanding of the key concepts of the various disciplines comprising the Social Studies. This will broaden their understanding of recurring social issues; help them to understand the controversies (current and persistent local, national and global issues). This will help promote students' growth as individuals and as citizens of Pakistan and of an increasingly interdependent world. This course will encourage prospective teachers to further develop their instructional repertoire and assessment practices in order to improve the teaching and assessment of concepts, skills, values and social actions. This course will prepare prospective teachers to provide for their students' activity-rich opportunities for inquiry, cooperative learning, discussion, role play, etc. It will equip prospective teachers with strategies to deal with controversial issues in their classrooms. Hence, this course combines content with different teaching strategies to make the teaching and learning of social studies a valuable and interesting educational experience for both teachers and students.

Content

1. Citizenship and Human Rights Education
2. History - People, Past Events and Societies
3. Geography - People, Place and Environment
4. Culture and Diversity
5. Power, Authority and Governance
6. Production, Distribution and Consumption
7. Indus valley civilization
8. Foundation and Socio-cultural state of Mughals
9. Teaching of History & Geography:
10. Use of A.V-aids in teaching history and geography
11. Planning lessons
12. Imparting instruction,
13. Expository method

Recommended Texts

1. Anderson, L. H. (2018). *Chains.* New York: Atheneum Books for Young Readers.

Suggested Readings

1. Brophy, J. and Alleman, J. (2006). *Powerful social studies for elementary students.* Belmont, CA: Thomson Wadsworth.
2. Schulz, W., Ainley, J., Fraillon, J., Losito, B., Agrusti, G., & Friedman, T. (2018). *Becoming citizens in a changing world: IEA International Civic and Citizenship Education Study 2016 international report.* Springer.

EDUC-5218   **Teaching Practice**   **3(0+3)**

During the practicum, student students are expected to critically select and use appropriate materials, resources (including persons in the community) and technology, and to have experiences with classroom management and a variety of evaluation techniques (including authentic assessment). Collaboration with other Student Teachers and professionals in the school setting should be encouraged in order to develop team building skills and utilization of all resources to enhance children's learning. For the practicum in semester 4, every student enrolled will be assigned to an elementary grade class. The Practicum Seminar will utilize a variety of teaching and learning approaches, but rely heavily on reflective journals, small group and peer interaction. The way field experiences for the Practicum are organized may vary from semester to semester, and from institution to institution. Your Instructor will provide you specific information about where you will teach or how to obtain a classroom placement, and your schedule for the semester. Each Student Teacher will develop a plan for gradually increasing responsibility in the classroom, working with the Seminar Instructor, the College/University Supervisor (Seminar Instructors will supervise field experiences, but may also work with a team of supervisors) and the Cooperating Teacher.

Course Outcomes

Student teachers will be able to:
1. Reflect on and learn from teaching practice.
2. Collaborate with peers, cooperating teacher and college/ supervisor, establishing professional relationships.
3. Invite, accept, and utilize feedback from the supervising teacher, peers, and the college/university supervisor in a non-defensive manner.
4. Produce and implement plans for teaching and learning.
5. Utilize appropriate instruments or techniques for assessing student learning and learning needs.
6. Recognize cognitive and affective needs of students and establish learning environments and use activities appropriate to meeting those needs.

The Practicum consists of two important parts:
a. A school placement in an elementary school;
b. A seminar that meets regularly.

Grading Policy

Grading for this course follows the university's policies. This will be explained by the Instructor early in the course and will include both coursework and examinations. Grades for the Practicum Experience will be assigned in collaboration with the cooperating teacher, college supervisor and Practicum Instructor

URCE-5103   Functional English–III (Technical Writing & Presentation Skills)   3(3+0)

The course aims to be comprehensive in its coverage and depth so that, on its completion, participants will have gained both a theoretical understanding of the basic principles of Second Language Acquisition and the practical knowledge of how to apply these principles effectively in the language classroom. The course focuses on ways of teaching young learners the four skills of listening, reading, speaking and writing to enable them to reach a basic level of communicative competence in both spoken and written English. The students would be able to the content logically to add specific details on the topics such as facts, examples and statistical or numerical values. The course will also provide insight to convey the knowledge and ideas in objective and persuasive manner. Furthermore, the course will also enhance the students' understanding of ethical considerations in writing academic assignments and topics including citation, plagiarism, formatting and referencing the sources as well as the technical aspects involved in referencing.

Contents

1. Presentation skills
2. Readings skills
3. Academic reading
4. Style, content, language, form, clarity, consistency
5. Technical report writing
6. Progress report writing
7. Essay writing
8. Academic writing
9. Paragraph and essay writing
10. Organization and structure of paragraph and essay
11. Logical reasoning
12. Transitional devices (word, phrase and expressions)
13. Development of ideas in writing
14. Styles of documentation (MLA and APA)
15. In-text citations
16. Plagiarism and strategies for avoiding it

Recommended Texts

1. Ron White (2018). *Writing*, Advanced *Oxford supplementary skills.* London: Oxford University Press

Suggested Readings

1. Langan, J. (2016). *College writing skills.* McGraw-Hill Higher Education.
2. Laurie G.Kirszner and Stephen R. (2018). *Patterns of college writing* (4th Ed.). Mandell: St. Martins Press.
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EDUC-6219   **Foundations of Education (Foundation)**   **3(3+0)**

The major focus will be on developing an understanding of the participants how different philosophical theories affect education. The course will also include historical development of education of the Pakistan. Emphasize will be given on analyzing various sociological, political, economic and ideological forces that influence the process of education in our culture context. This course will also be used to develop the ability in prospective teachers to interpret knowledge within its historical, philosophical, ideological, and social contexts, which will lead to produce critical perspectives on education both within, and outside of, schools. The course will explore general questions such as: What is the ultimate goal of education? How is education different from social indoctrination? Should education limit itself to imparting literacy, numeracy, and various kinds of skill and information, or should teachers also strive to influence the character and values of their students? In addition to these, various specific topics of current interest in the philosophy of education may be explored, such as: academic freedom; access to education; social and moral values, the ethics of education; religious values in individual and social life.

Content

1. Ideological Foundation of Education
2. Philosophical Foundations of Education
3. Psychological Foundations of Education
4. Socio-Economic Foundations of Education
5. Historical Foundations of Education in Pakistan
6. Aims of Education
7. Problems and Issues in Education in Pakistan
8. Learning and Methods of Learning
9. Curriculum and Instruction
10. Society, Community and Education
11. Guidance and Counseling
12. Historical Development of Education in Pakistan
13. Problems and Issues of Education in Pakistan

Recommended Texts
1. Canestrari, A. (2019). *Foundations of education*. New York: Sage Publications.
2. Bartlett, S., & Burton, D. (2020). *Introduction to education studies*. California: SAGE Publications Limited.

Suggested Readings
1. Sadovnik, A. R., Cookson Jr, P. W., Semel, S. F., & Coughlan, R. W. (2017). *Exploring education: An introduction to the foundations of education*. New York: Routledge.
2. Ornstein, A. C., Levine, D. U., Gutek, G., & Vocke, D. E. (2016). *Foundations of education.* Nashville: Nelson Education.
3. Eugene, F.P. (2016). *Critical issues in education: Anthology of reading*. New York:

Sage Publications.

4. Murphy, D. (2015). *Foundations/Introduction to teaching*. New York: Sage Publications.

EDUC-6220   Fundamentals of Language & Linguistics (Content Course – I)   3(3+0)

This course will enable the student to understand the nature, structure, and use of language. It will provide skills and tools for the analysis of language structure. Students will be able to identify patterns and systems in language and develop tools of analysis with which to examine language. Student will grammatical systems and describe how language conveys meaning. The purpose of this course is to provide the awareness to the students about the origins of European languages, branches of Linguistics; their introduction and relationship of language with society and culture. This course is designed to introduce students to general concepts of language & linguistics. The course is organized in a 'bottom up' fashion from smallest to largest segments of language by starting with an Introductory to Language, moving through Sound, Word, and ending with Sentence. Aspects of language origin & design will be examined as well as cross-linguistic language typologies. This introductory language course is primarily designed to allow students to gain a sufficient amount of 'Explicit' (conscious) Knowledge of Language and Linguistics and to provide students with the tools necessary for understanding language structure

Content

1. Language; meaning, nature, & linguistic
2. Phonetics; Branches of phonetics
3. Phonology
4. Morphology
5. Syntacts
6. Semantics and pragmatics
7. Language, society and culture
8. Second language acquisition
9. Applied Linguistics,
10. Relationship between theoretical linguistics
11. Applied Linguistics
12. Role of linguist in language teaching
13. Contrastive Analysis

Recommended Texts

1.   Yule, G. (2016). *The study of language (6ᵗʰ Ed.).* Cambridge: Cambridge University Press.

Suggested Readings

1. O'Grady, W. & Archibald, J. (Ed). (2015). *An Introduction: Contemporary linguistic analysis. (8ᵗʰ Ed.).* Retrieved from https://www.amazon.com/Contemporary-Linguistic-Analysis-Introduction-8th/dp/0321836154
2. Routledge (2015). *English language and applied linguistics Textbooks*. Retrieved from www.routledge.com/representatives.
3. Barber, C. L. (2018). The Story of language. London: Pan.

EDUC-6221   **Physics (Content Course – I)**   **3(3+0)**

Physics is a very important natural science which deals, in a very broader sense, with the study of matter and energy as well as their interrelationship. It involves the study of simple electronics to the most complex nuclear reactions in modern physics. In this mechanical age, every machine from the simplest household appliances to super computer is based on principles of physics. It plays a vital role in the industrial as well as economic development and scientific advancement of a country. It is also a vital part of engineering science. Hence teaching of physics holds a pivotal position in science education. This course will make students aware of the basic concepts involved in Physics and able to apply the concepts of physics in daily life.

Content

1. Physical quantities and measurement
2. Kinematics
3. Dynamics
4. Turning effect of forces
5. Gravitation
6. Work and Energy
7. Properties of matter
8. Transfer of heat
9. Simple harmonic motion and waves
10. Sound
11. Geometrical optics
12. Electrostatics
13. Current electricity
14. Atomic and nuclear physics

Recommended Texts

1. Brown, R. G. (2018). *Introductory Physics I*. Duke University Physics Department Durham. Retrieved from https://webhome.phy.duke.edu/~rgb/Class/intro_physics_1/intro_physics_1.pdf

Suggested Readings

1. FHSST (2015). *The free high school science texts: A textbook for high school students studying physics*. Retrieved from http://savannah.nongnu.org/projects/fhsst
2. *Text books of grades 9, 10, 11, and 12*. Lahore: Punjab Textbook Board

EDUC-6222   **Curriculum Development (Foundation)**   **3(3+0)**

This course is intended to orient the prospective teachers about the principle, process and procedure of curriculum design and development. The participants will be informed about various foundations on which the curriculum is based, defining and delineating the objectives, selection of content, its scope and outcomes, teaching strategies, curriculum evaluation, design of instructional materials. This course will also include various factors that affect the process of curriculum development and implementation. Students will be provided exposure to various curriculum development models and theories to enhance their understanding. The career and technical and technical curriculum focus not only on the educational process but also on the tangible results of that process. This course focuses on curriculum within the context of career and technical education. This course also focuses primarily on content and areas related to it. It encompasses the macro or broadly-based activities that impact on a wide range of programs, courses, and student experiences. This course will be delivered within the context of existing curriculum and the bodies and procedures adopted for curriculum development process in Pakistan.

Content

1. Introduction to Curriculum
2. Foundations of Curriculum
3. Curriculum: Aims, Goals and Objectives
4. Models of Curriculum
5. Designs of Curriculum
6. Process of Curriculum Development in Pakistan
7. Curriculum Change
8. Curriculum Theory and Practice: Various models:
9. Curriculum Development Process & Curriculum change in Pakistan
10. Curriculum Reforms in Pakistan
11. Curriculum Evaluation

Recommended Texts

1. Nicholls, A., & Nicholls, S. H. (2018). *Developing a curriculum: A practical guide.* New York: Routledge
2. Oliva, P.F. (2015). *Developing the curriculum. (4th ed.).* New York: Longman.

Suggested Readings

1. Parkay, F. W., Anctil, E. J., & Hass, G. (2014). *Curriculum leadership: Readings for developing quality educational programs.* Upper Saddle River, NJ: Pearson Prentice

Hall.

2. Kelley A.V (2014). *The curriculum: theory and practice*. London: Paul Chapman.

EDUC-6223 **Educational Psychology (Foundation)** **3(3+0)**

The purpose of this course is to develop learner's insight. Its unique approach helps student teachers to understand different psychological concepts by encouraging them to examine their own learning and then showing them how to apply these concepts as teachers. This course concentrates on core concepts and principles. It gives readers an in-depth understanding of the central ideas of educational psychology. The main purpose of the course is to make students aware of how to bridge the gap between theory and practice. In other words, how they can use various concepts of educational psychology to improve their learning and teaching skills. The student teachers will be introduced with major theories of intelligence, personality, motivation, memory, thinking and instruction. They will also be trained in how these theories can be applied in the classroom teaching. Understanding the psychological basis of these theories will help them to manage classroom in a way that promotes learning and minimizes disruptions. It provides the study of learners and learning contexts both within and beyond traditional classrooms and evaluates ways in which factors such as age, culture, gender, and physical and social environments influence human learning.

Content

1. Introduction to psychology
2. Fundamentals of Human Development
3. Learning
4. Information Processing
5. Intelligence
6. Instruction
7. Motivation: Theory and Practice
8. Creating Learning Environments
9. Teaching for Learning (i.e. Effective Teaching)
10. Individual Differences / Variations
11. Personality Theories
12. Measurement and evaluation in educational Psychology

Recommended Texts

1. Ormrod, Jeane, (2019) *Educational psychology: Developing learner*. Upper Saddle River, NJ: Pearson.

2. Santrock, J. W. (2018). *Educational psychology*. Boston: McGraw –Hill.

Suggested Readings

1. Iqbal, M. Z., & Shahid, S. M. (2016). *Educational psychology & guidance*. Islamabad: AIOU.
2. Woolfolk, A. (2015). *Educational psychology, sixth canadian edition.* Upper Saddle River, NJ: Pearson Education.
3. Rashid, M. (comp.) (2016). *Allied material of educational guidance and counseling*. Islamabad: AIOU.

EDU-6224   **Contemporary Issues and Trends in Education**   **3(3+0)**

Competent teachers are usually knowledgeable in their respective content areas. With several educational options available to students today, newer trends are emerging in this field which has completely changed the traditional held perceptions about education. Several career options that were earlier not considered to be traditional have emerged as the most sought-after education and career options. Therefore, a course on contemporary issues and trends in education is considered significant to develop an insight among teachers. At the end of this course, the students will be able to: Argue on the positive and negative impact of the information explosion; Explore the gap between Madrassah and mainstream education and identify appropriate government responses; Identify barriers to the achievement of universal literacy and how these may be removed at the local level; Discuss the gradually reducing gender disparity in education in Pakistan and its likely consequences; Analyze the relationship between national curriculum structure and career opportunities; Consider how best environmental awareness can be enhanced through schools and Consider the consequence of the growing privatization of education.

Content

1. Education as a Complex Enterprise
2. Madrassah Education
3. Universal Literacy
4. Gender Disparity
5. Population Education:
6. Environmental Awareness
7. Privatization of Education
8. Information Literacy
9. Media Literacy
10. Organizational Dynamics

Recommended Texts

1. Rao, V. K. (2018). *Population education.* New Delhi: Efficient Printer.
2. OECD (2019) *Trends shaping education 2019.* Paris: OECD Publishing. https://doi.org/10.1787/trends_edu-2019-en

Suggested Readings

1. Sylvester, C. (1994). *Feminist theory and international relation, in postmodern era.* Cambridge: Cambridge University Press.
2. Badran, M. (2018). *The gender of Islam.* Cairo: Al-Ahram.
3. Higher Education Commission (2012). *Contemporary issues and trends in education. islamabad.* Retrieved from file:///C:/Users/MuhammadSultan/Downloads/contemporary-issues-and-trends-in- education.pdf

EDUC-6225   **Language Skill (Content Course – II)**   **2(2+0)**

This course will groom the students in all four communication skills (reading, listening, w r i t i n g, and speaking) and also impart an understanding of the nature of the phenomenon of the four skills. It will enable the student to make a practical usage of these skills in real life. The purpose of this course is to develop the English language proficiency of prospective elementary school teachers, and to help them become confident in reading, writing, speaking and listening to the English language. Instead of teaching grammar in isolation and at sentence-level only, this course is based on developing language abilities among student teachers through an integrated approach that provides opportunities to develop their listening, speaking, reading and writing skills. With a focus on social interaction, the course draws specific attention to accurate use of structures, improved pronunciation and to developing active vocabulary in descriptive, narrative and instructional texts.

Content

1. Readings Skill
2. Listening Skill
3. Techniques for Improving listening
4. Writing as Productive Skill
5. Technical writing; writing a research paper and reports
6. Speaking skill
7. Approaches to teaching speaking
8. Techniques for improving speaking
9. Techniques for improving speaking
10. Problem solving exercises

Recommended Texts

1. Donn, B. (2018). *Wall pictures for language practice: teacher's handbook.* NY: Longman Dictation
2. Carter, R. & Nunan, D. (eds.) (2017). *The Cambridge guide to teaching English to speakers of other languages.* Cambridge: Cambridge University Press.

Suggested Readings

1. Nuttall, C. (2006). *Teaching reading skills in a foreign language.* London: Heinemanan
2. Hill, L.E. (2009). *Sounds and spelling.* Oxford: OUP Teaching Vocabulary
3. McLaughlin, B. (2016). *Theories of second language learning.* London: Arnold.
4. Saville-Troike, M. (2018). *Introducing second language acquisition.* Cambridge: Cambridge

University Press.

The basic purpose of these courses on Chemistry is to enable prospective teachers to develop competency in the above-mentioned fields in both theoretical and practical aspects. Chemistry is the study of matter and the ways in which different forms of matter combine with each other. You study chemistry because it helps you to understand the world around you. Everything you touch or taste or smell is a chemical, and the interactions of these chemicals with each other define our universe. Chemistry forms the fundamental basis for biology and medicine. This course is very helpful to develop understanding of basic chemical reactions and processes in daily life. This course highlights the essential attributes of the teacher in making the teaching effective for the learners. It describes the importance and types of teacher planning practice related to different teaching methods for science subjects in classroom. It will also focus on how to relate facts, concepts, and theories to every day experience to develop highly knowledgeable, highly skilled teachers do make a difference in terms of student learning using low cost and no cost and traditional audio visual as well as digital technology tools in teaching learning process.

Content

1. Introduction to Chemistry
2. Atomic Structure
3. Periodicity of Elements
4. Chemical Bonding
5. Electrochemistry
6. Acids, Bases and Salts
7. Hydrocarbons
8. Water
9. Chemical industries

Recommended Texts

1. Milanovic, V., Trivic, D., & Tomasevic, B. (2019). *Secondary-school chemistry textbooks in the 19th century*. DOI: 10.2298/JSC140926052M.
2. *Text books of grades 9, 10, 11, and 12*. Lahore: Punjab Text Book Board

Suggested Readings

1. Poulsen, T. (2016). *Introduction to chemistry*. Retrieved from
   https://openedgroup.org/books/Chemistry.pdf
2. Siegel, J. A. (2015). *Forensic Chemistry: Fundamentals and applications*. DOI:10.1002/9781118897768

EDUC-6227   **Comparative Education (Professional)**   **3(3+0)**

Education system in a country cannot be isolated from the education system of other countries. Keeping in view the requirement of equivalence in global world, it is important to compare the education system of Pakistan with other developing and developed countries. Knowledge about education system of various countries assist policy maker to reflect on the education in the context of competition and excellence. The education system in a country cannot be isolated from the education systems of other countries. Keeping in view the requirement of equivalence in a global world, it is important to compare the education system of Pakistan with those of other developing and developed countries. Knowledge about the education systems of various countries assists policymakers in reflecting on education in the context of competition and excellence. It is, therefore, important that the teacher are aware of the objective, curricula, teacher education, admission criteria and staff recruitment requirement of the education system of developed and developing countries.

Content

1. Introduction to Comparative Education
2. Elements of Comparative Education (Both qualitative and quantitative dimensions)
3. Comparative View of Systems of Education in Pakistan
4. Comparative Education in Developed Countries; USA, UK, Japan & Singapore
5. Comparative Education in Developing Countries; India, China, Malaysia & Pakistan
6. Global Issues in Comparative Perspective (focusing developing countries)

Recommended Texts

1. Isani, and Virk, M.L. (2018) *Higher education in Pakistan.* Islamabad: National Book Foundation.
2. Noah, H. & Eckstein, M. (2015). *Doing comparative education: Three decades of collaboration.* Hong Kong: Comparative Education Research Centre, University of Hong Kong.

Suggested Readings

1. Abdulrahman, Y. (2018). *Studies in comparative education: Issues, processes and engagements.* Retrieved from https://sites.google.com/worldchampionshipwinners/worldchampionship-2018-in-education-research-contemporary-islamic
2. HEC (2012). *Comparative education.* Retrieved from https://hec.gov.pk/english/services/universities/RevisedCurricula/Documents/2011-2012/Education/CompEdu_Sept13.pdf

EDUC-6228   Introduction to Guidance and Counseling (Professional)   3(3+0)

This course has been designed to introduce the concept, scope, and theories that govern the process of guidance and counseling in education. It will enable students to identify areas of guidance and counseling at the elementary level. Through the knowledge and skills acquired from this course, they will be well equipped to explore the talents and potential of their students, while preparing them for life in the 21st century. The course will include both theoretical knowledge of guidance and counseling and the development of students' counseling skills. It will strengthen their ability to exercise active listening skills, reflect on students' problems, and help them choose potential solutions to their problems. The course will also enable students to design school-wide guidance and counseling programs. This course demonstrates knowledge of the importance of guidance and counselling to teachers and students and critically analyses the concepts, scope, and theories that govern the process of guidance and counseling.

Content

1. Introduction to Guidance and Counseling
2. The role of guidance and counselling personnel
3. Techniques of Guidance
4. Basic skills of Counselling
5. Services of Guidance
6. Evaluation of the guidance program
7. Cumulative Record Card
8. Identifying elementary social problems
9. Exercising basic counselling skills in a controlled situation
10. Evaluating basic counseling techniques among peers

Recommended Texts

1. Chandra, S.S. (2019). *Philosophy of education.* New Delhi: ATLANTIC.
2. Rao, V.K. & Reddy, R.S. (2017). *Academic environment: advice, counsel and activities*. New Delhi: Ashish Publishing

Suggested Readings

1. Chandra, S. S. (2012). *Sociology of education.* New Delhi: ATLANTIC.
2. Semel, S. F. (2010). *Foundations of education: The Essentials text.* USA: Routledge

EDUC-6229 Introduction to Grammar & Error Analysis (Content Course – III) 3(3+0)

This course focuses on different approaches to teaching grammar in real class room situations. The students also learn the problems the students of English language may face and how these are to be tackled by applying certain remedial strategies. The main purpose of this course is to discuss the importance of error analysis in the teaching of English as a foreign language. Although errors are bad things in learning English as a foreign language, error analysis is advantageous for both learners and teachers. For learners' error analysis is needed to show them in what aspect grammar is difficult for them whereas for teachers, it is required to evaluate themselves whether they are successful or not in teaching English. Keeping in view all the limitations and demands of the 21st century education, this course is designed to meet the challenges of new-millennium. This course deals with the methods techniques and approaches to English Language Teaching. This analysis aimed at showing the students the causes and kinds of the grammatical errors. The student will be familiarized with different kinds of grammar.

Content

1. English Language Teaching
2. Error Analysis
3. Place of Grammar in Language Teaching
4. Kinds of Grammar
5. Approaches to grammar teaching
6. Teaching Writing; Approaches to teaching writing at elementary & secondary level
7. Teaching Speaking; Approaches to teaching speaking
8. Teaching Listening; Approaches to teaching listening
9. Teaching Vocabulary
10. Teaching Grammar
11. Methodologies of teaching second language
12. Error Analysis

Recommended Texts

1. Ouhalla, J. (2019). *Transformational generative grammar*. UK: Arnold

Suggested Readings

1. Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching*. Cambridge: Cambridge university press.
2. Broughton, G., Brumfit, C., Flavell, R. (2013). *English as a Foreign Language*. UK: Routledge Education Books

Biology is an important natural science it deals with the study of living organisms both plants and animals. The science which we teach at elementary level consists mainly of the biological concepts. The basic purpose of this course on teaching of biology is to enable prospective teachers to develop competency in both theoretical and practical domains. Biology is an important natural science it deals with the study of living organisms both plants and animals. The science which we teach at elementary level consists mainly of the biological concepts. The basic purposes of these courses on the teaching of biology are to enable prospective teachers to develop competency in the above mentioned fields in both theoretical and practical aspects and comprehend and appreciate the concepts, principles, theories and laws of biology, describe and apply the basic concepts & principles of biology in daily life, develop scientific thinking & scientific attitude in themselves and in their students bring out creativity through solving problems as well as to analyze the biological problems of mankind and propose solutions to them.

Content

1. Biological concepts
2. Gaseous exchange in plants
3. Homeostasis in plants
4. Coordination and control
5. Support and movement
6. Reproduction
7. Inheritance
8. Ecology
9. Pharmacology
10. Use of A.V-aids in teaching Biology
11. Different methods used in the teaching of Biology
12. New Trends in Biology Teaching
13. Lesson Planning in Biology.

Recommended Texts

1. Primack, R. B. (2019). *Essentials of conservation biology*. Sunderland: Singapore Associates.
2. Punjab Text Book Board. (2018). *Text book of biology*. Lahore: Punjab Text Book Board

Suggested Readings

1. Jones, M., Fosbery, R., Gregory, J., & Taylor, D. (2014). *Introduction to Biology*. Cambridge: Cambridge university press
2. Kampourakis, K., & Reiss, M. J. (Eds.). (2018). *Teaching Biology in schools: Global Research, Issues, and Trends*. UK: Routledge.

EDUC-6231   Introduction to Methods of Teaching English (Pedagogy – I)   3(3+0)

The course deals with the content, methods, techniques, and approaches to English Language Teaching. It focuses mainly on the latest methods & techniques of teaching English language by especial use of the modern software & simulations available in the market. The course is also designed to assist the prospective teachers to review the English Language syllabi of elementary & secondary level and understand the linguistic units in them. They will also be able to teach different units of the syllabi efficiently and effectively up to the secondary level by applying various language teaching strategies and to exhibit practical skills in teaching English language at secondary level through bringing into use the theoretical knowledge about language teaching as well as to develop the four communication skills of reading, writing, listening & speaking effectively & efficiently. They will also be able to perform error analysis. Students will also learn about developing their own lesson plans on different lesson planning formats.

Contents

1. Introduction to English language teaching
1. Teaching of English
2. Teaching Vocabulary
3. Teaching Readings
4. Teaching Writing
5. Teaching Listening
6. Teaching Speaking
7. Teaching Grammar
8. Teaching Methodologies
9. Error Analysis
10. Contrast between the behaviorist and mentalist attitudes toward errors
11. Lesson Planning in English

Recommended Texts

1.   Hall, G. (2017). *Exploring English language teaching: Language in action*. UK: Routledge.
2.   Johnson, K. (2017). *An introduction to foreign language learning and teaching.* UK: Routledge.

Suggested Readings

1. Cheung, H., Chen, H. C., Lai, C. Y., Wong, O. C., & Hills, M. (2012). *The development of phonological awareness: Effects of spoken language experience and orthography*. Cognition, *81*(3), 227-241.
2. Susser, B., & Robb, T. N. (2017). *EFL extensive reading instruction: Research and procedure*. Jalt Journal, 12(2), 161-185.
3. Cook, V. (2016). *Second language learning and language teaching*. UK: Routledge.
4. White, R. V. (2017). *Teaching written English.* UK: Routledge.

The course is designed for the effective interactive ways of teaching science. The course will highlight the power of observation and inquisitiveness in general sciences studies. It will also focus on how to relate facts, concepts, and theories to every day experience. Teaching science subjects is complex and demanding work. It requires highly specialized skills and knowledge to impact significantly on student learning. Teachers must use this knowledge to continually refine their conceptual and pedagogical skills. This course highlights the essential attributes of the teacher in making the teaching effective for the learners. It describes the importance and types of teacher planning practice related to different teaching methods for science subjects in classroom. It will also focus on how to relate facts, concepts, and theories to every day experience to develop highly knowledgeable, highly skilled teachers do make a difference in terms of student learning using low cost and no cost and traditional audio visual as well as digital technology tools in teaching learning process.

Content

1. Nature of Science
2. Aims / Objectives Teaching General Sciences
3. Methods of Teaching General Science
4. Approaches of Teaching General Science
5. Teaching Aids
6. Lesson Planning in Teaching
7. Students Motivation
8. Inquiry Methods
9. Activity Methods
10. Discussion Method
11. Cooperative learning
12. Teaching Skills
13. Teaching Tools
14. Characteristics of effective Science Teaching
15. Evaluation

Recommended Texts

1. Lawson, A. E. (2019). *Science teaching and the development of thinking*. Belmont, CA: Wadsworth.
2. Terry. J. (2019). *Oxford secondary science teaching guide-1*. New York: Oxford University Press

Suggested Readings

1. Agha Khan University Examination Board (2012) *General Science IX- X (based on National Curriculum 2002)*. Karachi: AGKEB.
2. Otero, V., & Meltzer, D. (2017). A discipline-specific approach to the history of US science education. *Journal of College Science Teaching*, *46*(3), 34-39.

EDUC-6233   **Research Methods in Education**   **3(3+0)**

This course is designed for B. Ed honors candidates to prepare them to situate themselves as researching professionals and at the same time enhance their own professional practice. The aims and objectives of this course are to introduce BS students to the basic concepts of language which have immediate relation to their ordinary as well as academic life. To sensitize students to the various shades and aspects of language, to show that it is not a monolithic whole but something that can be looked at in detail. The core concepts of research in linguistics will particularly be discussed. The students will further be taught and hand on practice will be given about the citation and on line research. The other objective of this course is to develop a research orientation among the students and to acquaint them with fundamentals of research methods. Further, the course aims at introducing them to the basic concepts used in research and to scientific social research methods and their approach. Some other objectives of the course are to develop an understanding of various research designs and techniques and to identify various sources of information for literature review and data collection. Lastly the aims of the course are to develop an understanding of the ethical dimensions of conducting applied research.

Content

1. The Nature of Educational Research
2. Concepts, Constructs and Variables
3. Hypotheses and Research Questions
4. Data Collection Tools
5. Types of Educational Research: Types of Research: Qualitative and quantitative
6. Literature Review
7. Methodology
8. Data Analysis
9. Research Proposal & Report Writing
10. The Researching professional
11. Techniques of Reviewing Literature
12. Writing formats & Presentation

Recommended Texts

1. Best, J. W., & Kahn, J. V. (2019). *Research in education*. India: Pearson Education.
2. Geoffrey E. Mills, L. R. Gay (2019). *Educational research: Competencies for analysis and applications. (12th Ed.).* NY: Merrill- Prentice Hall.

Suggested Readings

1. Crtswell, J. W (2019). *Research design.* London: Sage Publications.
2. HEC (2012). *Research methods in education*. Retrieved from https://hec.gov.pk/english/services/universities/RevisedCurricula/Documents/2011-2012/Education/ResearchMethods_Sept13.pdf
3. John W Creswell (2018). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research, (6th Ed.).* Pearson Education. Retrieved from http://www.sxf.uevora.pt/wp-content/uploads/2013/03/Creswell_2012.pdf

EDUC-6234   **Teaching Practice (Short Term)**   **3(0+3)**

The Practicum is a 3 credit course. As this is a practical course, one credit requires additional hours of practice. It is recommended that Student Teachers spend approximately 30 days/six weeks on the school placement in semester VII. Student Teachers should aim to spend six weeks at school for the practicum in Semester VII. The way field experiences for the Practicum are organized may vary from semester to semester, and from institution to institution. Your Instructor will provide you specific information about where you will teach or how to obtain a classroom placement, and your schedule for the semester. Each Student Teacher will develop a plan for gradually increasing responsibility in the classroom, working with the Seminar Instructor, the College/University Supervisor (Seminar Instructors will supervise field experiences, but may also work with a team of supervisors) and the Cooperating Teacher.

Course Outcomes

Student teachers will be able to:
1. Reflect on and learn from teaching practice.
2. Collaborate with peers, cooperating teacher and college/ supervisor, establishing professional relationships.
3. Invite, accept, and utilize feedback from the supervising teacher, peers, and the college/university supervisor in a non-defensive manner.
4. Produce and implement plans for teaching and learning which reflect the use of appropriate instructional methods and strategies to meet the needs of all students within the context of the practicum classroom.
5. Utilize appropriate instruments or techniques for assessing student learning and learning needs.
6. Recognize cognitive and affective needs of students and establish learning environments and use activities appropriate to meeting those needs.

Course Description
The Practicum consists of two important parts:
a. A school placement in an elementary school;
b. A seminar that meets regularly.

Grading Policy
Grading for this course follows the university's policies. This will be explained by the Instructor early in the course and will include both coursework and examinations. Grades for the Practicum Experience will be assigned in collaboration with the cooperating teacher, college supervisor and Practicum Instructor

EDUC-6235   **School Management (Professional)**   **3(3+0)**

This course focuses on developing effective elementary school leaders. The aim of the course is to make prospective teachers well acquainted with the process of running schools in effective and efficient manner besides being well versed with the duties and responsibilities of the head teachers. The course covers knowledge about school management; organization; function of head teachers, record keeping and school-community relations related matters. After completing this course prospective teachers will be able to; manage and plan school academic matters effectively; manage and plan school budget matters effectively; manage and plan students affairs related to co-curricular activities; manage library and instructional material related matters; manage upward, downward and horizontal communication; manage and plan school – community relationship activities; resolve conflicts among different custodians of school community; maintenance and management of school infrastructure and programs.

Content

1. Concept of organization, administration and management
2. Role of head teacher as manager
3. Planning the curriculum
4. Health, safety and co-curricular activities
5. Management structure
6. Communication in schools
7. Record keeping in schools
8. Day to day concerns
9. School Plan

Recommended Texts

1. Burden, P. (2019) *Classroom management and discipline*. New York: Longman.

Suggested Readings

1. Hoy, W.K. & Miskel, G.C (2016). *Educational administration: Theory research and practice, (5*^{*th*} *Ed.).* New York: McGraw Hill Inc.
2. Lunenburg, F., & Ornstein, A. (2011). *Educational administration: Concepts and practices*. New York: Nelson Education.

This course is designed to develop prospective teachers towards adequate knowledge of the concept of evaluation and test construction during the course. The teacher will develop skills to construct classroom-b a s e d tests to evaluate students learning outcomes. 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.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. The learner will also be able to report the result to different stake holders in a professional manner.

Content

1. Test, testing and evaluation
2. Types of Evaluation
3. Types of test
4. Test Construction
5. Test Administration and analysis
6. Qualities of a good test
7. Interpretation of test scores
8. Reporting the test results to:
9. Counseling of students after reporting the results

Recommended Texts

1. Ebel, R. L. (2019). *Essentials of educational measurement*. Retrieved from
   https://pdfs.semanticscholar.org

Suggested Readings

1. Freeman, R., & Lewis, R. (2016). *Planning and implementing assessment*. UK: Routledge.
2. Swain, S. K., Pradhan, C., & Khatoi, P. K. (2015). *Educational measurement statistics and guidance*. New Delhi: Kalyani Publishers.

EDUC-6237   **Teaching Practice (Long Term)**   **6(0+6)**

The Practicum is a 6-credit course. As this is a practical course, 1 credit requires additional hours of practice. It is recommended that Student Teachers spend approximately 60 days/12 weeks on the school placement in semester 8. Student Teachers should aim to spend six weeks at school for the practicum in Semester 8. Each Student Teacher will develop a plan for gradually increasing responsibility in the classroom, working with the Seminar Instructor, the College/University Supervisor (Seminar Instructors will supervise field experiences, but may also work with a team of supervisors) and the Cooperating Teacher.

Course Outcomes

Student teachers will be able to:
1. Reflect on and learn from teaching practice.
2. Collaborate with peers, cooperating teacher and college/ supervisor, establishing professional relationships.
3. Invite, accept, and utilize feedback from the supervising teacher, peers, and the college/university supervisor in a non-defensive manner.
4. Produce and implement plans for teaching and learning which reflect the use of appropriate instructional methods and strategies to meet the needs of all students within the context of the practicum classroom.
5. Utilize appropriate instruments or techniques for assessing student learning and learning needs.
6. Recognize cognitive and affective needs of students and establish learning environments and use activities appropriate to meeting those needs.

Course Description

The Practicum consists of two important parts:
a. A school placement in an elementary school;
b. A seminar that meets regularly.

Grading Policy

Grading for this course follows the university's policies. This will be explained by the Instructor early in the course and will include both coursework and examinations. Grades for the Practicum Experience will be assigned in collaboration with the cooperating teacher, college supervisor and Practicum Instructor

Student will complete a Research Project / Thesis under the supervision of a teacher nominated by the Department of Education. The theory-oriented approach to the final thesis in higher education is still dominant at the Master as well as Bachelor level. However, that at the Bachelor level a practice-oriented approach would be more appropriate. Bachelor's thesis is claimed to be a bridge between education and the job market. The essential objective of the thesis is to contribute to theory building within a specific field of study through scientific research and thus it is predominantly theoretical in nature. The idea is that a qualified student teacher has to be capable of conducting scientific research on a modest scale. This approach aims to prepare students for the 'real world'. A dissertation or thesis is likely to be the longest and most difficult piece of work a student has ever completed. It can, however, also be a very rewarding piece of work since, unlike essays and other assignments. The student is able to pick a topic of special interest and work on their own initiative.

Steps:

1. Students are given choice to opt the thesis
2. Students are allocated supervisors
3. Research topic for thesis are discussed in research committee
4. Research committee also finalized the evaluators
5. After finalization of thesis, students work under the supervisor
6. On completion thesis is submitted after the approval of supervisor
7. After evaluation of thesis form evaluator, viva is conducted.

Recommended Texts

1. Halyna M., Kornuta, R., & Germaine, W. (2019). *A concise guide to writing a thesis or dissertation: educational research and beyond*. UK: Routledge. https://doi.org/10.4324/9780429056888

Suggested Readings

1. MASANJA, N. M. (2019). *Practical handbook to dissertation and thesis writing: An easy-to-use guide to dissertation or thesis writing*. USA: NMM Printers.
2. Bell, D. J., Foster, S. L., & John D. C. (2019). *Dissertations and theses from start to finish: psychology and related fields*. (3rd ed.). UK: Routledge. Retrieved from https://www.apa.org/pubs/books/4316188

MA
ELEMENTARY

EDUC-6301   **Introduction to Education**   **3(3+0)**

The course focuses on the introduction of basic concepts in education and the ideological, philosophical and psychological foundations of education and on developing an understanding of the education and major terminologies. The course will also include guidance and counseling as an essential component of education so that effective educational process may be streamlined. Emphasis will be given on analyzing various sociological, political, economic and ideological forces that influence the process of education in our cultural context. This course will also be used to develop the ability in prospective teachers to interpret knowledge with its historical, philosophical, ideological and social context, which will lead to produce critical aspects of education both within and outside the school. The basic objectives of the course are to define the basic concepts of education, to describe the important features of foundations of education and understand the role of education in society so that overall development of prospective teacher may be ensured which is basic aim of education.

Contents

1. Introduction to education
2. Process of education
3. Foundations of education
4. Modes of education
5. Formal; informal and non-formal education
6. Basic educational philosophies
7. Structure of education in Pakistan
8. National education policies
9. Aims of education and curriculum
10. Learning and learning strategies
11. Society, community and education
12. Guidance and counseling

Recommended Texts

1. Bartlett, S., & Burton, D. (2016).*Introduction to education studies*. New York: Sage.
2. MASANJA, N. M. (2019). *Practical handbook to dissertation and thesis writing: An easy-to-use guide to dissertation or thesis writing*. USA: NMM Printers.

Suggested Readings

1. O'Connor, D. J. (2016). *An introduction to the philosophy of education*. London: Routledge.
2. Sadovnik, A. R., Cookson Jr, P. W., Semel, S. F., & Coughlan, R. W. (2017). *Exploring education: An introduction to the foundations of education*. London: Routledge

EDUC-6302   **Communication Skills in English**   **3(3+0)**

Communication skills are essentially important for teachers because all teaching after all is communicating knowledge skills and attitudes affectivity. Similarly, language plays a pivotal role in improving ones communication skills. Hence a teacher must have mastery over various aspects of language and well-developed communication skills for better teaching. At present, the medium of instruction in most of the disciplines is English at higher education level. Hence, fluency in speaking, creativity and innovation in writing, efficiency in listening and fluency in reading skills are well-appreciated and demanded from individuals. In order to improve these four communication skills of (reading, writing, listing & speaking) of our prospective teachers and teacher educators we have designed this course to fulfill these requirements. This course highlights numerous basic concepts to develop the oral and written expression as well as presentation skills of students. The basic objectives of the course are to enable students to read different academic & non-academic materials fluently & efficiently, to write clearly and effectively in the discourse of the discipline, to use these skills for meaningful communication and Listen with maximum comprehension.

Contents

1. Concept of communication
2. Communication Process and barriers to communication
3. Communication Skills for Teaching
4. Functional English
5. Readings Skills
6. Readings Strategies and techniques to improve reading
7. Comprehension and vocabulary
8. Writing Skills
9. Writing essay, CV, applications
10. Report writing
11. Listening Skills
12. Techniques to improve listening
13. Speaking Skills
14. Presentations; interview techniques

Recommended Texts

1. Delamain, C., & Spring, J. (2017).*Developing baseline communication skills*. London: Routledge.
2. Kumar, V., Raj, B., Kapurthala, & Jalandhar. (2017).*Comprehension and communication skills in English*. New Delhi. Kalyani Publishers.

Suggested Readings

1. Reed, M., & Levis, J. (2018).*The handbook of English pronunciation*. New Jersey: John Wiley & Sons.
2. Owen Hargie.(2018) *The Handbook of Communication Skills*, London: Routledge

The main purpose of the course is to make students aware of psychological aspects of human development and use of psychological principles in field of education. This subject will help bridge the gap between theory and practice. This subject will help prospective teachers to understand individual differences so that they may be able to identify needs of every student individually. In other words, how students can use various concepts of educational psychology to improve their learning and teaching skills. The student teachers will be introduced with major theories of intelligence, personality, motivation, memory, thinking and instructions. They will also be trained in how these theories can be applied in the classroom teaching to produce positive learning environment. Understanding the psychological basis of these theories will help them to manage classroom in a way that promotes learning and minimizes disruptions. It will also provide them with the tools needed to be a better teacher, counselor and guide.

Contents

1. Introduction
2. Scope, nature and need of educational psychology
3. Learning and Instruction
4. Motivation: Theory and Practice
5. learning
6. Creating Learning Environments
7. Teaching for Learning (i.e. Effective Teaching)
8. Individual Differences / Variations
9. Intelligence and theories of intelligence
10. Personality and Personality Theories
11. Applied Behavior Analysis
12. Complex cognitive processes

Recommended Texts

1. Duchesne, S., & McMaugh, A. (2018).*Educational psychology for learning and teaching*. Boston. Cengage
2. Slavin, R. E. (2019).*Educational psychology: Theory and practice*: New York. Pearson Education, Inc.

Suggested Readings

1. Santrock, J. W. (2017).*Educational psychology*. New York: McGraw-Hill.
2. Evans, E. G. S. (2017).*Modern educational psychology: A historical introduction*. London. Routledge.

Computer is nowadays being used in almost all academic disciplines. It is the latest and most advanced technology of the present era. Education too is not an exception. Computer technology is being applied as a major AV- aid in instruction as well as planning. Moreover, numerous soft wares have been developed that are used in research (for data analyses and data presentation) and teaching. This course is intended to introduce the students with recent developments and applications of computer technology in the field of education. It will enable the students to equip themselves with the use of modern technologies in the classroom. It also enables them to use these technologies in school management. Information technology plays a vital role in the development of every organization, whether, business organization or social organization like school. This course focuses on the recent developments and applications of computer technology in the field of education. The course has following objectives for the students, understand computer systems and information technology differentiate among different work environments of computer systems, exhibit capabilities of using computer in education and develop and maintain database of an educational institute.

Contents

1. Fundamentals of Computer
2. Role of computer
3. An introduction to Disk Operating System
4. Windows operating system.
5. Word Processor
6. Spread sheet
7. Designing Presentations
8. Data Base Management
9. Scheduling and Maintaining Personal Information
10. Computer in Education
11. Searching for Information
12. Web sites and search engines

Recommended Texts

1. Steinberg, E. R. (2018).*Teaching computers to teach*. London: Psychology Press.
2. Cox, J. & Preppernau, J. (20017). *Step by step Microsoft office word 2007*. Washington: Microsoft Press

Suggested Readings

1. Parsons, J. J., Oja, D., Beskeen, D. W., Cram, C. M., & Duffy, J. (2015). *Enhanced computer concepts and Microsoft office 2013 illustrated*. New York. Cengage Learning.
2. Comer, D. E. (2018). *The Internet book: Everything you need to know about computer networking and how the Internet works*. London: Chapman and Hall.

EDUC-6305   **Education in Pakistan**   **3(3+0)**

This course is designed to develop prospective teachers' awareness and understanding of education in Pakistan. Prospective teachers will develop their knowledge about different aspects of development of education keeping in view different aspects of development of education i.e. pre -primary education, elementary education, secondary education and higher education. In this process current policy and programs will also be studied with reference to formal, non-formal and informal modes of education. Teacher educator will ensure that different components of education like management, leadership etc. and major issues and challenges in education sector are also taken into consideration. The basic objectives of the course are to understand schooling structure at different levels in Pakistan, to decipher the nature and purpose of education in the pre and post-independence period and delineate the historic roots and subsequent development of pre service teacher education in Pakistan. Moreover this subject will develop awareness among prospective teachers about statistical facts regarding education in Pakistan.

Contents

1. Introduction
2. Structure of education in Pakistan
3. Administration of education
4. Decentralization
5. Management
6. Education in Pakistan :pre and post-independence
7. Policy formulation in Pakistan
8. Technical and vocational education in Pakistan
9. Pre-service teacher education in Pakistan
10. Statistical overview of education in Pakistan
11. Major issues and challenges
12. Trends in education

Recommended Texts

1. Amjad, R., & Burki, S. J. (Eds.). (2015). *Pakistan*. Cambridge: Cambridge University Press.
2. Siddiqui, S. (2016).*Education policies in Pakistan: Politics, projections, and practices.* Oxford: Oxford University Press.

Suggested Readings

1. Burki, S. J. (2018).Pakistan: fifty years of nationhood. London: Routledge.
2. Shah, S. (2015).*Education, leadership and Islam: Theories, discourses and practices from an Islamic perspective* London: Routledge.

EDUC-6306   **Sociology of Education**   **3(3+0)**

The course provides students with the sociological insight of education so that they may be able to correlate sociology and education. Core concepts, levels, educational institutions, theories, educational policies and reforms with reference to sociological aspect of education will be studied in this course. Relationship of education with socio-economic development will also be discussed so that role of education can be highlighted to reduce gap between institutions and society and demands for theory and practices may be fulfilled. The course highlights the role of education in the development of sociology. The basic objectives of the course are to discuss relation between school and community. It is base to understand and develop linkage among the school, community and teacher for effective education. It will enable students to identify the social factors affecting education and how these can support the development of education. It will highlight the role of teachers and school in socialization of students and development of society.

Contents

1. Introduction
2. Theoretical approaches to sociology of education
3. Development of sociology
4. Society , community and culture
5. Group and group dynamics
6. Socialization
7. Professional socialization of teachers
8. Social institutions
9. School and community
10. Teacher and community
11. Social control
12. Technological change

Recommended Texts

1. Musgrave, P. W. (2017).*The sociology of education*. London: Routledge.
2. Hallinian, M.T. (2016). *Handbook of the sociology of education*. New York: Springer.

Suggested Readings

1. Ballantine, J. H., Hammack, F. M., & Stuber, J. (2017).*The sociology of education: A systematic analysis*. London: Routledge.
2. Chaudhry, M. I. (2014). *A Textbook of general sociology*. Lahore: Aziz Publishers

EDUC-6307 **Educational Assessment and Evaluation** **3(3+0)**

Assessment plays a vital role in promoting educational activities and reporting results. Same is the case with educational test, measurement and evaluation of students' achievement and progress. It is an essential part of teaching learning process and without it all educational process is meaningless. It is because without doing this we cannot judge the degree or extent to which we have been successful in teaching learning process. This course is intended to introduce students with various techniques, instruments (assessment tools) and approaches to measure and evaluate students' achievement in classroom. The basic objectives of the course are to comprehend and apply various tools and techniques of measuring student's progress. It will develop to understanding about importance of educational assessment and action research in educational decision making. Moreover it will help students to construct, administer, organize and analyze various types of test items. Hence students will be able to identify, understand and elaborate main characteristics of a good test and criteria for its development.

Contents

1. Introduction
2. Instructional objectives
3. Types of Tests
4. Planning and Developing Classroom Tests and assessment
5. Test construction
6. Qualities of good tests
7. Portfolio
8. Evaluating Typical Behavior / Affective Domain
9. Analysis and interpretation of Test Results / Scores
10. Reporting and Grading of Results
11. Counseling of Students after Reporting Test Results
12. Practical work

Recommended Texts

1. Pidgeon, D., & Yates, A. (2018).*An introduction to educational measurement*. London: Routledge.
2. Gipps, C. (2011). *Beyond Testing (Classic Edition): Towards a theory of educational assessment*. London: Routledge.

Suggested Readings

1. Wells, C. S., & Faulkner-Bond, M. (Eds.). (2016).*Educational measurement: From foundations to future*. New York: Guilford Publications.
2. Blalock, H. M. (2017).*Measurement in the social sciences*. London: Routledge.

Technology is the application of scientific knowledge for the welfare and progress of humanity. If we use this scientific knowledge for the welfare of students and teachers (for better teaching and learning purposes) it becomes educational technology. Many new technologies have emerged with the passage of time. Each technology brings new challenges and opportunities. Sometimes this revolutionize the world e.g. as computer technology has revolutionized the 20th & 21st centuries. Now it is mandatory for educational institutions to use latest technologies to compete in global village. The course highlights the teaching strategies and technologies in classrooms because educational technology improves knowledge retention, encourage individual learning and collaboration. The course has objectives for the students to understand the applications of different technologies in teaching learning process, evaluate the role and importance of technologies in teaching- learning process and plan lessons identifying appropriate technologies and methods to deliver those lessons effectively.

Contents

1. Introduction
2. Teaching process
3. Methods and techniques of teaching
4. Lesson planning as a teaching tool
5. Lesson plan
6. Introduction: educational technology
7. Types of educational technologies and media
8. Uses of technology in learning process
9. Teacher's role
10. Current types of the educational technology systems and their application
11. Integrating technology into the curriculum and instruction
12. Practical work

Recommended Texts

1. Rushby, N., & Surry, D. (Eds.). (2016).*The Wiley Handbook of Learning Technology.* New Jersey: John Wiley & Sons.
2. Spector, J. M. (2015). *Foundations of educational technology: Integrative approaches and interdisciplinary perspectives.* London: Routledge.

Suggested Readings

1. Cullingford, C., & Haq, N. (2016).*Computers, schools and students: The effects of technology.* London: Routledge.
2. Keengwe, J. (Ed.). (2015). *Handbook of research on educational technology integration and active learning.* Pennsylvania: IGI Global.

Educational research is the formal and systematic application of the scientific method to the study of educational problems. The purpose of this course is to make students familiar with research, and to enable the students to acquire the body of knowledge and competencies for application and analysis related to research. The overall strategy of this course is to promote attainment of a level of expertise in research through the acquisition of skills and by involving students in the research process. It is due to the fact that all professional teachers and researchers should be familiar with the methods of research and the analysis of data so that they can find out the valid solutions of their educational problems. This course addresses the research, its types and importance in the field of teacher education. The basic objectives of the course are to enable students for critical analysis of different research work and relate it to national and local context. To engage with the research literature and to establish how different researchers techniques help improve the overall classroom situation and to conduct research in different educational settings and Write research report and present it effectively.

Contents

1. The Nature of Educational Research
2. Types of Educational Research
3. Research designs
4. Concepts, Constructs and Variables
5. Research objectives
6. Hypotheses and Research Questions
7. Data Collection Tools
8. Literature Review
9. Methodology
10. Data Analysis
11. Research Proposal
12. Report Writing

Recommended Texts

1. Walliman, N. (2017).*Research methods: The basics*. London: Routledge.
2. Gay, L. R. (2010). *Educational research: Competencies for analysis and application*. NY: Pearson Education:

Suggested Readings

1. Patten, M. L., & Newhart, M. (2017).*Understanding research methods: An overview of the essentials*. London: Routledge.
2. Fraenkel, J. R. &Wallen, N. E. (2015). *How to Design and Evaluate Research in Education.* NY: McGraw Hill.

Keeping in view the demands of the 21st century education; this course was designed to meet the challenges of new-millennium. This course aims to provide knowledge about English and the skills of teaching English. The course focuses to equip students with complete understanding of the theory and practice of English Language teaching. The prospective teachers will get awareness of methods techniques and approaches to ELT. They will also get an opportunity to practice the skill of teaching by applying various methods studied in the course. The course is divided into four parts as four essential and basic skills of English i.e. writing, reading, listening and speaking. Moreover the sub skills; grammar, vocabulary, pronunciation, academic writing and error analysis are also important points of focus of this course. Although learning English can be challenging and time-consuming, it is also very valuable to learn and can create many opportunities for the prospective teachers to get good jobs.

Contents

1. Teaching Writing
2. Teaching Readings
3. Teaching Speaking
4. Teaching Listening
5. Teaching Vocabulary
6. Teaching Grammar
7. Teaching Comprehension
8. English Language Teaching
9. Methodologies
10. Academic writing
11. Error Analysis
12. Practical Work

Recommended Texts

1. Hall, G. (2017). *Exploring English language teaching: Language in action*. London: Routledge.
2. Cook, V. (2016). *Second language learning and language teaching*. London: Routledge.

Suggested Readings

1. Nunan, D. (2015). *Teaching English to speakers of other languages: An introduction.* London: Routledge.
2. Roberts, J. (2016). *Language teacher education*. London: Routledge.

EDUC- 6311   **Curriculum Development**   **3(3+0)**

This course highlights the theory and historical development in the field of curriculum. Curriculum development is a problem solving process and it involves the consideration of the needs and problems for the improvement of the programs and the implementation of solutions and alternatives for learners and their contexts The major objectives of the course are to understand basic concepts of curriculum and instruction, to comprehend and evaluate the process of curriculum development and change in general and in Pakistani context in particular. It presents essential knowledge of curriculum theories and models. It also focuses to review and evaluate the curriculum reforms that have taken place in Pakistan so far. Curriculum is a reflection and a product of the society and can contribute to the change in the society. It is necessary to reflect on the issues to reach decisions in a dynamic and responsive curriculum development process. This course also aims to enable students to identify and suggest solutions to the issues related to curriculum and its implication.

Contents

1. Introduction to the concept of curriculum
2. Elements of curriculum: Objectives, content, teaching methods and evaluation
3. Basic components of curriculum and instruction, and their inter-relationship
4. Foundations of curriculum
5. Curriculum goals, aims and objective
6. Curriculum theory and practice: various models
7. Curriculum development: introduction, procedures and steps in development
8. Curriculum development process in Pakistan
9. Curriculum reforms in Pakistan
10. Curriculum reforms in the light of national educational policies
11. Issues of curriculum change
12. Curriculum evaluation

Recommended Texts

1. Nicholls, A., & Nicholls, S. H. (2018).*Developing a curriculum: A practical guide.* London: Routledge.
2. Wiles J.W & Bondi J.C., (2014). *Curriculum development: A guide to practice.* London. Routledge

Suggested Readings

1. Berry, R., & Adamson, B. (Eds.). (2011). *Assessment reform in education: Policy and practice* (Vol. 14). London: Springer Science & Business Media.
2. Alsubaie, M. A. (2016*). Curriculum development: Teacher involvement in curriculum development.* Journal of Education and Practice, 7(9), 106-107.

This course conveys various aspects of .educational planning and management. EPM is more than a technical exercise. It is also an organized social process involving a variety of people. The course presents and discusses the main features that characterize the educational planning processes currently in practice as well as the process of plan preparation. It also includes historical background of educational administration and supervision. The course has following objectives for the students: Understand and differentiate the terms administration, supervision, organization and management. , Review and evaluate the specific organizational conditions and Understand, characterize and exercise effective leadership traits and behaviors. One of the main tasks of educational planners is to assist decision-makers with the choice of adequate goals and strategies. Planners therefore need to understand the current challenges facing educational development and be able to evaluate possible policy responses with their respective implications. The purpose of course is to provide an overview of the principal issues underway in educational development today and the related challenges for policy makers and planners.

Contents

1. Introduction to planning and management
2. Supervision and inspection
3. Meaning, need, aims and types of supervision and inspection.
4. Techniques of supervision and factors affecting educational supervision
5. Nature and scope of educational management
6. Process of management
7. Decision making.
8. The school discipline.
9. Meaning, purpose and types of school discipline
10. Three stages of discipline and factors affecting school discipline
11. Rules and regulations
12. Key issues in educational management
13. Records in educational institutions

Recommended Texts

1. Bush, T., Bell, L., & Middlewood, D. (Eds.). (2019). *Principles of educational leadership & management.* California: SAGE.
2. Adams, D., Piaw, C. Y., Lee, K. C. S., & Sumintono, B. (Eds.). (2019*). Instructional leadership to the fore: Research and evidence.* Kuala Lumpur: University of Malaya Press.

Suggested Readings

1. Shah, S. (2016). *Education, Leadership and Islam.* London: Routledge:
2. Eacott, S. (2015). *Educational leadership relationally: A theory and methodology for educational leadership, management and administration.* NY: Springer.

EDUC-6314   **Institutional Improvement**   **3(3+0)**

The course highlights the planning and procedures for institutional improvement. The basic objectives of the course are to: understand the concept of change and school improvement, recognize that change can be a slow and complex process and identify the role of school leaders as change agents. Academics must be involved in a sequence of tasks – developing assessments; testing and refining them against new evidence, making sense of accountability results, and responding with changes in programs or delivery. The course offers insight into the process of how educators could contribute to the development and use of outcome measures for student learning in higher education. It takes institutional improvement process as an important opportunity to learn and gain insight into the institution's own quality management of the core functions of the institution (teaching & learning, research and community service/engagement). The goal of the course is to provide knowledge to prospective teachers about how to develop, integrate, and continuously improve institutional planning, implementation strategies, evaluation, and improvement activities.

 Contents

1. Understanding the change process
2. Features of effective school
3. Leadership and school relationships
4. School community relationships
5. Proper utilization of Resources
6. Students' academic performance
7. Professional commitment of teacher
8. Planning school improvement
9. Needs assessment
10. Survey of human resources
11. Survey of material resources
12. Targets and STRATEGIES
13. Coordination and implementation of plan
14. Supervising and monitoring
15. School culture

Recommended Texts

1. Clarke, P. *(2015). Improving school in difficulty.* London: Continuum International Publishing
2. Giancola, J. A. & Hutchison, J. K. (2015). *Transforming the culture of school leadership: Humanizing our practice*. CA: Corwin Press.

Suggested Readings

1. Ruddock, Jean. & Flutter, J. (2014). *How to improve your school: Giving pupils a voice.* London: Continuum Press.
2. Rudduck, J., Chaplain, R. & Wallace, G. (eds.) (1996). *School improvement: What can pupils tell us*? London: David Fulton.

EDUC-6315   **Seminars on Trends and Issues in Education**   **3(3+0)**

The course on contemporary issues and trends in education is considered to develop an understanding among future teachers about the emerging trends and issues related to educational system. The basic objectives of the course are to enable students to argue on the positive and negative impact of the new trends emerging in education as well as to identify the issues and suggest solutions. Students are required to prepare presentations or discussion papers for the rest of the group on their selected topics related to the educational trends or issues. This course offers an ideal opportunity to develop the subject understanding and ability to critically analyze. Active and sensitive participation within the group session will develop various skills and enhance learning. Students will be able to apply the knowledge and understanding gained through wider readings and ideas of others. They will learn how to select, organize and present their material. They will learn expressing clearly correct misunderstandings, support the work of others, practice using technical language, and learn from the ideas of other students and teacher.

Contents

1. Education as a complex enterprise
2. Madrassah education
3. Universal literacy
4. Formal and non-formal education: advantages and disadvantages
5. Gender disparity
6. Population education:
7. Impact of population growth on national development.
8. Steps towards population planning and welfare.
9. Types and causes of pollution
10. Environmental education
11. Privatization of education
12. Government resources and multiple demands
13. Need of private sector education
14. Challenges of quality education
15. Information in education

Recommended Texts

1. Green, D. (2018). *Trends and issues. International developments in assuring quality in higher education.* London: Routledge.
2. Leicht, A., Heiss, J., & Byun, W. J. (2018). *Issues and trends in education for sustainable development. 5(1).* Paris: UNESCO Publishing.

Suggested Readings

1. Indira, M. (2013). *Changing Demands of Technical and Vocational Education.* New Delhi: Authorspress
2. Usmani, B. D. (2014). *Women Education in 21st Century.* New Delhi: Authors press

EDUC-6316   **Child Development and Learning**   **3(3+0)**

The course highlights the development stages of child and learning aspects of child development. The course has following objectives for students :Understand and describe the basic terminology, history, research methodology, stages and issues in child development; Evaluate various theories and approaches to the study of child development and Explain the role and contribution of different theories of child development in teaching and learning process A solid understanding of milestones and developmental pathways across each domain of children's development can benefit teachers in several ways. Knowledge of how children within a given age span typically develop and learn provides a general framework to guide teachers in preparing the learning environment, considering curriculum, designing learning experiences, and teaching and interacting with children. Also important for educators to know are the sequences in which children gain specific concepts, skills, and abilities, building on prior development and learning. Familiarity with known learning sequences should inform curriculum development and teaching practice.

Contents

1. Introduction and meaning of growth and development
2. A framework for studying child development
3. Major domains and processes of development
4. Developmental stages and benchmarks of the stages of child development
5. Understanding development
6. A brief review of developmental theories
7. Emotional development
8. Social development
9. Physical development
10. Moral development
11. Introduction to learning
12. Significance & scope
13. The views of classical thinkers about learning Plato, Aristotle, Descartes, Thomas Hobbes, John Locke, Berkley, David Hume, Immanuel Kant, John S. Mill.
14. Modern classification of learning theories.
15. Theories of learning

Recommended Texts

1. Kail, R. V., & Cavanaugh, J. C. (2019). *Human development: A life-span view*. Boston: Cengage Learning.
2. Moore, R. C. (2017). *Childhood's domain: Play and place in child development.* London: Routledge

Suggested Readings

1. Arif, H. A. (2003). *Human Development and Learning*. Lahore: Majeed Book Depot.
2. Pritchard, A. (2017). *Ways of learning: Learning theories for the classroom.* London: Routledge.

The course highlights the analysis of education system in comparative perspectives. Comparative education is the field of education that analyses the education system of a country by using data and systems from other countries; and designs policies to improve education. The education system in a country cannot be isolated from the education systems of other countries. Keeping in view the requirement of equivalence in a global world, it is important to compare the education system of Pakistan with those of other developing and developed countries. Knowledge about the education systems of various countries assists policymakers in reflecting on education in the context of competition and excellence. It is, therefore, important for Instructors to be aware of the objective, curricula, teacher education, admission criteria, and staff recruitments of the education systems of other developed and developing countries. In this course, comparison among various streams of education is presented for the students. The course also provides an insight into the qualitative and quantitative methods of comparison

Contents

1. Introduction to Comparative Education
2. Concept of Comparative Education, meaning, need and scope
3. Purpose of Comparative Education
4. Methods & Comparative Education
5. Qualitative Elements of Comparative Education
6. Quantitative Elements of Comparative Education
7.   Comparative View of Systems of Education in Pakistan
8. Private and Public
9. Madrassah and formal education
10. Formal vs. Distance and non-formal education
11. Comparative Education in Developed Countries: USA; UK; Japan; Singapore
12. Comparative Education in Developing Countries: Pakistan; India; China; Malaysia
13. Global Issues in Comparative Perspective (focusing developing countries)

Recommended Texts

1. Hayhoe, R., Manion, C., & Mundy, K. (2017). *Why study comparative education.* London Routledge.
2. Watson, K. (2018*). Key issues in education: comparative perspectives.* London: Routledge.

Suggested Readings

1. Beech J. (2016). *The Theme of Educational Transfer in Comparative Education: Research in Comparative and International Education.* London: Routledge.
2. Han. S., & Buchmann, C. (2016). *Aligning science achievement and STEM expectations for college success: A Comparative study of curricular standardization.* The Russell Sage Foundation Journal of the Social Sciences, 2(1), 192-211.

EDUC-6319   **Teaching of Social Studies**   **4(4+0)**

The course focuses to develop mastery and command over the contents and competency of teaching social studies from Class I to class X (in both public and private sectors). This course will help the student teacher, to reflect on the purpose of teaching social studies and to shape their approach to teaching the subject. It will prepare them to teach the knowledge, skills, values, and attitudes essential for democratic citizenship. As a social studies teacher, students will have the opportunity to encourage informed and responsible civic action. Social studies teachers have an added responsibility to help children understand their world. Moreover, their task becomes more challenging given the dynamic nature of society and the subject matter, the nature and needs of learners, and the wide variety of learning. The course relates the knowledge of the subject to the context of Pakistan. Students will not only get the information of various teaching methods but also an opportunity to understand them by using a variety of methods and techniques of teaching social studies in classroom. The course aims to provide knowledge of teaching at both elementary and secondary levels.

Contents

1. Scope and objectives of teaching social studies
2. Problems in teaching Social Studies
3. History of Pakistan and Subcontinent
4. Review of the content of Geography and History for class 9th, 10th and inter level
5. Different teaching methods as given below will be demonstrated practically in the class room using appropriate content:
6. Lecture method
7. Project method
8. Discussion method
9. Activity method
10. Problem solving
11. Text book method
12. Role playing
13. Questioning- answering
14. Illustration and Demonstration
15. Programmed Instructions

Recommended Texts

1. Brophy, J., Alleman, J., & Halvorsen, A. L. (2016). *Powerful social studies for elementary students*. New York: Cengage Learning.
2. Russell III, W. B., Waters, S., & Turner, T. N. (2017). *Essentials of elementary social studies.* London.: Routledge

Suggested Readings

1. Banks, J. A. (2015). *Cultural diversity and education: Foundations, curriculum, and teaching.* London: Routledge
2. Cohen, M. L. (2016). *Asia: Case Studies in the Social Sciences-A Guide for Teaching*: London: Routledge

EDUC-6320   **Teaching of Mathematics**   **4(4+0)**

This course will equip Student Teachers with the knowledge and skills to teach math in elementary grades. They will become familiar with the mathematics content in Pakistan's National Curriculum and expected student learning outcomes. Student Teachers will learn to use a variety of instructional methods that promote active learning of math, including making and using teaching and learning materials. They will plan mathematics lessons and activities, and engage in practice teaching of math. The basic objectives of the course are to describe the nature, history and development of mathematics at elementary level in Pakistan, to acquire the skills and competencies required for the teaching of mathematics at elementary level and apply effectively the various methods of teaching mathematics. Each three unified session will focus on three aspects of math education: mathematical content, learning the math's content, and teaching the math's content. These will be combined to form an integrated instructional model that addresses the learning outcomes.

Contents

1. Methods and techniques of teaching mathematics:
2. Oral work, written work, assigned work, project work
3. Drill and practice (whole class, large group, small group, individual work)
4. Teaching aids and mathematics laboratory
5. Setting up and using a mathematics laboratory in elementary school
6. Use of low cost /no cost materials (from classrooms and surrounding for teaching of mathematics)
7. Measuring achievements in mathematics
8. Planning mathematics learning
9. Numeration systems, concept of addition and subtraction
10. Concept of multiplication and divisions , numbers theory & Integers
11. Fractions , set & functions
12. Elementary statistical concepts and information handling:
13. Percentage, ratio and proportion
14. Algebraic expressions
15. Geometry and trigonometry

Recommended Texts

1. Anwar, M.; Qureshi, M.F. et al (2013). *Mathematics -10 (Part-II).* Lahore: Punjab Text Board
2. Zazkis, R., & Liljedahl, P. (2019).*Teaching mathematics as storytelling*. Rotterdam: Sense Publisher.

Suggested Readings

1. Bennett –Jr., A. B. and Nelson. L.T. (2014). *Mathematics for elementary teachers: A conceptual approach. (6th ed)*. Boston: McGrew-Hill, Inc.
2. Bennett-Jr, A.B and Nelson, L.T.(2004).*Mathematics for elementary teachers: A conceptual approach.* (6th ed.). Boston: McGraw-Hill

EDUC-6321   **Teaching of General Science**   **4(4+0)**

The course highlights the power of observation and curiosity in general sciences studies. The basic objectives of the course are to understand scientific concepts, focus on how to relate facts, concepts, and theories to everyday experience. Teaching the scientific method to students is teaching them how to think, learn, solve problems and make informed decisions. These skills are integral to every aspect of a student's education and life, from school to career. Teaching technological literacy, critical thinking and problem-solving through science education gives students the skills and knowledge they need to succeed in school and beyond. The course will enable the student teachers to learn how to work with students at elementary level while teaching science. Engaging students in science content requires educators to help students see themselves as scientists and engineers instead of passively observing other people doing the work of science. Students will be provided opportunities to demonstrate their learning skills by developing various scientific models from everyday life.

Contents

1. Nature of science
2. Science as a process and product: scientific knowledge
3. Aims / objectives of teaching general sciences
4. History of science education
5. Aims / objectives of teaching general science at elementary level
6. Methods of teaching general science
7. Approaches of teaching general science
8. Teaching aids
9. Evaluation
10. Matter and forces
11. Energy
12. Heat and light
13. Structure of cell
14. Human systems
15. Metals and non-metals

Recommended Texts

1. *General Science for Class VIII (2010).* National Curriculum and Textbook Board.
2. Gilbert, J. K., & Justi, R. (2016). *Modelling-based teaching in science education Vol. 9).* Cham, Switzerland: Springer International Publishing.

Suggested Readings

1. Demkanin, P. et al (2016). *Effective use of ICT in Science Education. European cooperation for the training of school education staff.* Bob Kibble, School of Education, University of Edinburgh.
2. *Methods of Teaching (2012).* Higher Education Commission (HEC), Pakistan

The course highlights the theories and practical knowledge in the field of physics. The basic objectives of the course are to: enable students to understand and apply the theories, laws and principles of physics in their daily life., teach the concepts, principles, theories and laws of physics up to secondary level; evaluate and appraise the concepts and principles (theories and laws) of physics and to design and conduct experiments in the lab. The course on Teaching Physics is composed of three elements: a study of physics content, readings about the teaching and learning of physics, and practical experience teaching physics to the students. This course will provide opportunities for the students to get engaged in activities that engender both broad-based skills which span these domains (e.g. problem solving, analysis, and meta-cognition) as well as specialized domain-specific knowledge and skills (e.g. physics content, and knowledge of and practice in theories of teaching).

Contents

1. Physics teaching
2. Scientific process / method
3. Nature , steps ,stages and characteristics of scientific method
4. Scientific attitude , nature and importance
5. Introduction to physics
6. Physics teaching in Islamic perspective
7. Use of A.V-aids in teaching physics
8. Planning lessons
9. Developing required instructional & helping materials for teaching physics
10. Imparting instruction
11. An overview of teaching methods for science
12. Different methods used in the teaching of physics. (A detailed study of the nature, scope procedures, merits, demerits and application of the methods and techniques)

Recommended Texts

1. Alsop, S. and Hicks, K. (2013). *Teaching science: A hand book for primary & secondary school teachers*. New Delhi: Kogan Page
2. Burko, L. M. (2016). *Using the case study method in teaching college physics*. London. Routledge

Suggested Readings

1. Mohapatra , J.K . and Mathapatan, M .(2011) . *New dimensions of science curriculum: An operational approach.* New Delhi: Commonwealth.
2. Khurshid, K., Shah, A. F., & Reid, N. (2016). *Information and Communication Technology in Learning Physics at Secondary School Level in Pakistan.* Bulletin of Education and Research, 38(2), 135-151.

EDUC-6323   **Teaching of Chemistry**   **4(4+0)**

The course introduces the methods used for teaching chemistry. It also provides a review to the secondary level concepts of chemistry and its teaching. The course has major objectives for students to: understand and explain the concepts theories and laws of chemistry up to secondary level in public sector and O' level develop scientific attitude and inquiry skills required for teaching chemistry; and relate and apply various concepts, principles and laws of chemistry in their daily life. The course on Teaching chemistry is composed of three elements: a study of chemistry content, readings about the teaching and learning of chemistry, and practical experience teaching chemistry to the school students. This course will provide opportunities for the student teachers to get engaged in activities that produce both broad-based skills which span these domains: problem solving, analysis, and meta-cognition; as well as specialized domain-specific knowledge and skills for instance chemistry content, and knowledge of and practice in theories of teaching science.

Contents

1.   Use of A.V-aids in teaching chemistry
2. Planning lessons
3.   Different methods used in the teaching of chemistry(A detailed study of the nature, scope procedures, merits, demerits and application of the methods and techniques)
4. Introduction to chemistry: basic concepts.
5. Elements and compounds
6. Chemical reactions and chemical equation
7. Atomic structure
8. States of matter
9. Solution and suspension
10. Hydrogen and water
11. Nitrogen and oxygen
12. Sulpher and its compounds
13. Halogens
14. Organic chemistry
15. Radioactivity

Recommended Texts

1. Eilks, I., & Byers, B. (Eds.). (2015). *Innovative methods of teaching and learning chemistry in higher education.* Cambridge: Royal Society of Chemistry.
2. Punjab Text Book Board (2018). *Chemistry.* Lahore: Punjab Text Book Board.

Suggested Readings

1. Gilbert, J. K., De Jong, O., Justi, R., Treagust, D. F., & Van Driel, J. H. (Eds.). (2006). *Chemical education: Towards research-based practice* (Vol. 17). Netherlands: Springer Science & Business Media.
2. Jegstad, K. M., & Sinnes, A. T. (2015). *Chemistry teaching for the Future: A model for secondary chemistry education for sustainable development.*International Journal of Science Education, 37(4), 655-683.

EDUC-6324   **Teaching of Biology**   **4(4+0)**

The course highlights the contents of biology at secondary level and its teaching. The main purpose of the course on teaching of biology is to enable prospective teachers to develop competency in the above-mentioned field in both theoretical and practical aspects. The course on Teaching biology is composed of three elements: a study of biology content, readings about the teaching and learning of biology, and practical experience teaching biology to the students. This course will provide opportunities for the students to get engaged in activities that produce both broad-based skills which span these domains (e.g. problem solving, analysis, and meta-cognition) as well as specialized domain-specific knowledge and skills (e.g. biology content, and knowledge of and practice in theories of teaching). Students will be provided opportunities to demonstrate their learning skills by developing various scientific models related to biology from everyday life. As a biology teacher they will be able to teach the pupils about cells, genes and evolution and the scientific principles and concepts used to understand the living world.

Contents

1. Biology teaching
2. Scientific process / method: Its nature, step, stages and characteristics
3. Scientific attitude, nature and importance
4. Use of A.V-aids in teaching biology
5. Planning lessons
6. Developing required instructional & helping materials for teaching biology
7. Imparting instruction
8. Different methods used in the teaching of biology (A detailed study of the nature, scope procedures, merits, demerits and application of the methods and techniques)
9. Cell: unit of life and classification
10. Different systems
11. Transport in living organisms
12. Inheritance and genes
13. Evolution
14. Environmental biology

Recommended Texts

1. Kampourakis, K., & Reiss, M. J. (Eds.). (2018).*Teaching biology in schools: global research, issues, and trends.* London: Routledge.
2. Punjab Text Book Board. (2018). *Biology for secondary classes.* .Lahore: Punjab Text Book Board.

Suggested Readings

1. Kampourakis, K., & Reiss, M. J. (Eds.). (2018).*Teaching biology in schools: global research, issues, and trends*. New York: Routledge.
2. Wells, H. G. (2018). *Text-book of Biology*. Frankfurt: Outlook Verlag GmbH.

EDUC-6325   **Organizational Behavior**   **3(3+0)**

This course on organization theory and behavior provides knowledge that helps people understand, diagnose, and respond to emerging organizational needs and problems of our educational institutions. The main objective of Organizational Behavior is to enable students to understand the human interactions in an organization, find what is driving it and influence it for getting better results in attaining its goals .Therefore; the basic objective of this course is to provide a strong conceptual framework for studying, understanding, and applying theory and practice of organization behavior and to explores the nature of organization and organization theory. The course will provide an understanding of how to explain, predict, and influence behavior. Managers need to be able to explain why employees engage in some behaviors rather than others, predict how employees will respond to various actions and decisions, and influence how employees behave. The effective implementation of organizational behavior in education contributes to the enhancement of job performance, incurs job satisfaction and leads to achievement of desired goals and objectives.

Contents

1. Management; functions, roles and skills
2. Organizational behavior and evolution of the concept of OB
3. Challenges and opportunities for study of OB
4. Fundamentals of individual behaviour: individual difference – personality & ability
5. Perception and individual decision making
6. Basic motivation concepts
7. Foundation of group behaviour
8. Stages of group development and social loafing
9. Basic approaches to leadership
10. Organization change and stress management
11. Approaches to managing organizational change
12. Creating a culture for change
13. Work stress and its management
14. Conflict and negotiations
15. Global implications

Recommended Texts

1. Daft, R. L. (2020). *Organizational theory and design.* New York: Cengage
2. Stephen P. Robbins and Timothy A. Judge, (2019) *Organizational Behavior (18th ed)*, New York: Pearson Education

Suggested Readings

1. Gray, J. L., & Stark, F. A. (2007). *Organizational behavior: Concepts and applications.* (7th ed.). Toronto: Charles E. Merrill Publishing Co.
2. Osland, J., Devine, K., & Turner, M. (2015). *Organizational behavior.*Wiley Encyclopedia of Management, 1-5.
3. Kreitner, R. & Kinicki, A. (2011). *Organizational behavior. (5th ed.).* Boston: McGraw Hill.

EDUC-6326   **Economics and Financing of Education**   **3(3+0)**

This course addresses the concept of financing in the field of education. It highlights both theory and practice of economics and financing of education. The basic objective of this course is to introduce the students with the concepts, theories and principles of economics and financing and their application in our educational setup. Economic education generates knowledge. It gives people the tools to understand economic and financial issues and to interpret events that will affect their financial futures. In short, informed, well educated consumers make better decisions, increasing their economic security and wellbeing. Economists recognize that developing basic economic and financial knowledge is an important goal for a democratic society that relies heavily on informed citizens and personal economic decision-making. Therefore, the course will inculcate awareness among prospective teachers about the policies and process of educational financing in general as well as its status in Pakistan. Economic education is vital to the future health of our nation's economy

Contents

1. Concepts and assumptions in the economics of education
2. Individual demand for education
3. The social rate of return approach
4. Identifying and analyzing the costs and benefits
5. Results of social rate of return
6. Criticism of S.R.O.R. as policy indicator
7. Manpower planning
8. Educational outputs
9. Educational costs
10. Financing education in Pakistan
11. Budgeting and financing
12. Who pays for education?
13. Students' financing through loans
14. Alternative strategies for financing education in Pakistan
15. Economics of life long education

Recommended Texts

1. Fisher, R. C. (2018). *State and local public finance*. London: Routledge
2. Robinson, E. A. G., & Vaizeyd, J. E. (2016). *The economics of education.* London: Palgrave McMillan.

Suggested Readings

1. Ardalan, K. (2016). *On the role of paradigms in finance*. London: Routledge.
2. Nu'Man, R., & Ali, S. N. (2016). *Islamic Economics and Finance Education: Consensus on Reform.* London: Routledge

The course highlights the human resource management in the fields of education. The basic objective of the course is to create awareness among students about human resource management, performance appraisal procedures and understanding of rewarding people as human resource managers. Studying HRM opens doors to a variety of career paths and job positions in human resource management and beyond. Managing people and client relations is an important skill to acquire in any organization. Many other skills like organisation, administration, multitasking, presentations, reporting and communication are also part of studying HRM. The course focuses on teaching how to manage human resources in an organization which involves the effective use of personnel, aimed at improving the organization's performance. The broad purpose of the human resource management function in any educational organisation is to attract, develop, retain, and motivate personnel in order to achieve the school's mission. Thus, the course will benefit the prospective teachers by enabling them to deal effectively with human resources in educational setting

Contents

1. Strategic human resource management
2. Building human resource management
3. Organizational structure
4. Job analysis: elements, methods
5. Human resource planning
6. Recruitment process
7. Selection process
8. Placement process
9. Issues related to recruitment, selection and placement
10. Employee development and learning
11. Performance management
12. Use of technology for performance management
13. Rewarding people
14. Managing employee retention and turn over
15. Evaluation and improving human resource function

Recommended Texts

1. Cascio, W. F. (2015). *Managing human resources.* New York: McGraw-Hill
2. Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2017). *Human resource management: Gaining a competitive advantage*. New York: McGraw-Hill

Suggested Readings

1. Armstrong, M. (2006*). A handbook of human resource management practice.* Philadelphia, PA: Kogan Page Publishers.
2. Boxall, P., & Purcell, J. (2011). *Strategy and human resource management*. London: Palgrave Macmillan

EDUC-6328   **Qualitative Research Methods in Education**   **3(3+0)**

This course highlights the features of qualitative research which aims to get a better understanding through firs hand experience, truthful reporting, and quotations of actual conversations. It aims to enable the learners to understand how the participants derive meaning from their surroundings, and how their meaning influences their behavior. Educational research refers to a systematic attempt to gain a better understanding of the educational process, generally with a view in improving its efficiency. It is an application of scientific method to the study of educational problems. Applied qualitative research could be the source of solid evidence for making decisions related to education. The course presents knowledge about principles, methodologies, distinctions and applications of methodologies of qualitative research in education. It also focuses on the recent developments in this field. The basic objectives of the course are to enable the learners to differentiate qualitative research from other types of research especially the quantitative one and to prepare research designs and proposals on the topics related to educational issues and problems in our local context.

Contents
1. Qualitative research: definitions and concepts
2. Differences between qualitative and quantitative research
3. Characteristics of qualitative research
4. Qualitative research in education
5. Some theoretical affiliations and classifications of qualitative inquiry
6. Anthropology
7. Phenomenology
8. Symbolic interactions
9. Ethnography: ethnographic research
10. Feminist research
11. Postmodern research
12. Ethno-methodology
13. Techniques of data collection in qualitative research
14. Field work
15. Evaluation and pedagogical uses of qualitative research

Recommended Texts

1. Creswell, J. W., & Poth, C. N. (2017). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage Publications.
2. Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012*) How to design and evaluate research in education.* New York*:* McGraw-Hill

Suggested Readings

1. Hartas, D. (Ed.). (2015).*Educational research and inquiry: Qualitative and quantitative approaches*. London: Bloomsbury Publishing.
2. Eisner, E. W. (2017). *The enlightened eye: Qualitative inquiry and the enhancement of educational practice*. New York: Teachers College Press.
3. Patten, M. L., & Newhart, M. (2017). *Understanding research methods: An overview of the essentials.* London : Routledge

EDUC-6329   **Designing and Reporting Research in Education**   **3(3+0)**

The course highlights the theory and practice of designing and reporting research. The basic objectives of the course are to impart the understanding of the purpose of research, its designs, writing report and present the research report. The course presents knowledge about quantitative and qualitative research designs. It focuses on the distinctive features of designs and criteria for selection of appropriate design for conducting educational research. It also focuses on the recent developments in the field. The basic objectives of the course are to enable students to understand and select the most appropriate design for their research. Construction of research proposals on the topics related to educational issues and problems in our local context is another important feature of the course. Practical exercise on writing a Research Report will enable the learners not only to disseminate knowledge, but also to present the findings for expansion of the knowledge. Thus the course aims to achieve the purpose of research that is not just to discover something but to communicate that discovery to a larger audience.

Contents

1. Conceptual foundations of a research design in quantitative research
2. Concept of research design
3. The purposes of research design
4. Elements of a research design
5. Criteria / characteristics of a good research design
6. Research design and writing a research proposal
7. Quantitative research designs
8. Qualitative research designs
9. Development of a research plan / proposal.
10. Need and significance of research proposal
11. Report writing in quantitative research
12. Need and significance of research proposal
13. Major sections of a research report (Abstract, Introduction, problem, methods & procedures, discussion, bibliography/reference list and appendices)
14. APA manual 6th edition
15. Report writing in qualitative research

Recommended Texts

1. Creswell, J. W., & Poth, C. N. (2017). *Qualitative inquiry and research design: Choosing among five approaches.* Thousand Oaks, CA: Sage Publications.
2. McKenney, S., & Reeves, T. C. (2018). *Conducting educational design research.* London: Routledge

Suggested Readings

1. Blaikie, N., & Priest, J. (2019). *Designing social research: The logic of anticipation.* New York: John Wiley & Sons
2. Zapata-Rivera, D. (Ed.). (2018). *Score reporting research and applications.* London*:* Routledge

EDUC-6330   **Analysis and Interpretation of Data**   **3(3+0)**

This course discusses the data, data analysis and interpretation techniques. Data analysis is the most crucial part of any research. Hence, the purpose of the course is to provide awareness of data analysis procedures through the use of analytical and logical reasoning to determine patterns, relationships or trends. Different strategies provide data analysts with an organized approach to working with data; they enable the analyst to create a "logical sequence" for the use of different procedures. The basic objectives of the course are to develop understanding in data planning, analysis and interpretation, application of data analysis procedures using different soft wares. The course will introduce the learners to the critical concepts common to the analysis of quantitative research data, with special attention to survey data analysis. These concepts will help the prospective teachers to designing research. Knowing how best to look at data and derive insights is critical to ensuring that the information has a positive impact on efforts to improve the educational system.

Contents

1. Data and its types
2. Analysis of quantitative data through SPSS
3. Statistical concepts
4. Measures of central tendency and variability
5. Measures of relationship
6. Inferential statistics (correlation + regression)
7. Hypothesis testing ; the null hypothesis; one and two tailed tests ; use of null hypotheses
8. Parametric vs. nonparametric techniques
9. Carrying out parametric statistical tests: t-distribution, z-test, ANOVA and ANCOVA.
10. Carrying out non-parametric statistical tests: chi square test
11. The role of statistical analysis
12. Selecting an appropriate statistical analysis
13. Coding, rostering and inputting data
14. Qualitative data: types and forms
15. Data analysis in qualitative research

Recommended Texts

1. Blalock, H. M. (2017).*Measurement in the social sciences*. New York: Routledge
2. Reinharz, S. (2017). *On Becoming a Social Scientist: from survey research and participant observation to Experimental Analysis*. New York: Routledge

Suggested Readings

1. Pallant, J. (2006) *SPSS Survival Manual A step by step guide to data analysis using SPSS for Windows (Version 10)*. London: McGraw-Hill
2. Lune, H., & Berg, B. L. (2016). *Qualitative research methods for the social sciences*. Essex: Pearson Higher Ed.

B.Ed (1.5 YEARS) GENERAL

EDUC 6401   **General Methods of Teaching**   **3(3+0)**

This course highlights the essential attributes of the teacher, the importance and types of teacher planning practice related to different teaching methods. Knowledge of Teaching Methods gives a broader perspective of teaching to prospective teachers. Teaching methods are often divided into two broad categories: teacher-centered methods (also called direct instruction) and learner-centered methods (also called indirect instruction or inquiry-based learning). An effective teacher knows several methods, some teacher-directed and others learner-directed. From among these methods, a teacher selects the one method or combination of methods most likely to achieve a particular lesson's objectives with a particular group of students. The course focuses on the development of abilities among prospective teachers to explain the basic concepts of teaching, describe-the-importance, and types-of teacher planning, prepare lesson plans according to individual needs, apply teaching skills on identifying learning difficulties in the classroom, and select, prepare and use appropriate teaching materials. It will also focus on how to relate facts, concepts, and theories to everyday teaching learning experiences.

Contents

1. Introduction to Teaching
2. The Concepts of Teaching Methods, Strategies and Techniques
3. Lesson Planning in Teaching
4. Approaches to Lesson Planning
5. Student Motivation
6. Theories of Motivations
7. Inquiry Methods
8. Activity Methods
9. Discussion Method
10. Cooperative learning
11. Teaching Tools
12. Planning To Use the Materials
13. Kinds of AV Materials

Recommended Texts

1. De Vries, M. J. (Ed.). (2018). *Handbook of technology education.* USA: Springer.
2. Marzano, R. J. (2018). *The handbook for the new art and science of teaching.* Bloomington: Solution Tree.

Suggested Readings

1. Allen & Mendler. (2009). *Motivating students who don't care: Successful techniques for educators.* Bloomington: National Educational Service
2. Shami, P.A. et al. (2016). *Instructional methods*. Lahore: Majeed Book House.
3. Singh, Y.k.(2017). *Teaching of general science*. New Dehli: APH Publishing Corporation

This course addresses the knowledge and understanding of formative and summative learning assessment and how teachers use assessment to inform decisions about teaching and learning. Assessment and evaluation are key directors of education and are pivotal to learning and teaching. Assessment is the process of making a judgement or measurement of the worth of an entity, for example, a person or process. Evaluation in education involves gathering and evaluating data evolving from planned learning activities, delivery of instructions, and/or programs. Students will get an understanding of learning domains and their role in assessment. This course examines the purposes, paradigms, and types of assessment and evaluation used in education, and in particular the innovations associated with them. The course has the following main objectives for the students to understand the concepts and application of classroom assessment, integrate objectives with evaluation and measurement, acquire skills of assessing the learning outcomes, and interpret test scores and results of different assessment techniques.

Contents

1. Measurement, Assessment and Evaluation
2. Types of assessment
3. Objectives and assessment
4. Preparation of table of specification
5. Types of Assessment Tests
6. Techniques of Assessment
7. Types of Test
8. Reliability of Assessment Tools
9. Validity of Assessment Tool
10. Planning and Administering Classroom Tests
11. Interpreting Test Scores
12. Reporting Test Scores

Recommended Texts

1. Blalock, H. M. (2017). *Measurement in the social sciences*. UK: Routledge.
2. Pidgeon, D., & Yates, A. (2018). *An introduction to educational measurement*. UK: Routledge.

Suggested Readings

1. Gipps, C. (2011). Beyond Testing (Classic Edition): *Towards a theory of educational assessment.* UK: Routledge.
2. Miller , M.D., Linn, R. L. & Gronlund. N. E. (2013). *Measurement and assessment in teaching* (11th Edition). USA: Pearson
3. Wells, C. S., & Faulkner-Bond, M. (2016). *Educational measurement: From foundations to future.* USA: Guilford Publications

EDUC-6403   **Curriculum Development (Foundation)**   **3 (3+0)**

This foundation course "Curriculum Development" is designed to; enable the learners to discuss the concept, history, curriculum development process and various approaches, issues to curriculum development. This course introduces participants to a range of theories and approaches to curriculum development. Emphasis will be placed on methods of determining curriculum priorities, objectives, scope and sequence, and organizational patterns. In addition, participants will develop skills related to instructional design such as the development of plans for teaching and learning. The course highlights the importance of alignment; that is, the connection between course outcomes/goals, delivery of instruction, and the assessment and evaluation of learning. The course has following main objectives for the student to give an introduction of the concept, history, and foundation of curriculum development generally and specifically with reference to Pakistan, compare and contrast the comparative perspectives of curriculum development in different countries of the world to broader their view in the national and international context. The course also assists to develop a deeper understanding of the testing, measurement, and evaluation in the curriculum.

Contents

1. Introduction to Curriculum
2. Curriculum Planning and Development
3. Basic principles of Curriculum Development
4. History of Curriculum Development in Pakistan
5. Curriculum Development under various Education Policies
6. Foundations of Curriculum
7. Conceptual framework of Curriculum Development
8. Process of Curriculum Development
9. Aims Goals and Objectives of Education
10. Content Selection and Organization Principles and Procedure
11. Principles of Curriculum Organization
12. Evaluation of Curriculum
13. Curriculum and Development

Recommended Texts

1. Oliva, P.F. (2015). *Developing the Curriculum. (4th ed.).* New Yark: Longman
2. Nicholls, A., & Nicholls, S. H. (2018). *Developing a curriculum: a practical guide*. UK: Routledge

Suggested Readings

1. Berry, R., & Adamson, B. (Eds.). (2011). *Assessment reform in education: Policy and practice (Vol. 14)*. USA: Springer Science & Business Media
2. Wiles J.W & Bondi J.C., (2014). *Curriculum development: A guide to practice (9th Ed.).* UK: Routledge

The course Research Methods in Education is designed to orient prospective teachers to the concept and methods of research in education. The learner will be able to do critical analysis of different research work and relate it to their own context. The course provides students with the opportunity to engage with the research literature and to establish how different researchers' techniques help improve the overall classroom situation. This course focuses on action research, and it aims to equip Student Teachers with the necessary skills to plan and conduct action research in an educational setting. This course will also help Student Teachers to write research proposals and research reports and to create presentations to discuss their work. The course will serve the students in developing abilities to discuss the meaning, nature & scope of research in education identify different models and approaches of action research, identify research problems and develop research questions and develop a research proposal.

Contents

1. Introduction of Educational Research
2. Need and scope of research in education
3. Types of research by Purpose
4. Types of research by Methods
5. Historical Research
6. Experimental Research
7. Descriptive Research
8. Tools and Techniques of Research
9. Sampling Technique
10. Sampling Errors
11. Designing a Research Proposal
12. Theoretical framework
13. Writing Research Report

Recommended Texts

1. Geoffrey E. Mills, L. R. Gay (2019). *Educational research: Competencies for analysis and applications, (12th Ed.)*. N.Y: Merrill- Prentice Hall
2. Patten, M. L., & Newhart, M. (2017). *Understanding research methods: an overview of the essentials*. UK: Routledge

Suggested Readings

1. Fraenkel, J. R. &Wallen, N. E. (2015). *How to design and evaluate research in education*:   NY: McGraw Hill
2. Gay, L. R. (2010). *Educational research: Competencies for analysis and application.* NY: Pearson Education.
3. Walliman, N. (2017). *Research methods: The basics*. UK: Routledge

EDUC-6405   **Educational Leadership and Management**   **3 (3+0)**

It has become the dire need for a society that everyone must have a specialization in every field of life due to the rapid expansion of knowledge. Education modifies the behavior of a person, thus education can perform this duty well if the system of education runs effectively. For making, developing, and establishing the education system administration, management and supervision to play an important role as well as in all other aspects of society. In Pakistan, the existing system of educational management and supervision is considered as a defective system which does not cope the national, and local level needs of education system. There are so many reasons. One, reason is that we cannot yet established a firm administrative structure for education- system. It is always uncertain and wavering. So it is the need of our educational institution to prepare those personnel at higher level who are highly skilled, professionally trained and capable in their field, particularly in school management and leadership. So the present course of educational leadership and management observes and envisages the promotion of educational leadership management and supervision.

Contents

1. Concept of Administration
2. Basic principles of Educational Administration
3. Fundamental principles of Islamic Administration
4. Concept of Educational Management
5. Concept of Supervision
6. Educational Planning
7. Approaches of Educational Plan
8. School Discipline and Classroom Management
9. Management of Resources, Physical, Financial, Human, Technological
10. School Records
11. Administrative and Supervisory Structure in Pakistan
12. Educational Code
13. Evaluation Management System

Recommended Texts

1. Adams, D., Piaw, C. Y., Lee, K. C. S., & Sumintono, B. (Eds.). (2019). *Instructional leadership to the fore: research and evidence*. University of Malaya Press
2. Bush, T., Bell, L., & Middlewood, D. (Eds.). (2019). *Principles of educational leadership & management*. SAGE Publications

Suggested Readings

1. Eacott, S. (2015). *Educational leadership relationally: A theory and methodology for educational leadership, management and administration*. USA: Springer
2. Shah, S. (2016). *Education, leadership and islam*. UK: Routledge

The main purpose of the course is to make students aware of how to bridge the gap between theory and practice. In other words, how they can use various concepts of educational psychology to improve their learning and teaching skills. The course is intended to improve the reading, writing, and communication skills of students. For this purpose, various structured and unstructured activities will be designed and assigned to the students so that they can better develop their abilities and skills. The student teachers will be introduced with major theories of intelligence, personality, motivation, memory, thinking, and instruction. They will also be trained in how these theories can be applied in classroom teaching. Understanding the psychological basis of these theories will help them to manage the classroom in a way that promotes learning and minimizes disruptions. It will also provide them with the tools needed to be a better teacher, counselor, and guide.

Contents

1. Meaning and nature of Psychology and Educational Psychology
2. Methods of educational psychology
3. Learning and Instruction
4. Expository learning, Constructivist & situated learning
5. Motivation: Theory and Practice
6. Creating Learning Environments
7. Teaching for Learning (i.e. Effective Teaching)
8. Characteristics of effective teachers
9. Individual Differences / Variations
10. Intelligence and Personality Theories
11. Complex cognitive processes
12. Teaching & learning about thinking

Recommended Texts

1. Duchesne, S., & McMaugh, A. (2018). *Educational psychology for learning and teaching*. AU: Cengage
2. Santrock, J. W. (2017). *Educational psychology.* Boston: NY: McGraw –Hill

Suggested Readings

1. Evans, E. G. S. (2017). *Modern educational psychology: an historical introduction*. UK: Routledge
2. Ravi, V. (2016). *Advanced educational psychology*. USA: Lulu Publications

EDUC-6407   **Philosophy of Education**   **3 (3+0)**

This course will provide learners with an opportunity to consider a variety of educational issues from a philosophical perspective. The course will explore general questions such as: What is the ultimate goal of education? This course positions philosophy within various historical contexts and uses historical thinking tools to engage with philosophical thinking tools. The course introduces students to a wide range of philosophers and a wide range of philosophical schools of thought as they relate to education. This course provides a study of the educational implications of Idealism, Realism, NeoThomism, Experimentalism, and Existentialism. Significant factors will include the curricula emphasis, preferred method, ethics, and aesthetics stressed by each philosophy. Attention is placed on the learner's ability to identify and describe his or her own philosophy of education. The course will assist in developing abilities of students to understand the meaning of the term Philosophy, understand the subdivisions of philosophy, as well as to explain the leading philosophies and theories of education.

Contents

1. Introduction of Philosophy
2. Types of Philosophy
3. Western Philosophies of Education
4. Idealism vs Realism
5. Naturalism vs Pragmatism
6. Postmodernism
7. Progressivism
8. Perennialism
9. Essentialism
10. Muslim Philosophical Perspective on Education
11. Theories of Education
12. Role of Values in Education
13. Teaching of social and moral values through education

Recommended Texts

1. O'Connor, D. J. (2016). *An introduction to the philosophy of education*. Routledge:UK
2. Mead, G. H., Biesta, G. J., & Trohler, D. (2015). *Philosophy of education*. UK: Routledge

Suggested Readings

1. Kleinig, J. (2016). *Philosophical issues in education*. UK: Routledge
2. Shami, P.(2015). *Educational philosophy*. (1st Ed.). Sargodha: Pakistan
3. Phillips, D. C. (Ed.). (2014). *Encyclopedia of educational theory and philosophy*. USA: Sage Publications.

EDUC-6408   **Critical Thinking and Reflective Practices**   **3 (3+0)**

This course is designed for the undergraduate program of teacher preparation. It is expected that the teachers of twenty first century should be able to not only learn and review the current policies and practices in education but may also have the ability to think critically and reflect upon the current practices to bring positive changes. This course will introduce the prospective teachers to critical theory, and help them to become reflective practitioners in their professional careers. This course will also help them to initiate action research culture within education and strengthen the community of practice in the profession of teaching. The course will focus on the development of abilities among students to analyze the content and design classroom instruction in an innovative manner, ask and analyze thought-provoking questions, review and reflect upon their own teaching practices for further improvement and apply critical thinking in different content areas. They will also learn mind mapping techniques as well as tools and techniques of critical thinking and reflective practices.

Contents

1. Introduction to Critical Thinking
2. Essential aspects of Critical Thinking
3. Teacher as a Critical Thinker
4. Critical Theory and Pedagogy
5. Roots of Critical Pedagogy
6. Teaching Strategies to help promote Critical Thinking
7. Classroom Assessment Techniques
8. Reflective Practice
9. Reflective Cycle
10. Action Research
11. Reflective and Critical Writing
12. Tools and Techniques of Critical Thinking and Reflective Practices
13. Mind Mapping
14. Portfolio Development
15. Communities of Practice and Knowledge

Recommended Texts

1. Brookfield, S. (2012). T*eaching for critical thinking: tools and techniques to help students question their assumptions.* USA: Jossey-Bass
2. Cottrell, S. (2017). *Critical thinking skills: Effective analysis, argument and reflection*. UK: Macmillan International Higher Education

Suggested Readings

1. Bolton, G. (2010). *Reflective practice: writing and professional development (3rd Ed.).* Los Angeles: Sage
2. Wink, J. (2011). *Critical pedagogy: notes from the real world (4th Ed.).* NJ: Pearson Education

EDUC-6409   **Human Development and Learning (Foundation)**   **3 (3+0)**

This course will cover the major theoretical and methodological approaches in the study of human development and learning. Learning remains continuous throughout human life whereas human development across the lifespan (from infancy to adulthood) is presented with an interdisciplinary perspective, focusing on physical, psychological, sociological, and cognitive aspects of development. This course will give prospective teachers a detailed insight into the phenomenon of human development and learning through a topical approach within an educational context. In doing so, they will learn about the physical, cognitive, social, personality, emotional, and moral development across the lifespan. The major life issues, milestones, and transitions from conception to death will also be explored. The course has the following objectives to serve the students in developing basic concepts in human development, growth and learning, the process of human development and its classroom application, and understanding various aspects and stages of human development. This course will also guide the students to study approaches to learning and individual differences among students.

Contents

1. Human development and growth
2. Factors influencing Human Development
3. A Frame work for studying Human Development
4. Physical Development
5. Intellectual Development
6. Social Development
7. Emotional Development-
8. Moral Development
9. Language Development
10. Human Learning
11. Transfer of Learning
12. Approaches to Learning
13. Individual Differences

Recommended Texts

1. Kail, R. V., & Cavanaugh, J. C. (2018). *Human development: a life-span view*. USA: Cengage Learning
2. Moore, R. C. (2017). *Childhood's domain: play and place in child development*.   UK: Routledge

Suggested Readings

1. Arif, H. A. (2003). *Human development and learning*. Majeed Book Depot: Lahore
2. Benson, J. (2019). *Advances in child development and behavior*, volume 56 (1st Ed.). USA: Elsevier Academic Press
3. Pritchard, A. (2017). *Ways of learning: learning theories for the classroom*. UK: Routledge

EDUC-6410   Information and Communication Technology in Education   3(3+0)

This course will help the prospective teachers to understand, use, and apply a range of Information Communications Technologies (ICTs)—such as computers and the Internet, other audio and video equipment, mobile phones, and online resources and tools—as part of the teaching and learning process. During this course, they will learn to collaborate with their peers to develop a learning activity that uses digital tools and resources to support student-centered learning. The course focuses on teaching with technology. Technology in this course largely means computers/laptops, though instruction is largely similar to whether a teacher is using a laptop or cell phone. The focus of this course is to provide prospective teachers with the knowledge and skills regarding how ICTs can be used to engage students in the learning process, improve understanding of content as well as instructional and assessment practices, and enhance communication and collaboration in the classroom. To attain this end, students will design and create instructional units in which technology plays a central role and implement these units with students.

Contents

1. Meaning and definition of educational technology
2. Types of educational technology
3. Components of educational technology
4. Types of Educational Technologies, Media and Their Uses in Learning Process
5. Electronic Aids
6. Graphic Aids
7. Educational technology systems and their application
8. Computer-based educational technology
9. Virtual reality systems: Simulations & games
10. Planning and implementation for effective technology integration in teaching
11. Integrating Technology into the Curriculum and Instruction
12. Media and Teaching
13. Professionalism in teaching
14. Effective teaching or effective teacher

Recommended Texts

1. Harasim, L. (2017). *Learning theory and online technologies*. UK: Routledge
2. Rashid, M. (Ed.). (2015). *Allied material on teaching strategies*. Islamabad: AIOU
3. Spector, J. M. (2015). *Foundations of educational technology: Integrative approaches and interdisciplinary perspectives*. UK: Routledge

Suggested Readings

1. Laurillard, D. (2013). *Teaching as a design science: Building pedagogical patterns for learning and technology*. UK : Routledge
2. Peters, M. A., & Roberts, P. (2015). *Virtues of openness: Education, science, and scholarship in the digital age*. UK : Routledge

EDUC-6411-6412   **Teaching Practice**   **12(0+12)**

This course has been developed to enhance the student teachers' abilities to develop their knowledge and skills and to apply these in teaching pupils in school through on hand training and experiences. Teaching Practice helps teacher candidates develop the skills needed to become an effective teacher. Prospective teachers will be able to experience the school environment and organize and teach groups and whole classes to facilitate learning. Student teachers will be able to monitor and evaluate the work produced by the pupils, adjusting teaching and future planning in the light of this information. Student teachers will be able to evaluate each lesson taught, reflecting on their own professional development and demonstrate a sound understanding of the role of the teacher with mentoring from school teachers. Student teachers will have opportunities to teach different classes and subject(s); develop knowledge and expertise about available resources; and collect, develop, organize, and prepare resources for teaching and learning. They will be provided opportunities to become responsible for the teaching of whole classes, taking on assessment and other school responsibilities guided by school teachers and departmental TP supervisors.

Contents

1. Teaching Practice; Introductory Sessions
2. Identify different topics for General Science lesson plans
3. Sessions on Lesson Planning in accordance with different teaching methodologies
4. Developing 40 Lesson Plans for teaching
5. Setting General and Specific Objectives
6. Planning learning activities for students
7. Developing their own teaching strategies for classroom instructions
8. Development of assessment tools and AV-aids
9. Students' Teaching Practice at Schools: Maintaining school and classroom discipline
10. Writing school and classroom observations
11. Activities Related to School Management during Teaching Practice
12. Draft Final Lesson Plans
13. Final Lesson

Recommended Texts

1. Feden, P. D., & Vogel, R. M. (2018). *Methods of teaching*. Boston: McGraw Hill.

Suggested Readings

1. Rashid, M. (Ed.). (2001). *Allied material on teaching strategies*. Islamabad: AIOU.
2. Norton, P. & Sprague, D. (2001). *Technology for teaching.* Boston Allyn & Bacon.

The major purpose of teaching this course is to develop mastery and command over the contents and competency of teaching the contents of social sciences from Class I to Class X (in both public and private sectors) by using a variety of methods and techniques. Physical sciences deal with the study of physical objects (matter), their interaction, interdependence, and predictability, etc. While the social sciences deal with the study of human behavior through naturalistic observation as well as in laboratory settings. All social sciences aim at studying the interaction, interdependence of human beings, and predictability of human behavior. Owing to the complexity of human nature and behavior, it is very difficult and almost impossible to predict it with 100% accuracy and objectivity. Numerous attempts, however, have been made to make social sciences more and more systematic and organized by applying the scientific methodology. The course objectives for students are to teach history and geography of the world and subcontinent, inculcate in their students the passion of patriotism through teaching the history of Pakistan Movement, and explain different concepts of Islamic and Pakistan studies.

Contents

1. Meaning, importance, scope and objectives of social studies
2. Pakistani society and culture
3. Important and repeated topics for Social Studies
4. Sources for material on social studies
5. Problems of Social Studies' subjects
6. Understanding of community
7. Problems in teaching Social Studies
8. Study Resources for Social Studies at Elementary and Secondary Level
9. Teaching methods to teach social studies
10. Trends and Issues in teaching of Social studies
11. Lesson Planning in Social Studies.

Recommended Texts

1. Cohen, M. L. (2016). *Asia: case studies in the social sciences-a guide for teaching*. UK: Routledge
2. Russell III, W. B., Waters, S., & Turner, T. N. (2017). *Essentials of elementary social studies*. UK: Routledge

Suggested Readings

1. Banks, J. A. (2015). *Cultural diversity and education: Foundations, curriculum, and teaching*. UK: Routledge
2. Brophy, J., Alleman, J., & Halvorsen, A. L. (2016*). Powerful social studies for elementary students*. USA: Cengage Learning

Science has become an essential and integral part of our life. Without the knowledge of basic principles, concepts, theories, and laws of science one cannot understand and explain a number of daily-life processes and many phenomena which one observes and experiences in one's life. Hence a basic knowledge about the fundamentals of science has become a necessity of everyone. Furthermore, science is not only a knowledge rather it is an attitude towards nature I a way of thinking as well as a way of life. Keeping this in view, science has been given the status of a compulsory subject in any education system in the form of "general science". So it is being taught even to the students of arts, literature, and social sciences. It is due to this large scale demand of science teaching that we need a large number of science teachers. These science teachers must be equipped with in-depth knowledge with full understanding and well-developed skills to communicate (teach) the concepts, principles, theories, and laws of science at the elementary and secondary levels.

Contents

1. Introduction & history of Science
2. Nature, scope and importance of science education
3. Scientific Method
4. Branches of science
5. Science and society
6. Use of A.V-aids in teaching general science
7. Scientific process
8. Scientific attitude
9. Planning lessons
10. Different methods used in the teaching of general science
11. New Trends in Science Teaching
12. Science technology and society
13. Science technology and literacy
14. CAI and ICT for teaching of General Science
15. Laboratory Skills

Recommended Texts

1. Gilbert, J. K., & Justi, R. (2016). *Modelling-based teaching in science education (Vol. 9).* Switzerland: Springer International Publishing
2. Textbook Board. (2018). *General science for Class VIII*. Lahore: Textbook Board

Suggested Readings

1. Higher Education Commission. (2012). *Methods of teaching*. Pakistan: Higher Education Commission (HEC)
2. Singh, Y.K. (2017). *Teaching of General Science*. New Dehli: APH Publishing Corporation

Physics is a very important natural science which deals, in a very broader sense, with the study of matter and energy as well as their interrelationship. It involves the study of simple electronics to the most complex nuclear reactions in modern physics. In this mechanical age, every machine from the simplest household appliances to supper computer is based on principles of physics. It plays a vital role in the industrial as well as economic development and scientific advancement of a country. It is also a vital part of engineering science. Hence, the teaching of physics holds a pivotal position in science education. However, in spite of all, this teaching of physics, like other sciences, is not up to the mark in our country. It involves the teaching of some of the most abstract and complex concepts of the science which require much advance and highly technical education and practical training of teachers. But unfortunately, in our country, teachers of physics are either untrained or superficially trained. They are mostly unaware of the principles of theory and practice of teaching physics.

Contents

1. Physics Teaching
2. Use of A.V-aids
3. Different methods used in the teaching of physics
4. New Trends in Physics Teaching
5. Science technology and society
6. Science technology and literacy
7. CAI and ICT for teaching of General Science
8. Laboratory Techniques, Practical and Practical Work in Physics
9. Evaluation of student's achievement

Recommended Texts

1. Alsop, S. and Hicks, K. (2013). *Teaching Science: A hand book for primary & secondary school teachers.* New Delhi: Kogan Page
2. Mohapatra , J.K . and Mathapatan, M .(2011) . *New dimensions of science curriculum: An operational approach.* New Delhi: Commonwealth.

Suggested Readings

1. Higher Education Commission. (2012). *Methods of teaching.* Pakistan: Higher Education Commission (HEC)
2. Meltzer, D. E. and Shaffer, P. S. (2011). *Teacher education in physics research, curriculum, and practice.* USA: American Physical Society

Chemistry is one of the most organized and systematic natural sciences. It deals with the study of the structure, composition, and properties of matter and changes which occur in matter and energy. The teaching chemistry usually referred to as chemical education, is considered generally a difficult subject because of a lot of abstractions involved. Numerous researchers' books and countless articles and journals are available on chemical education/teaching of chemistry. All these things have provided us with the latest advancements in the fields of curriculum, technologies, techniques, and methods of teaching (pedagogy). A chemistry teacher hence requires in-depth knowledge of teaching chemistry and the latest technologies and evaluative processes of chemical education. These courses are intended to introduce our prospective teachers with all these things mentioned above. They deal with the content of chemistry. The prospective teacher will be able to understand and explain the concepts theories and laws of chemistry up to the secondary level in the public sector and O' level, relate and apply various concepts, principles and laws of chemistry in their daily life. Teach the concepts, laws, and principles of chemistry up to the secondary level.

Contents

1. Laboratory Techniques-Practical's & Practical work in Chemistry
2. Chemistry teaching
3. Scientific process
4. Scientific attitude
5. Using computer technology
6. Use of A.V-aids
7. Different methods used in the teaching of Chemistry
8. New Trends in Chemistry Teaching
9. Science technology and society
10. Science technology and literacy
11. CAI and ICT for teaching of Chemistry
12. Evaluation of student's achievement in chemistry

Recommended Texts

1. Taber, K. S. (2016). 24. *Teaching and learning chemistry*: *An international course   companion.* USA : Springer
2. Punjab Text Book Board. (2018). *Text book of chemistry.* Lahore*:* Punjab Text Book Board

Suggested Readings

1. Eilks, I., & Byers, B. (Eds.). (2015). *Innovative methods of teaching and learning chemistry in higher education.* UK: Royal Society of Chemistry
2. Gilbert, J. K., & Justi, R. (2016). *Modelling-based teaching in science education (Vol. 9).* Switzerland: Springer International Publishing

Biology is an important natural science it deals with the study of living organisms both plants and animals. The science which we teach at elementary level consists mainly of the biological concepts. Biology is taught separately at higher and higher secondary level. Hence, there is a genuine need for trained and well educated biology teachers who have an in-depth knowledge of content and expertise in applying the latest methods and techniques as well as instructional technologies available in the market. The basic purposes of these courses on the teaching of biology are to enable prospective teachers to develop competency in the above mentioned fields in both theoretical and practical aspects and comprehend and appreciate the concepts, principles, theories and laws of biology, describe and apply the basic concepts & principles of biology in daily life, develop scientific thinking & scientific attitude in themselves and in their students bring out creativity through solving problems as well as to analyze the biological problems of mankind and propose solutions to them.

Contents

1. Biology teaching
2. Scientific process
3. Scientific attitude
4. Use of A.V-aids in teaching Biology
5. Different methods used in the teaching of Biology
6. New Trends in Biology Teaching
7. Science technology and society
8. Science technology and literacy
9. CAI and ICT for teaching of General Science
10. Evaluation of student's achievement in Biology
11. Lesson Planning in Biology.

Recommended Texts

1. Kampourakis, K., & Reiss, M. J. (Eds.). (2018). *Teaching biology in schools: Global research, issues, and trends.* UK: Routledge
2. Punjab Text Book Board. (2018). *Text book of biology.* Lahore: Punjab Text Book Board

Suggested Readings

1. Boyle, M., Senior, K., Greenwood, T., Clegg, C. J., Clegg, C. J., Mackean, D. G., & Read, G. (2017). *Collins advanced science-biology.* UK: Philip Allan for Hodder Education
2. Wells, H. G. (2018). *Text-book of biology.* UK: BoD–Books on Demand

Mathematics is pure science which is often referred to as "mother of sciences'. The importance of mathematical knowledge can be realized from the fact that almost all educational philosophies have emphasized its teaching at all levels because it develops the abilities of logical and critical thinking among the students. Mathematics is a highly conceptual science and teaching mathematics is not an easy job. It requires highly trained teachers who know concept learning and concept teaching in detail. Moreover, an in-depth knowledge and understanding of latest methods and techniques in the teaching of mathematics as better teaching of Maths leads to a better understanding of Maths which in turn results in the development of science and technology. This course will help the prospective teachers in understanding the concepts, principles, and laws of mathematics, solve practical problems about various concepts, principles, and laws of Maths included in the syllabi of elementary level, learning the concepts, principles and laws of Mathematics effectively through the practical problems at elementary level and applying the basic concepts, laws, and principle of Maths in solving daily life problems related to Mathematics.

Contents

1. Teaching Methodologies of Mathematics (O' Level) Theoretical Perspective
2. Mathematical language and symbolism
3. Pure and applied mathematics
4. The educational value of mathematics
5. Pedagogical Perspective
6. Curriculum of Mathematics
7. Principles & criteria of curriculum development and design in mathematics
8. Defects in the current teaching of mathematics
9. Methods and Approaches to Teaching of Mathematics
10. Planning and Delivering Lessons
11. Measurement & Evaluation in Mathematics
12. Technological Perspective
13. Mathematics Laboratory, Library and Text-Books

Recommended Texts

1. Bennett –Jr., A. B. and Nelson. L.T. (2014). *Mathematics for elementary teachers: A Conceptual Approach, (6th Ed.).* Boston: McGrew-Hill, Inc.
2. Punjab Textbook Board. (2019). *Mathematics class 9th & 10th.* Lahore: Punjab Textbook Board
3. Zazkis, R., & Liljedahl, P. (2019). *Teaching mathematics as storytelling.* Netherlands: Brill Sense

Suggested Readings

1. Anwar, M.*; Qureshi, M.F. et al (2013). Mathematics -10 (Part-II).* Lahore: Punjab Text Board
2. Bennett–Jr., A.B. and Nelson. L.T. (2014). *Mathematics for elementary teachers: A conceptual approach. (6th Ed.).* Boston: McGrew-Hill
3. Thong, H.S. and Hong, K.N. (2015). *New additional mathematics (for O' level).* Karachi: Paramount publishing Enterprise

The course deals with the content, methods, techniques, and approaches to English Language Teaching. It focuses mainly on the latest methods & techniques of teaching English language by especial use of the modern software & simulations available in the market. The course is also designed to assist the prospective teachers to review the English Language syllabi of elementary & secondary level and understand the linguistic units in them. They will also be able to teach different units of the syllabi efficiently and effectively up to the secondary level by applying various language teaching strategies and to exhibit practical skills in teaching English language at secondary level through bringing into use the theoretical knowledge about language teaching as well as to develop the four communication skills of reading, writing, listening & speaking effectively & efficiently. They will also be able to perform error analysis. Students will also learn about developing their own lesson plans on different lesson planning formats.

Contents

1. Introduction to English language teaching
1. Teaching of English
2. Teaching Vocabulary
3. Teaching Readings
4. Teaching Writing
5. Teaching Listening
6. Teaching Speaking
7. Teaching Grammar
8. Teaching Methodologies
9. Error Analysis
10. Contrast between the behaviorist and mentalist attitudes toward errors
11. Lesson Planning in English

Recommended Texts

1. Hall, G. (2017). *Exploring english language teaching: Language in action*. UK: Routledge
2. Johnson, K. (2017). *An introduction to foreign language learning and teaching*. UK: Routledge

Suggested Readings

1. Cook, V. (2016). *Second language learning and language teaching.* UK: Routledge
2. White, R. V. (2017). *Teaching written english*. UK: Routledge

اردو ہماری قومی زبان ہے جو تمام صوبوں کے لوگوں میں روابط قائم کرتی ہے۔ اردو زبان کو پرائمری سطح سے لیکر اعلی ثانوی سطح تک بطور ضروری مضمون پڑھایا جاتا ہے۔ لہذا اردو زبان کی تدریس کا کورس زیر تربیب اساتذہ کو تدریس اردو کے لئے مطلوبہ مہارتیں اور طریقہ کار سمجھانے میں انتہائی مدد گار ہے۔ جس کے ذریعے طلبا تدریس اردو کے مختلف پہلوؤں اور مواد کی موثر تدریس کے کئی گر جان سکتے ہیں۔ اس مضمون کی مدد سے زیر تربیت اساتذہ کے اندر یہ صلاحیت پیدا کی جاتی ہے کہ وہ اردو زبان (لسانیات) کی مبادیات پر بحث کر سکیں۔ اردو زبان کی بنیادی اور لازمی مہارتوں کے ذریعے درست اظہار خیال کر سکیں۔ ۔ تدریس اردو میں استعمال ہونے والے طریقہ ہائے تدریس کی مدد سے اردو کی تدریس کو موثر اور دلچسپ بنا سکیں۔۔ جدید ذرائع کی مدد سے طلباء کے لئے تدریس کو دلچسپ اور خوشگوار بنا سکیں۔ موثر سبقی منصوبہ بندی کر سکیں۔ اور۔ جائزہ اور پیمائش کے جدید طریقوں کو استعمال کر سکیں۔

مواد

1۔ زبان کی تفہیم

2۔ دو لسانی طریقے کے ذریعے آوازوں کی پہچان

3۔ الفاظ بنانا جملے بنانا، جملے کی اقسام

4۔ زبان دانی کی مہارتیں

5۔ طریقہ ہائے تدریس

6۔ تدریس نثر

7۔ قراءت از معلم (صحیح تلفظ، برجستہ ادائیگی اور معیاری لہجے کے ساتھ)

8۔ قراءت از طلباء (اغلاط کی درستگی، الفاظ کے معانی، عبارت کی تفہیم)

9۔ تدریس انشاء کے طریقے

10۔ مباحثی طریق

11۔ سوال و جواب

12۔ غیر رسمی بحث اور رسمی بحث

13۔ سیاحتی طریق

Recommended Texts

1۔ سفینہ اُردو (قواعد انشاء) از طاہر شادانی

2۔ اردو قواعد از مولوی عبد الحق

Suggested Readings

1۔ اُردو زبان اور اُس کی تعلیم از ڈاکٹر سلیم فارانی

2۔ تدریس اُردو از ڈاکٹر فرمان فتح پوری

EDUC-6421   **Educational Administration and Supervision**   **3 (3+0)**

This course covers all aspects needed for managing a class or a school. It also includes historical background of educational administration and supervision. Administration plays a pivotal role in any organization. Administrators are the single most important ingredient in determining an organization's success or failure. The following famous proverb which states that "like the headmaster, like the school" is an indicative proof of it. Whether in business, government, education, medicine, or religion, the quality of an organization's administration determines the quality of the organization itself. A successful administrator anticipates change, vigorously exploits opportunities, rectifies poor performance, and leads the organization towards its objectives. Administrators can turn straw to gold or the reverse. This course also encompasses all aspects needed for managing and supervising a school. It also includes historical background of educational administration and supervision. Students will understand and differentiate the terms administration, supervision, organization and management, apply different tools and techniques of administering and supervising, understand and perform various functions of management review and evaluate the specific organizational conditions and understand, characterize and exercise effective leadership traits and behaviors

Contents

1. Introduction to Educational Administration
2. Nature, aims, objectives and principles of school Administration
3. School Organization, Elements and principles of school organization
4. Supervision and Inspection
5. Techniques of supervision
6. Factors affecting educational supervision
7. Decision Making
8. School Organization and Human Relations / Interpersonal relations
9. Organizational Structure of our education system
10. School and Community
11. Duties of Head Teacher
12. Key Issues in Educational Management

Recommended Texts

1. Bush, T., Bell, L., & Middlewood, D. (Eds.). (2019). *Principles of educational leadership & management.* USA: SAGE Publications
2. Northouse, P. G. (2016). *Leadership: theory and practice (7th Ed.).* USA: SAGE Publications

Suggested Readings

1. Razik, T. A. & Swanson, A. D. (2010). *Fundamental concepts of educational leadership and management (3rd Ed.)*. NY: Allyn & Bacon
2. Shah, S. (2016). *Education, leadership and Islam*. London: Routledge
3. *School management: Windows on practice guide (2012)*. Islamabad: Higher Education Commission

EDUC-6422   **Organizational Behavior**   **3(3+0)**

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 behavior. It also explores the nature of organization and organization theory. This course on organization theory and behavior thus provides knowledge that helps people understand, diagnose, and respond to emerging organizational needs and problems of our educational institutions. Students will 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 and understand and analyze organizational behavior of employees in workplace conditions as well as understand group dynamics in developing effective teams and managing organizational change and resolving and avoiding conflicts within and outside organization.

Contents

1. Introduction to Organization Behavior
2. Basic OB Model
3. Fundamentals of Organizational Behavior
4. Factors Affecting Organizations
5. Fundamentals of Individual Behaviour: Individual Difference - Personality & Ability
6. Perception and Individual Decision Making
7. Basic Motivation Concepts
8. Early Theories of Motivation
9. Contemporary Theories of Motivation
10. Foundation of Group Behaviour
11. Basic Approaches to Leadership
12. Organization Change and Stress Management
13. Conflict and Negotiations

Recommended Texts

1. Daft, R. L. (2015). *Organizational theory and design*. NY: West Publishing,Co.
2. Judge, T. A., & Robbins, S. P. (2017). *Essentials of organizational behavior*. USA: Pearson Education
3. Osland, J., Devine, K., & Turner, M. (2015). *Organizational behavior.* UK: Wiley Encyclopedia of Management

Suggested Readings

1. Daft, R. L. (2012). *Organizational theory and design*. NY: West Publishing Co.
2. Kreitner, R. & Kinicki, A. (2011). *Organizational behavior, (5th ed.)*. NY: Mcgraw-Hill.
3. Robins, S. P. (2013). *Organizational behavior* (5th Ed.). Boston: IRWIN McGraw HILL

The intent of this course is to provide an overview of various leadership roles teachers can assume when their professional goals focus on student achievement, instructional improvement, school reform, collegiality, and curriculum development at local, regional, state, or national levels, in private or public settings, or in political or professional organizations. Emphasis is placed on research related to these themes and strategies to identify, support, and develop attitudes and skills needed by teacher leaders. This course provides an overview of various leadership roles teachers can assume when their professional goals focus on student achievement, instructional improvement, school reform, collegiality, and curriculum development at local, regional, state, or national levels, in private or public settings, or in political or professional organizations. The course is aimed at developing abilities among students 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, and explain different styles of leadership and their implication for educational institutions improvement.

Contents

1. Introduction to Leadership
2. Moral dimensions of educational leadership
3. Role of Educational Leadership in School Improvement and Management
4. Educational Change and Leadership in National and International Perspectives
5. Leadership Models and Theories
6. Application of Leadership Theories to the Leadership and Management of Education
7. Leadership Styles
8. Roles and Responsibilities of Leadership
9. Instructional Leadership
10. Leadership: Values and Ethics
11. Seminars in instructional Leadership

Recommended Texts

1. Bottery, M. (2016) *The challenges of educational leadership*: *Values in a globalized age*. London: Chapman
2. Bush, T. (2017) *Theories of educational leadership and management*. London: Sage.

Suggested Readings

1. Bush, T. (2015). *Understanding instructional leadership.* UK: Routledge
2. Robertson, J. (2016). *Coaching leadership: Building educational leadership capacity through partnership.* New Zealand : New Zealand Council for Educational Research

EDUC-6424   **Foundations of Science Education**   **3 (3+0)**

This course will focus on the ideological, philosophical psychological socio-economic, and historical foundations of education. The major focus will be on developing an understanding of the participants how different philosophical theories affect education. The course will also include the historical development of education of Pakistan. Emphasize will be given on analyzing various sociological, political, economic, and ideological forces that influence the process of education in our cultural context. This course will also be used to develop the ability in prospective teachers to interpret knowledge within its historical, philosophical, ideological, and social contexts which will lead to produce critical perspectives on education both within, and outside of schools. The major focus will be on developing an understanding of the participants how different philosophical theories affect education. Explain the important features of the foundation of education, specify the role of educational thinkers in education, discuss the modes of education, and discuss the historical development of Pakistan.

Contents

1. Ideological Foundation of Education
2. Philosophical Foundations of Education
3. Idealism
4. Realism
5. Pragmatism
6. Re-construction
7. Psychological Foundations of Education
8. Historical Foundations of Education in Pakista
9. Problems and Issues in Science Education in Pakistan
10. Environmental Education
11. Gender and Education

Recommended Texts

1. Canestrari, A. (2016). *Foundations of education*. NY: Sage Publications
2. Samel, S. F. (2018). *Foundations of educations: The essential texts*. UK: Routledge

Suggested Readings

1. ASER-Pakistan (2019). *Annual status of education Report 2018*. Islamabad: Idara Taleem-O-Agahi
2. Banks, J. A. (2015). *Cultural diversity and education: Foundations, curriculum, and teaching*. UK: Routledge.
3. Pachauri, A. (2016). *Foundations of education*. ND: Pragun Publications
4. Shami, P. A. (2015). *Introduction to education*. Lahore: Ilmi Book House.

Classrooms are busy places. Every day in every classroom, teachers make decisions about their pupils, the success of their own instruction, and perform number of other tasks. Teachers continually observe, monitor, and review pupil performance to obtain evidence for decision. Evidence gathering and classroom making are necessary and ongoing aspects of teaches' lives in the classroom. Keeping in view, the tasks teachers have to perform in the classroom, this course, prospective teachers will develop their knowledge and understanding of formative and summative learning assessment and how teachers use assessment to inform decisions about teaching and learning in Science. They will develop a range of practical assessment skills to use in the classroom with students of different ages, grades, and subjects including using questions and tasks to assess learning and giving oral and written feedback on student work. This course highlights the assessment and evaluation procedures in science education. The course will serve the students to study the theory and apply the same for test development purposes. They will be able to understand the concept and nature of testing & evaluation, develop and analyze test items for assessing different abilities of students, recognize and describe the different types of measurement instruments.

Contents

1. Introduction to Assessment
2. Different types of test
3. Characteristics of Test
4. Designing Objectives
5. Preparing a table of specification
6. Methods of stating instructional objectives
7. Types of Tests
8. Item Analysis
9. Assembling, Administering and Evaluating the Test
10. Grading and Reporting
11. New Trends and Issues

Recommended Texts

1. Obe, W. H. (2018). *The teaching of science in primary schools*. UK: David Fulton Publishers.
2. Waite, S. (Ed.). (2017). *Children learning outside the classroom: From birth to eleven.* USA: Sage.

Suggested Readings

1. Mertler, C. A. (2016). *Classroom assessment: A practical guide for educators*. UK: Routledge
2. Wells, C. S., & Faulkner-Bond, M. (Eds.). (2016). *Educational Measurement: From Foundations to Future.* UK: Guilford Publications
3. Miller , M.D., Linn, R. L. & Gronlund. N. E. (2013). *Measurement and assessment in teaching* (11th Edition). USA: Pearson

Educators improve their practice by adopting and adapting educational systems and practices that were developed elsewhere. Comparisons of educational systems also provide a basis for assessing the suitability of current practices. This course focuses on training student teachers to compare and contrast educational systems and exposes students to the comparative approaches in education. Furthermore, the course aims at providing prospective teachers a basis for educational comparisons aimed at creating an understanding of issues influencing the focus, structure, organization and practice of education at international level, regional level and local level. With a major focus on Science Education, the course will equip the prospective science teachers with necessary acquaintance regarding issues and trends in the field of Science Education around the world so that they can learn the lessons for improvement and quality enhancement of Science Education in Pakistan. The course highlights to equip the prospective science teachers with necessary acquaintance regarding issues and trends in the field of Science Education around the world so that they can learn the lessons for improvement and quality enhancement of Science Education in Pakistan, compare the education systems of selected developed countries and compare the education systems of selected developing countries

Contents

1. Introduction to Comparative Education
2. Comparative Education: Historical Development and Evolution
3. Introduction to The WCCES: A Glob. Body in Comparative Education
4. Comparative Approach. in Education
5. Bereday's Four-Stage Method
6. Holmes' Problem Solving Approach
7. Eckstein and Noah's Scientific Method
8. Comparative Study of International Systems of Education
9. Comparative Study of Regional Systems of Education
10. Comparative Studies in Science Education
11. Globalization of Science Education
12. Analysis of TIMSS reports
13. Analysis of PISA reports

Recommended Texts

1. Hayhoe, R., Manion, C., & Mundy, K. (2017). *Why study comparative education*. UK: Routledge.
2. Watson, K. (2018). *Key issues in education: Comparative perspectives*. UK: Routledge

Suggested Readings

1. Beech J. (2016). *The theme of educational transfer in comparative education*. UK: Routledge
2. Noah, H. & Eckstein, M. (2015). *Doing comparative education: Three decades of collaboration*. Hong Kong: Comparative Education Research Centre.

B.Ed
(1.5 YEARS)
SCIENCE
EDUCATION

EDUC-6601   **Foundations of Science Education**   **3(3+0)**

Science education cultivates students' curiosity about the world and enhances scientific thinking. Through the inquiry process and scientific method, students will be able to explore the nature of science and develop scientific knowledge and science process skills to help them evaluate the impacts of scientific and technological development. The present course explores religious, philosophical, psychological and socio-economic dimensions of science education and their impact on science education. It will help the prospective science teachers to gain a foundational perspective of science education. Moreover, the material on comparative analysis of science education at global and national level have also been included. The course is focused on these learning objectives: Explore Islamic perspective of science education and contributions of Muslims in flowing of exact science; Describe views of various philosophers of science and their impact on science education; Analyze the socio-economic factors in shaping science education; and evaluate the state of science education worldwide and comparing it with Pakistan along with future trends.

Contents

1. Islamic Foundations of Science Education
2. Muslim scientists and Modern science Education
3. Philosophical Foundations of Science Education-Theories
4. Philosophical Foundations of Science Education-Methods
5. Psychological Foundations of Science-Classical Theories
6. Psychological Foundations of Science-Modern Theories
7. Socio-Economic Foundations-I of Science Education
8. Socio-Economic Foundations-II of Science Education
9. Science Education in Global Perspective
10. Science Education in the Developed Countries
11. Science Education in the Developing Countries
12. Science Education in Pakistan
13. Science Education in global Perspective
14. Issues and challenges of Science Education in Pakistan
15. Future Trends in Science Education

Recommended Texts

1. Samel, S. F. (2018). *Foundations of educations: The essential texts*. UK: Routledge

2. Belarmino, J. J. (2017). *Exploring the nature of models in science, philosophy of science, and science education*. Ph. D. Thesis University of Illinois at Urbana-Champaign.

Suggested Readings
1. Canestrari, A. (2016). *Foundations of education*. NY: Sage Publications
2. Dash, N. R. (2015). *Philosophical foundation of education*. Directorate of Distance & Continuing Education. Utkal University, Bhubaneswar.
3. Rosenberg, A. (2005). *Philosophy of science* (2nd Ed.). Routledge.

EDUC-6602   **Curriculum Development in Science Education**   **3(3+0)**

Curriculum is one of the four basic components of education and the pathway through which the objectives of education are attained. This foundation course "Curriculum Development in Science Education" is designed to enable the learners to discuss concept, history, curriculum development process and various approaches, issues to curriculum development. It provides the science teacher educators an in-depth knowledge and understanding of the curriculum theory, design of the curriculum and procedures of developing and changing Science curriculum. Therefore, this course provides the opportunities to the learner to introduce the ideas and procedures involved in curriculum development and further the knowledge of various models of curriculum will help them to identify the best possible model for the science education in the Pakistan's scenario. Moreover, this course will enable them to develop their skills in curriculum design. The course also assists to develop a deeper understanding of the testing, measurement and evaluation in curriculum along with the knowledge about the conceptual framework and approaches to designing a Science curriculum.

Contents

1. Concept of Curriculum
2. Philosophical Foundations of Curriculum
3. Historical Foundations of Curriculum
4. Psychological Foundations of Curriculum
5. Economic Foundations of Curriculum
6. Social Foundations of Curriculum
7. Curriculum Designs
8. Patterns of Curriculum
9. Models of Curriculum Development
10. Instructional Process
11. Approaches to Teaching: Methods and Techniques
12. Process and Problems of Curriculum Development in Pakistan

Recommended Texts

1. Wiles J.W & Bondi J.C., (2018). *Curriculum development: A guide to practice* (10th Ed.). ISBN-13: 978-0133572322

2. Nicholls, A., & Nicholls, S. H. (2018). *Developing a curriculum: A practical guide*. UK: Routledge

Suggested Readings

1. Alsubaie, M. A. (2016). Curriculum development: Teacher involvement in curriculum development. *Journal of Education and Practice*, 7(9), 106-107.
2. Berry, R., & Adamson, B. (Eds.). (2011). *Assessment reform in education: policy and practice (Vol. 14)*. Springer Science & Business Media.
3. Wiles J.W & Bondi J.C., (2014). *Curriculum development: A guide to practice (9th Edition)*. UK: Routledge.

EDUC-6603   **Assessment in Science Education**   **3(3+0)**

Assessment is the key director of any education system, and is pivotal to learning and teaching. It is the process of making a judgment or measurement of worth of an entity or a process. This course "Assessment in Science Education" addresses the knowledge and concept of assessment in education and particularly in Science education. It enables the science teachers to use assessment in varied form in the process of decision making in the process of science teaching and learning. Prospective teacher students will enhance their understanding about learning domains and the role in their assessment. Further, students will be able to differentiate different methods of assessment and learn the skills of assessment with respect to the table of specification. In addition, this course is focused on elaborating application of classroom assessment, integrate objectives with evaluation and measurement, acquire skills of assessing the learning outcomes, and interpret test scores and results of different assessment techniques and addressing major issues of assessment.

Contents

1. Introduction to Assessment
2. Process of Assessment in Science Education
3. Assessment of Knowledge
4. Assessment of Comprehension and Application Skills
5. Assessment of Higher Abilities
6. Assessment of Practical Skills
7. Assessing Affective Objectives
8. Using Assessment information
9. Assessment in Science Education in Developed Countries
10. Assessment in Science Education in Developing Countries
11. Problems of Assessment and their Solution (strategies)
12. Issues and challenges in Assessment in Science Education
13. Trends in Assessment and Evaluation of Science Education

Recommended Texts

1. Blalock, H. M. (2017). *Measurement in the social sciences*. UK: Routledge
2. Pidgeon, D., & Yates, A. (2018). *An introduction to educational measurement*. UK: Routledge:.

Suggested Readings

1. Wells, C. S., & Faulkner-Bond, M. (Eds.). (2016). *Educational measurement: from foundations to future*. Guilford Publications.
2. Gipps, C. (2011). *Beyond testing (classic edition): Towards a theory of educational assessment.* UK: Routledge.

EDUC-6604 **Leadership in Science Education** **3(3+0)**

It has become the dire need for society that everyone must have a specialization in every field of life due to rapid expansion of knowledge. Education modifies the behavior of a person; thus, education can perform this duty well if the system of education runs effectively. For making, developing and establishing the education system administration, management and supervision to play an in important role as well as in all other aspects of society. In Pakistan the existing system of educational management and supervision is considered as defective system which does not cope the national, and local level needs of education system. There are so many reasons. One, reason is that we cannot yet established a firm administrative structure for education- system. It-is always uncertain and wavering. Therefore, it is the need of our educational institution to prepare those personnel at higher level who are highly skilled professional trained and capable in their field particularly in school management and leadership. Hence, the present course of educational leadership and management observes and envisages the promotion of educational leadership management and supervision.

Contents

1. Concept of Administration
2. Educational Administration meaning and nature
3. Concept of Educational Management
4. Concept of Supervision
5. Fundamental principles of Islamic Administration
6. Educational Planning
7. School Discipline and Classroom Management
8. Management of Resources
9. School Records
10. Administrative and Supervisory Structure in Pakistan
11. Evaluation Management System
12. Trends and Issues of Leadership in Science Education

Recommended Texts

1. Bush, T., Bell, L., & Middlewood, D. (Eds.). (2019). *Principles of educational leadership & Management*. SAGE Publications.

2. Day, C., & Sammons, P. (2016). *Successful school leadership. education development trust*. www.educationdevelopmenttrust.com

Suggested Readings

1. Escott, S. (2015). *Educational leadership relationally: A theory and methodology for educational leadership, management and administration*. Springer.

2. Northouse, P. G. (2016). *Leadership: theory and practice* (7th Ed.) SAGE Publications, Inc.

3. Shah, S. (2016). *Education, leadership and Islam*. UK: Routledge.

EDUC-6605   **Research Methods in Science Education**   **3(3+0)**

The course Research Methods in Education is designed to orient Student Teachers with the concept and methods of research in education. Learner will be able to learn how to engage in a critical analysis of different research work and relate it to their own context. The course provides students with the opportunity to engage with the research literature and to establish how different research techniques help to improve the overall classroom situation. This course focuses on action research, and it aims to equip the Student Teachers with the necessary skills to plan and conduct action research in an educational setting. Action research is a form of research that can be used to improve professional practices in the classroom. It can help in both personal development and institutional improvement. This course will also help Student Teachers to write research proposals and research reports and to create presentations to discuss their work. The course will serve the students in developing abilities to discuss the meaning, nature & scope of research in education identify different models and approaches of action research, identify research problems and develop research questions and develop a research proposal

Contents

1. Introduction of Educational Research
2. Types of Research
3. Historical Research
4. Experimental Research
5. Descriptive Research
6. Sampling Technique
7. Tools and Techniques of Research
8. Designing a Research Proposal
9. Writing Research Report
10. Educational Research in Science Education in Developed countries
11. Educational Research in Science Education in Developing countries
12. Trends and Issues in Educational Research in Science Education

Recommended Texts

1. Creswell, J. W (2018). *Educational research: planning, conducting, & evaluating quantitative & qualitative research (6th Ed.).* PEARSON, 2018.
2. Gay, L. R. (2017). *Educational research: Competencies for qnalysis and application*. New York: Pearson Education

Suggested Readings

1. Fraenkel, J. R. &Wallen, N. E. (2015). *How to design and evaluate research in education (9-Eds).* New York: McGraw Hill Book Company Inc.
2. Patten, M. L., & Newhart, M. (2017). *Understanding research methods: An overview of the essentials*. UK: Routledge.
3. William, N. (2017). *Research methods: The basics*. UK: Routledge.

EDUC-6606   **Educational Psychology**   **3(3+0)**

The main purpose of the course is to make students aware of how to bridge the gap between theory and practice. In other words, how they can use various concepts of educational psychology to improve their learning and teaching skills. The course is intended to improve the reading, writing and communication skills of students. For this purpose, various structured and unstructured activities will be designed and assigned to the students so that they can better develop their abilities and skills. The student teachers will be introduced with major theories of intelligence, personality, motivation, memory, thinking and instruction. They will also be trained in how these theories can be applied in the classroom teaching. Understanding the psychological basis of these theories will help them to manage classroom in a way that promotes learning and minimizes disruptions. It will also provide them with the tools needed to be a better teacher, counselor and guide.

Contents

1. Introduction
2. Learning and Instruction
3. Motivation: Theory and Practice
4. Complex Cognitive Processes
5. Creating Learning Environments
6. Teaching for Learning (i.e. Effective Teaching)
7. Individual Differences / Variations
8. Intelligence Theories
9. Personality Theories
10. Human Development
11. Moral and Social Development
12. Psychological Testing

Recommended Texts

1. Woolfolk, A. E. (2019). *Educational psychology*: Active learning edition *(14th ed.).* New York: Pearson.
2. Santrock, J. W. (2017). *Educational psychology.* Boston: McGraw –Hill.NY

Suggested Readings

1. Duchesne, S., & McMaugh, A. (2018*). Educational psychology for learning and teaching*. Cengage AU.
2. Evans, E. G. S. (2017). *Modern educational psychology: An historical introduction.* UK: Routledge.
3. Ravi, V. (2016). *Advanced educational psychology*. Lulu. com.
4. Ormrod, J. E. (2013). *Educational psychology: Developing learners* (8th Ed.). Pearson Education.

EDUC-6607   **Sociology of Education**   **3(3+0)**

Society transmits the knowledge, values and norms to the young generation to prepare them for their future roles in the society. As the schools are representatives of society therefore this process acquires institutional status where the teachers are to fulfil the social desires in shaping the students' personality and equipping them with knowledge and skills. This course "Sociology of Education' is developed for the teachers to know about the society, social perspectives and school, children and society relationship. The major objectives of this course are to; Know the process of linkage among the school community and teacher for effective education, Identify the social factors affecting education and how it can support the development of education and Know the role of teachers and school in socialization of students and development of society. After studying this course, the prospect teachers will be enabled to contribute in community work, health promotion activities and endorsement of healthy environment.

Contents

1. The Sociology of Education
2. Theoretical Approaches to Sociology of Education
3. Society, Community and Culture
4. The Culture and the School
5. The Child and Society
6. The Sociology of School Professional Socialization of Teachers
7. School and Community
8. The Social Function of Education
9. Globalization and the Economy
10. The Hidden Curriculum
11. Sociological Perspectives and Study of Education
12. Technological Change and Social control

Recommended Texts

1. Hallinan, M. T. (2018). *Handbook of the Sociology of education*. Springer, Boston, MA. https://doi.org/10.1007/0-387-36424-2
2. Alias, N. (2015). *Educational sociology and philosophy*. Malaysia: Open university of Malaysia

Suggested Readings

1. Chandra, S. S & Sharma, R. K. (2016). *Sociology of education*. New Delhi, India: Atlantic Publishers and Distributor.
2. Sharma, Y.K. (2018). *Foundations in sociology of education*. New Delhi, India: Kanishka Publishers Distributors.
3. Meyer, J. W., Bromley, P., & Ramirez, F. O. (2010). *Sociology of education*. DOI: 10.1177/0038040710367936

Statistics deals with the collection, classification, tabulation of numerical facts as the basis for explanation, description and comparison of phenomena. The use of Statistics in education particularly in science education, at the one end, enable the learners to present their scientific inquiries in well-established manner and one the other end, help the teachers to investigate the process of assessment and evaluation. The purpose of this course "Statistics in Science Education" is to set the stage for the discussion of how data are used to support student learning by reviewing some of the reasons for the increased attention given to data analysis in education today, and by providing an organizational framework to describe the use of data in education. After studying this course, the prospect teachers will be able to: understand and elaborate the relationship between statistics and research in education, to apply various statistical techniques in the research on different educational problems and to state hypotheses in various forms, and identify & apply suitable statistical techniques to test them.

Contents

1. Introduction
2. Scope or applications of statistics in education
3. Types and branches of statistics
4. Scales of Measurement and their use in Statistics
5. Descriptive Statistics
6. Inferential Statistics
7. Parametric and Non-Parametric Tests
8. Tests for Ordinal Data and Nominal Data
9. The Reliability of Test Scores
10. Hypotheses: Meaning, Types and Uses
11. Sampling and Sampling Distribution
12. Data preparation: screening data prior to Analysis
13. Data and Data Analysis

Recommended Texts

1. Illowsky, B., & Dean, S. (2018). *Introductory statistics*. OpenStax. Retrieved from https://openstax.org/details/books/introductory-statistics in your citation.

Suggested Readings

1. Albers, M. J. (2017). *Introduction to quantitative data analysis in the behavioral and social sciences*. John Wiley & Sons, Inc. DOI: 10.1002/9781119290384.

2. Miah, Abdul Qader (2016). *Applied statistics for social and management sciences*. Springer Singapore. DOI: 10.1007/978-981-10-0401-8

EDUC-6609 **Professionalism in Science Teaching** **3(3+0)**

Professionalism has become a subject of interest to academics, prospective professional groups and the common man. Professionalism is teaching is commonly discussed on ideological, sociological and educational bases. The fundamental purpose of the course "Professionalism in Science Education" is to make students fully comprehend professional code of conduct and enhance their ability to practice professional standards effectively inside and outside the classroom. This course describes changing role of teachers in 21st century scenario and how teachers can utilize technology with pedagogy. In addition, this course will provide a chance to understand the responsibility of a teacher beyond the classroom teaching specifically, in making the nexus between the new technology era and cultural & societal ethics. Moreover, the prospect teachers will be enabled to identify the gap between the theory and practice of professionalism in teaching by studying and analyzing the various professional and ethical issues in teaching. The understanding of the future teachers for their moral applications and implications will be inculcated to make them well prepared for the teaching profession.

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Contents

1. Introduction of Profession and Concept of Teaching
2. Professionalism in Teaching: Theory to Practice
3. Professionalization process and professionalism
4. Attributes of Teacher
5. Changing Role of The Teacher: Beyond Classroom
6. Science Teacher as Researcher
7. Ethics, Education and Science Teacher
8. Society, Culture and Teaching Procession
9. Teacher Professionalism and Globalization
10. Teaching Profession and open and distance learning (ODL)
11. Ethical Issues in Teaching Profession
12. Trends in Professionalism in Science Education

Recommended Texts

1. Corrigan**,** D., Dillon**,** J., & Gunstone**,** R. (2011) *The Professional knowledge base of science teaching*. Springer, Dordrecht

2. AIOU. (2018). *Professionalism in teaching*. Allied Material, Department of Early Childhood Education and Elementary Teacher Education. Islamabad: AIOU.

Suggested Readings

1. Timperley, A. W, Barrar, H & Fung, I. (2007). *Teacher professional learning and development: Best evidence synthesis iteration*. Wellington, New Zealand: Ministry of Education. Retrieved from http://educationcounts.edcentre.govt.nz/goto/BES

2. UNESCO (2015). *The Right to education and the teaching profession*. Retrieved from http://unesdoc.unesco.org/images/0023/002348/234820E.pdf

EDUC-6610   **Teaching Strategies in Science Education**   **3(3+0)**

Teaching science subjects is complex and demanding work. It requires highly specialized skills and knowledge to impact significantly on student learning. Teachers must use this knowledge to continually refine their conceptual and pedagogical skills. This course highlights the essential attributes of the teacher in making the teaching effective for the learners. It describes the importance and types of teacher planning practice related to different teaching methods for science subjects in classroom. It also focuses on how to relate facts, concepts, and theories to every day experience to develop highly knowledgeable, highly skilled teachers do make a difference in terms of student learning. Science Education demands the demonstration of the scientific knowledge; therefore, this course will prepare the future teachers with the blended knowledge and skills of developing the low cost but effective audio-visual aids. Further aim of this course is, enabling the prospective teachers for effective usage of modern and traditional audio visual as well as digital technology tools in teaching learning process.

Contents

1.   Introduction to Teaching
2.   Orientation of teaching practice
3.   Classroom Management and Effective teaching Strategies
4.   Lesson Planning in Science Teaching
5.   Students Motivation
6.   Inquiry Methods
7.   Activity Methods
8.   Discussion Method
9.   Cooperative learning
10.   Teaching Skills
11.   Teaching Tools
12.   Development of assessment tools and AV-aids
13.   Final Lesson Demonstration

Recommended Texts

1.   Terry. J. (2019). *Oxford secondary science teaching guide-1*. New York: Oxford University Press
2.   Singh, Y. K. (2017). *Teaching of general science*. New Dehli: APH Publishing Corporation

Suggested Readings

1.   Chueca, C. (2016). *Teaching natural science through montessori method in primary education*. Retrieved from https://uvadoc.uva.es/bitstream/10324/18537/1/TFG-O%20740.pdf
2.   Higher Education Commission. (2012). *Methods of teaching*. Course guide Associate Degree in Education/B.Ed. (Hons) Elementary. Islamabad
3.   Rajan, S. (2012). *Methodology of teaching science*. Pearson India

EDUC-6611   **ICT in Science Education**   **3(3+0)**

Information and Communication Technology (ICT) is a major challenge to our educational system. Now a days we are moving towards the digital technology integrated education system. To achieve this goal, prospect teachers are required to learn to use ICT in the teaching science in schools. In this course, the concept of Information and Communication Technologies (ICT) is explained and its evolution and its nature are discussed. This course will also illustrate the scope of ICT in our daily life in general and Science education in particular. The features of ICT are discussed to makes it widely applicable in educational process. The focus of this course is to provide with the knowledge and skills regarding how ICTs can be used to engage students in the science learning process, improve understanding of content. It will help the learners to identify the uses of assistive technology and utilizing it in creating accessible documents and multimedia for instructional purposes and assessment practices, and ultimately enhance communication and collaboration in the classroom.

Contents

1. Introduction of ICT in Science Education
2. Classification of AV aids
3. Types of Educational Technologies, Media and Their Uses in Learning Process
4. Current types of the educational technology systems and their application
5. Integration of Digital Technology in Curriculum and Instructions
6. Laboratory and workshop instructions
7. ICT and Open Distance learning in Science Education
8. Planning and implementation for effective technology integration in
9. Integrating Technology into the Curriculum and Instruction
10. Media and Teaching
11. ICT and Assessment & Evaluation
12. Trends and Issues of ICT in Science Education

Recommended Books

1. Fernandes, G.W.R, Rodrigues, A.M, & Ferreira, C.A.R. (2019). *Using ICT in inquiry-based Science education*. Springer, Cham.

2. Huang, R. J., Spector, M., & Yang, J. (2019). *Educational technology*. Springer Nature Singapore. DOI: https://doi.org/10.1007/978-981-13-6643-7

Suggested Books

1. Feden, P. D. and Vogel, R. M. (2018). *Methods of teaching*. Boston: Mc-Graw Hill
2. Rashid, M. (Ed.). (2015). *Allied material on teaching strategies*. Islamabad: AIOU.
3. Sharma, S. R. (2014). *Effective classroom teaching: Modern methods, tools and techniques*. Jaipur: Mangal Deep Publications.

EDUC-6612   **Critical Thinking and Reflective Practices**   **3(3+0)**

Critical Thinking and development of critical thinking skills is the address of every educational institute around the globe. It is associated with learning from experience, and is viewed as an important strategy for professionals who embrace teaching. Critical thinking and reflective practices both are integral skills for effective teaching. This course is designed for undergraduate program of teacher preparation at Sargodha University. It is expected that the teachers of twenty first century should be able to not only learn and review the current policies and practices in education but may also have the ability to think critically and reflect upon the current practices to bring positive changes. Today's education demands these desired skills and abilities from teachers as well as learners, no matter at what level we are teaching or learning. Critical thinking is one of the basic skills that help us to effectively utilize those elements of cognitive process that usually remain implicit. This course will introduce the prospective teachers to critical theory, help those becoming reflective practitioners, initiate action research culture within education and strengthen the community of practice in the profession of teaching.

Contents

1. Introduction to Critical Thinking
2. Critical Theory and Pedagogy
3. Teaching Strategies to help promote Critical Thinking
4. Critical thinking Skills and Science Subjects
5. Reflective Practice
6. Reflective Cycle
7. Action Research
8. Reflective and Critical Writing
9. Tools and Techniques of Critical Thinking and Reflective Practices
10. Communities of Practice and Knowledge
11. Role of Digital Technology in Developing critical Thinking
12. Trends and issues in Critical thinking and Reflective Practices

Recommended Book

1. Belarmino, J. J. (2017). *Exploring the nature of models in science, philosophy of science, and science education*. Ph. D. Thesis University of Illinois at Urbana-Champaign.

2. McPeck, J. E. (2016). *Teaching critical thinking: Dialogue and dialectic*. Routledge

Suggested Books

1. Dash, N. R. (2015). *Philosophical foundation of education*. Directorate of Distance & Continuing Education, Utkal University, Bhubaneswar.

2. Rosenberg, A. (2005). *Philosophy of science.* (2nd Ed.). Routledge.

EDUC-6613   **Laboratory Organization and Management**   **3(3+0)**

Science is an inquiry based practical subject and the "learning by doing" method is the most effective method for learning Science. In schools, laboratory is essential part of the teaching and learning of science subjects. Laboratory organization involves both the physical establishment and its operations while lab management is maintaining the laboratory which includes planning, organizing. Leading and controlling the tasks. This course "Laboratory Organization and Management" provides the insight of requirements and knowledge of organizing a scientific laboratory for science students and necessary steps to manage it effectively. The skilled and well-equipped science teachers can foster the science learning process through the use of laboratory. Another major objective to teach this course is to prepare the future science teachers by providing them extended knowledge of safety measures for a safe and hazard free laboratory work. The qualified future science teachers may therefore, be able to handle the practical work in the laboratories with security and accuracy.

Contents

1. Aims and Objectives of Laboratory Works
2. Laboratory Design
3. Day to Day Management of Laboratory
4. Store Designing
5. Laboratory Organization in Developed countries
6. Practical Science in Low-Income Countries
7. Teaching Strategies in Lab
8. Sequencing and Organization of Laboratory Activities
9. Assessment of Lab Work
10. Laboratory Safety
11. Digital Technology and Modern Laboratory

Recommended Book

1. Salerno, R.M, Gaudioso, J. (2015). *Laboratory biorisk management: Biosafety and biosecurity*. CRC Press Inc.

2. Belarmino, J. J. (2017). *Exploring the nature of models in science, philosophy of science, and Science Education*. Ph. D. Thesis University of Illinois at Urbana-Champaign.

Suggested Books

1. Dash, N. R. (2015). *Philosophical foundation of education*. Directorate of Distance & Continuing Education, Utkal University, Bhubaneswar.

EDUC-6614   **Academic Writing Skills**   **3(3+0)**

Academic writing is a formal, structured and sophisticated writing to fulfill the requirements for a particular field of study. This course "Academic Writing Skills" aims at providing understanding of writer's goal of writing (i.e. clear, organized and effective content) and to use that understanding and awareness for academic reading and writing. The objectives of the course are to make the students acquire and master the academic writing skills. The course would enable the students to develop argumentative writing techniques. The students would be able to the content logically to add specific details on the topics such as facts, examples and statistical or numerical values. The course will also provide insight to convey the knowledge and ideas in objective and persuasive manner. Furthermore, the course will also enhance the students' understanding of ethical considerations in writing academic assignments and topics including citation, plagiarism, formatting and referencing the sources as well as the technical aspects involved in referencing

Contents

1. The Writing Process
2. Readings: finding suitable sources
3. Finding key points and note-making
4. Paraphrasing & Summarizing
5. Elements of writing
6. Academic style
7. Accuracy in writing
8. Literature reviews
9. Academic Integrity and writing
10. Avoiding plagiarism; Re-writing and proof-reading
11. Role of Digital Technology in Academic writing
12. Trends and Issues in academic writing

Recommended Book

1. Bailey, S. (2017). *Academic Writing: A handbook for international students*. (3rd Ed.). Routledge an imprint of the Taylor & Francis Group. Retrieved from www.eBookstore.tandf.co.uk.

Suggested Books

1. Fry, H., Ketteridge, S., & Marshall, S. (2009). *A handbook for teaching and learning in higher education*. Retrieved from www.eBookstore.tandf.co.uk.
2. Phye, G. D. (1997). *Handbook of academic learning*. Academic Press Limited. Retrieved from www.eBookstore.tandf.co.uk.

EDUC-6615   **Teaching Practice**   **12(0+12)**

Teaching practice is a period that a student-teacher spends in teaching at schools as a part of his or her training. Teaching is very dynamic and challenging task; therefore, teaching practice is an important component towards becoming a teacher. In this course, through teaching practice, professional traits inculcate in student-teachers, and prepare them for the real classroom and school situation. It provides experiences to student teachers in the actual teaching and learning environment. During this teaching practice, a student-teacher is given the opportunity to try the art of teaching in real-time scenario before actually getting into the real world of the teaching profession. This practical course, as an important tool of learning, provides the chance to the prospect teachers to utilize their learned knowledge and teaching strategies into the practical form by communicating with pupils having individual differences and managing the classroom in order to enrich their teaching experience as well as their attitude towards teaching profession.

Contents

1. Orientation of Teaching practice
2. Lesson Planning and Activity development
3. Identify different topics for lesson plans
4. Developing 40 Lesson Plans
5. Microteaching Practice Sessions
6. Observation
7. Development of assessment tools and AV-aids
8. Students' Teaching Practice at Schools
9. Record Keeping
10. Draft final lesson plans
11. Accuracy in writing
12. Final Lesson

Recommended Book

1. Norton, P. & Sprague, D. (2001). *Technology for teaching.* Boston: Allyn & Bacon
2. Feden, P. D., & Vogel, R. M. (2018). *Methods of teaching.* Boston: McGraw Hill.

Suggested Books

1. Rashid, M. (Ed.). (2001). *Allied material on teaching strategies*. Islamabad: AIOU.

2. Norton, P. & Sprague, D. (2001). *Technology for teaching.* Boston Allyn & Bacon.

B.Ed
(1.5 YEARS)
ELT

This course deals with development of English language teaching in the course of history from its origin to a bit developed form in the modern era. From the origin of English Language Teaching in the middle ages and Elizabethan era to the recognition of English as second language and official language of British colonies in nineteenth century and, ultimately, towards the evolution of English as a foreign language and language of the global community which lead to the reformation of its teaching strategies in the twentieth century, it covers the evolution of teaching and learning methodologies by the teachers and preferences of the learners according to their learning needs. Epistemological nature of language teaching methodologies is also discussed in the content. Debate about language as Behavioural or Mental phenomenon is stated in the last unit. The two issues of language; meaning and reference are discussed in the second part of the course.

Contents

1. Origin of English Language Teaching
2. Language teaching in the nineteenth century
3. Conventional approaches to language teaching
4. Individual Reformers
5. The reform movement
6. ELT in the world: context and goals
7. World Englishes and English as a Lingua Franca: a changing context for ELT
8. Language and culture in ELT
9. Epistemological Nature of Language Teaching Methodology
10. From theory to practice, from application to implication
11. The epistemological universe of LTM
12. From a simple to a complex perspective: an historical sketch
13. The Complexity of Linguistic Structure
14. Language as a Mental Phenomenon

Recommended Texts

1. Hall, G. (2016). *The Routledge handbook of English language teaching*. New York: Routledge.
2. Pennycook, A. (2017). *The cultural politics of English as an international language*. New York: Routledge.

Suggested Readings

1. Balboni, P. E. (2015). *The epistemological nature of language teaching methodology*. Venice: Ca: Foscari University.
2. Jackendoff, R. (2016). *Foundations of language*. Oxford: Oxford University Press.
3. Lycan, W. G. (2018). *Philosophy of language*: *A contemporary introduction.* New York: Routledge.

EDUC-6502   **Curriculum Development in ELT**   **3(3+0)**

This course will provide opportunities to enable and prepare learners to introduce the ideas and procedures involved in curriculum development and further develop their skills in curriculum design in ELT. The course also assists to develop a deeper understanding of the testing, measurement and evaluation in ELT curriculum. Course planning and syllabus design of English language courses and of Curriculum Development and importance of goals and their importance in planning a curriculum are discussed in the relevant sections of the contents. Need analysis for English for appropriate curriculum for language teaching will be carried out by the students. Situation analysis of curriculum development in relation to English language teaching will be discussed during the course. It first examines foundations of curriculum then conceptual framework and approaches to designing a curriculum. Comparative studies will be discussed as well. In the last section, approaches in vogue to evaluation of curriculum development have been discussed.

Contents

1. The Origins of Language Curriculum Development
2. Historical background
3. Assumption underlying early approaches to syllabus design
4. Form Syllabus Design to Curriculum Development
5. Need Analysis of Curriculum Development
6. Situation Analysis of Curriculum Development
7. Planning Goals of Curriculum Development
8. Stating curriculum outcomes
9. Course planning and Syllabus Design of Curriculum Development
10. Providing for Effective Teaching Curriculum Development
11. The Role and Design of Instructional Materials
12. Approaches to Evaluation of Curriculum Development

Recommended Texts

1. Nunan, D. (2016). *Syllabus design.* Oxford: Oxford Unversity Press.
2. Wiles J.W & Bondi J.C., (2018). *Curriculum development: a guide to practice* (9th ed) ISBN-13: 978-0133572322.

Suggested Readings

1. Nunan, D. (2015). *The learner-centred curriculum: a study in second language teaching* (8th ed.). Cambridge: Cambridge University Press.
2. Richards, J. C. (2016). *Curriculum development in language teaching.* Cambridge: Cambrdige University Press.

The course provides answer to the queries; What is the best way to assess learners' ability? What are the most practical assessment instruments available? Are current standardized tests of language proficiency accurate and reliable? In an era of communicative language teaching, do our classroom tests measure up to standards of authenticity and meaningfulness? How can a teacher design tests that serve as motivating learning experiences rather than anxiety-provoking threats? All these and many more questions now being addressed by teachers, researchers, and specialists can be overwhelming to the novice language teacher, who is already baffled by linguistic and psychological paradigms and by a multitude of methodological options. This book provides the teacher trainee with a clear, reader-friendly presentation of the essential foundation stones of language assessment, with ample practical examples to illustrate their application in language classrooms. Assessment is focused on the four language skills; listening, speaking, reading and writing.

Contents

1   Testing, Assessing and Teaching
2   Principles of Language Assessment
3   Designing Classroom Language Tests
4   Standardized Testing
5   Assessing Listening
6   Basic types of listening
7   Designing assessment tasks for listening
8   Assessing Speaking
9   Designing assessment tasks for speaking
10 Test of spoken English
11 Assessing Readings
12 Micro-skills, macro-skills, and strategies for reading
13 Designing assessment tasks for reading
14 Assessing Writing
15 Micro and macro skills of writing
16 Designing assessment tasks for writing

Recommended Texts

1   Brown, H. D. (2016). *Language assessment principle and classroom practices*. New York: Pearson Education, Inc.
2   Damböck, B., & Bachman, L. F. (2018). *Language assessment for classroom teachers.* Oxford: Oxford University Press.

Suggested Readings

1   Aiken, L.R., (2013). *Psychological testing and assessment*. Boston: Allyn & Bacon.
2   Miller, M. D., Linn, R. L., & Gronlund, N. E. (2015). *Measurement and assessment in teaching* (11th ed.). New Jersey: Pearson Education, Inc.

It has become the dire need for society that everyone must have a specialization in every field of life due to rapid expansion of knowledge. Education modifies the behavior of a person, thus education can perform this duty well if the system of education runs effectively. For making, developing and establishing the education system administration, management and supervision to play an in important role as well as in all other aspects of society. In Pakistan the existing system of educational management and supervision is considered as defective system which does not cope with the national, and local level needs of education system. There are so many reasons. One, reason is that we cannot yet established a firm administrative structure for education- system. It-is always uncertain and wavering.-So it is the need of our educational institution to prepare those personnel at higher level who are highly skilled professional trained and capable in their field particularly in school management and leadership.

Contents

1   Concept of Administration
2   Educational Administration meaning and nature
3   Fundamental principles of Islamic Administration
4   Concept of Educational Management
5   Concepts of Management in education
6   Concept of Supervision
7   Difference between Administration and Supervision
8   Educational Planning
9   Types and Goals of Educational Planning
10 School Discipline and Classroom Management

Recommended Texts

1   Coleman, M., & Glover, D. (2016). *Educational leadership and management: developing insights and skills*. Berkshire: McGraw-Hill Education.
2   Glickman, C. D., Gordon, S. P., & Ross-Gordon, J. M. (2016). *The basic guide to supervision and instructional leadership.* Boston: Pearson Education, Inc.

Suggested Readings

1   Brundrett, M., Burton, N., & Smith, R. (2017). *Leadership in education*. London: SAGE Publications.
2   Razik, T.A. & Swanson, A.D. (2016). *Fundamental concepts of educational leadership and management (3rd ed.)*. New York: Allyn& Bacon.

Within the language teaching literature there are numerous works containing, at worst, wish lists for teacher action and, at least, powerful rhetorical prescriptions for practice. In both cases, the precepts tend to be couched in the form of received wisdom – in other words, exhortations for one line of action rather than another are argued logico-deductively rather than on the basis of empirical evidence about what teachers and learners actually do, inside and outside the classroom, as they teach, learn, and use language. If teachers are to benefit from the research of others, and if they are to contextualize research outcomes against the reality of their own classrooms, they need to be able to read the research reports of others in an informed and critical way. Unfortunately, published research is all too often presented in neat, unproblematic packages, and critical skills are needed to get beneath the surface and evaluate the reliability and validity of research outcomes. A major function of this course, in addition to providing a contemporary account of the 'what' and the 'how' of research, is to help non researchers develop the critical, analytical skills which will enable them to read and evaluate research reports in an informed and knowledgeable way.

Contents

1. An Introduction to Research Methods and Traditions
2. Research Traditions in Applied Linguistics
3. Qualitative and Quantitative Methods
4. The Experimental Method
5. Ethnography
6. Case Study
7. Classroom Observation and Research
8. Methods of classroom observation and research
9. Classroom Research: Sample Studies
10. Elicitation Techniques
11. Doing Research

Recommended Texts

1. Creswell, J. W. (2017). *Educational research: planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston: Pearson Education, Inc.
2. Nunan, D. (2015). *Research methods in language learning* . New York: Cambridge University Press.

Suggested Readings

1. Burns, A. (2016). *Doing action research in english language teaching: a guide for practoners*. New York: Routledge.
2. Gay, L. R. (2014). *Educational research: competencies for analysis and application (9th ed.).* Islamabad: Allama Iqbal Open University.

The main purpose of the course is to make students aware of how to bridge the gap between theory and practice. In other words, how they can use various concepts of educational psychology to improve their learning and teaching skills. The course is intended to improve the reading, writing and communication skills of students. For this purpose various structured and unstructured activities will be designed and assigned to the students so that they can better develop their abilities and skills.

The student teachers will be introduced with major theories of intelligence, personality, motivation, memory, thinking and instruction. They will also be trained in how these theories can be applied in the classroom teaching. Understanding the psychological basis of these theories will help them to manage classroom in a way that promotes learning and minimizes disruptions. It will also provide them with the tools needed to be a better teacher, counsellor and guide.

Contents

1. Introduction
2. Meaning and Nature of Educational Psychology
3. Learning and Instruction
4. Educational Psychology and Teaching
5. Motivation: Theory and Practice
6. Creating Learning Environments
7. Teaching for Learning (i.e. Effective Teaching)
8. Characteristics of Effective Teachers
9. Individual Differences / Variations
10. Intelligence and Personality Theories
11. Complex Cognitive Processes
12. Concepts of Problem Solving :Nature, Steps , Strategies, Factors

Recommended Texts

1. Dash, B.N., Dash, N., and Rath, M.P. (2017). *A text book of educational psychology*. New Delhi: Dominant Publishers and Distributors.
2. Woolfolk, A. (2016). *Educational psychology* (13th ed.). Harlow: Pearson Education Limited.

Suggested Readings

1. Iqbal, M. Z., & Shahid, S. M. (2014). *Educational psychology&guidance*. Islamabad: AIOU.
2. Santrock, J. W.(2016). *Educational psychology*. Boston: McGraw –Hill

As a language of global communication, English is to be taught as language of communication especially oral communication. To fulfill this purpose, speaking and listening need to be focused. As students of Department of Education are likely to become teachers, it becomes all the more important for them to gain mastery on oral skills. To effectively teach speaking and listening, teachers need to provide meaningful opportunities for students to talk for a range of purposes. Teachers are also required to explicitly teach the components of different types of discourse, e.g. planned and unplanned, formal and informal, dialogue and monologue, public and private. Teachers can significantly assist students by discussing the demands of each of these contexts, and by identifying strategies that might be useful. This course focuses on the ability to provide skillful instruction to the prospective teachers that balances explicit skills instruction within authentic contextually grounded activities. To make prospective teachers practice speaking in the classroom, a verified module for English speaking will be applied.

Contents

1. Introduction
2. Procedures for Teaching Speaking and Listening
3. The Functions of Oral Language
4. Contextual Understanding
5. Developing Contextual Understanding for Speaking and Listening
6. Embedding Speaking and Listening within the Classroom
7. Embedding Speaking and Listening within the Classroom
8. Processes and Strategies
9. Developing Metalinguistic Awareness
10. Teaching the Speaking and Listening Processes and Strategies
11. English Speaking Module for Prospective Teachers

Recommended Texts

1. Alam, M. (2018). *English speaking module for prospective teachers*. Sargodha: Department of Education, University of Sargodha.
2. Harmer, J. (2017). *The practice of English language teaching*. London: Pearson Longman ELT.

Suggested Readings

1. Brace, J. (2016). *Speaking and listening resource book*. Ascot: Department of Education WA.
2. Nunan, D. (2015). *Teaching English to speakers of other languages*: An Introduction. New York: Routledge.

English pronunciation becomes all the more significant when it comes to the learners who are likely to become English language teachers in Public and private sector. If a student has no clear idea about the syllable stress pattern of English words, he/she will definitely pronounce majority of the English words in a wrong way. Therefore, it is of vital importance not only to train the prospective teachers in correct English pronunciation but also train them to teach pronunciation in their future teaching career. This course aims to give a general introduction to pronunciation of English language and to familiarize the prospective teachers with the approaches and models of teaching pronunciation. This course focuses on both segmental and supra segmental features of English phonology and familiarizes the students with the current standard of International Phonetic Alphabet. This course also aims to make the students proficient in spoken language through extensive practice in the pronunciation of English and spoken Discourse.

Contents

1. The Description of Speech
2. Teaching Pronunciation
3. Problems and Approaches in Pronunciation Teaching
4. Techniques and activities
5. Vowels
6. Consonants
7. Word and Sentence Stress
8. Rules of Word Stress
9. Sentences: Stress timings and syllable timing
10. Intonation
11. Other Aspects of Connected Speech
12. Pronunciation and Spelling

Recommended Texts

1. Cameron, S. (2018). *Perfecting your English pronunciation* (2nd ed.). New York: McGraw-Hill.
2. Kelly, G. (2016). *How to teach pronunciation*. Harlow: Pearson Education Limited.

Suggested Readings

1. Ladefoged, Peter & Ian Macidieson. (2016). *The sounds of the world's languages*.Cambridge: MA, Blackwell Publishers.
2. Ladefoged, Peter. (2015). *A course in phonetics* Harcourt.
3. Roach P., (2008). *English phonetics and phonology*. Cambridge: CUP.

EDUC-6509 **Professionalism in Teacher Education in Pakistan** **3(3+0)**

Learning to teach is a continuous process which involves pre-service teacher preparation, and mentoring for beginning teachers and professional development. The purpose of this course is to assist student teachers to grasp the theory of professionalism and implement the same into practice needed for teaching profession. Teaching is the profession that is on the edge of a great transformation all over the world. At the same time the expectations about teacher's performance, roles, responsibilities, enthusiasm and commitment are increasing. Enhancing professionalism among teachers is an area of global concern. Developing cognitive skills is not the only criteria for effective performance, we also need to develop the affective skills of student teachers so that they can demonstrate the dispositions required of them mentioned in the National Standards for Teachers in Pakistan. This course will broaden the horizon of student teachers in determining the relationship of theory and practice of professionalism in respect of commitment and dedication for teaching through depicting dispositions required for teaching profession.

Contents

1. Introduction of Profession and Concept of Teaching
2. Characteristics of Effective Teaching
3. Professionalization Process and Professionalism
4. Professionalism in Teaching: Theory to Practice
5. Professional Dispositions for Teachers
6. Attributes of Professional Teacher
7. Changing Role of the Teacher: Beyond Classroom
8. Ethics, Education and Teacher
9. The moral role of teacher
10. Teaching Profession and Globalization
11. Teaching Profession and ODL

Recommended Texts

1. Day, C., Kington, A., Stobart, G., Sammons, P. and Gu, Q. (2017). *Teachers matter*. Open University Press.
2. Gutierrez, A., Fox, J., & Alexander, C. (2019). *Professionalism and teacher education*. Singapore: Springer Nature Singapore Pte Ltd.

Suggested Readings

1. Edwards, R. and Usher, R. (2016). *Globalisation and pedagogy: space, place and identity*. London: Routledge
2. Singer, A. J. (2016). *Teaching to learn, learning to teach.* London: Lawrence Erlbaum Associates, Publishers.

EDUC-6510   **Computer Assisted Language Learning (CALL)**   **3(3+0)**

Technology is powerful, and it has a unique strong way of grabbing attention, finding a relevant footing and really tuning students into their language lessons. But it is not often exactly known how to use this powerful technology that results in maximum benefit for learners as well as teachers. This is especially the issue in a third world country like Pakistan. In today's world of scientific advancement, computer has a vital role in almost every field including English language learning. Many a software has been developed and available in the market which can be instrumental in the process of teaching and learning a language. Therefore, it is need of the hour to make students familiar with usage of computer in language teaching and enable them to apply it in real teaching situation. This course caters the need of the prospective teachers to be familiarized with computer application in language teaching.

Contents

1. Introduction to Computer
2. Introduction to CALL
3. History of CALL
4. Types of CALL
5. CALL Hardware
6. Computer-mediated Communication
7. Asynchronous and Synchronous Written Communication
8. World Wide Web Resources in CALL
9. Computer Assisted Development of Language Skills
10. Evaluation of CALL Software
11. Technology Integration Strategies for ELL and Foreign Language Instruction
12. Virtual Platforms of Communication

Recommended Texts

1. Gimeno-Sanz, A., Levy, M., Blin, F., & Barr, D. (2017). *World CALL: sustainability and computer assisted language learning*. London: Bloomsbury.
2. Holland, M., & Fisher, P. (2016). *The path of speech technologies in computer assisted language learning*. New York: Routledge.

Suggested Readings

1. Beatty, K. (2015). *Teaching and researching computer assisted language learning (2nd ed.)*. Harlow: Pearson Education Limited.
2. Hunston, S. (2015). *Corpora in applied linguistics*. Cambridge: Cambridge University Press.

This course has been developed to help students with their written assignments in English at both undergraduate and postgraduate level. Students who are not native speakers of English often find the written demands of their courses very challenging. After learning English formerly for fourteen to sixteen years, students in Pakistan do not even know the basics of sentence structure whereas academic writing demands advance writing skills on part of the learner such as summarizing and extended response. In addition to the vocabulary of academic English they have to learn new conventions of style, referencing and format. Furthermore, their lecturers are often concerned by their lack of critical thinking skills, and also mention students' failure to answer the specific question and their inability to develop answers logically. Issues around vocabulary, plagiarism and referencing skills are significant additional worries. This course is designed to be used on both pre-sessional and in-sessional courses, is also suitable for multi-discipline courses and research report (thesis) writing.

Contents

1. The Writing Process
2. Readings: Finding Suitable Sources
3. Finding Key Points and Note-making
4. Paraphrasing & Summarizing
5. Paragraph structure
6. Development of ideas
7. Elements of Writing
8. Academic Style
9. Accuracy in Writing
10. Literature Reviews
11. Writing longer essays
12. Avoiding Plagiarism; Re-writing and Proof-reading

Recommended Texts

1. Bailey, S. (2015). *Academic writing: a handbook for international students*. (4th Ed.). Routledge an imprint of the Taylor & Francis Group. Retrieved from www.eBookstore.tandf.co.uk.
2. Fry, H., Ketteridge, S., & Marshall, S. (2016). *A handbook for teaching and learning in higher education*.

Suggested Readings

1. Oshima, A., & Hogue, A. (2016).*Introduction to academic writing*. (3rd Ed.). Pearson Education,
2. Whitaker, A. (2010). *Academic writing guide*. Retrieved from http://www.vsm.sk/Curriculum/academicsupport/academicwritingguide.pdf Inc.

EDUC-6512　　　　**Language Teaching Methods and Approaches**　　　　**3(3+0)**

The deteriorating standard and quality of education in general and at elementary & secondary level in particular are due to substandard and low quality of ELT. The major drawbacks of our students up to secondary level are their poor pronunciation, fluency, comprehension and creative writing. Moreover, their skills of reading, writing, speaking and listening are also deficient. The major reason for these deficiencies is our English teachers who are not well-trained only but are also non-professionals. They have no idea what method or technique is appropriate for their classroom teaching situation in general and the lesson they are delivering in particular. Keeping these deficiencies in view, this course focuses on the latest methods & techniques especially the modern software's & simulations available in the market. The second part of the course in this regard consists of the review of English content from class I--X and its effective teaching by applying various methods studied in the first course.

Contents

1. Introduction
2. Status of English in Pakistan
3. Theories of Learning and their Applications in Language Learning and Teaching
4. Teaching Vocabulary
5. Teaching Grammar
6. Methodologies
7. Approach, Method and Technique
8. Traditional methods
9. Reform Movements in Language Teaching Methodology
10. Error Analysis
11. Extensive Practice of Error Analysis and Correction of Errors.
12. Lesson Planning and Presentation

Recommended Texts

1. Harmer, J. (2016). *The practice of English language teaching*. London: Pearson Longman ELT.
2. Patel, M., & Jain, P. M. (2016). *English language teaching: methods, tools & techniques*. Jaipur: Sunrise Publishers & Distributors.

Suggested Readings

1. Hall, G. (2015). *Exploring English language teaching.* Oxon: Routledge.
2. Nunan, D. (2015). *Teaching English to speakers of other languages: an introduction*. New York: Routledge.

EDUC-6513   **Trends and Issues in English Language Teaching**   **3(3+0)**

Today, no one would doubt the fact that English has become an international language. English is the language that has spread throughout the world most extensively and is dominating in a number of important fields including international commerce, education, and communication. Pakistan is not an exception to such a global trend. Though English is mostly taught in Pakistan for academic purposes; for scoring better grades in higher exams and conduct research to obtain a higher education degree, English is now used for specific purposes like technical fields, business communication and law etc. With the spread of social media, people have even more started feeling the need of English than it was used to be in the past few decades. Many Asian countries have included English in the school curriculum in recognition that it can contribute to students' personal, linguistic, social, and cultural development. Keeping the current situation in view, this course aims to make the students familiar with the modern trends and issues in English Language teaching.

Contents

1. Teaching of English as a Foreign Language
2. Student-Centered Learning in ELT
3. Use of Multimedia in ELT
4. Teaching English to Young Learners
5. Integrating CALL into ELT
6. Cultural and Contextual Issues in ELT
7. Using Local Languages in English Language Classrooms
8. Learning Strategies in ELT
9. Developing Practical Skills in Learners
10. Language Teaching and Learning Practices in Class room
11. Current Issues in the Development of Materials for Learners of English
12. Recent Trends in ELT Methodology

Recommended Texts

1. Renandya, W. A., & Widodo, H. P. (2016). *English language teaching today*. Switzerland: Springer.
2. Sayer, P. (2016). *Ambiguities and tensions in English language teaching*. New York: Routledge.

Suggested Readings

1. Gass, S.M. & Mackey, A., (2015) *Stimulated recall methodology in second language research* Mahwah, NJ: Lawrence Erlhaum Association.
2. Huston, .Susan. (2014).*Corpora in applied linguistics*. Cambridge: Cambridge University Press.

EDUC-6514   **Classroom Management and Micro-Teaching**   **3(3+0)**

A program of study that aims to prepare prospective teachers must, therefore, equip them with knowledge and strategies for become effective managers of classrooms. In its narrowest sense, classroom management is defined in terms of 'disciplining' and 'controlling' students. This course, however, places the goal of 'student learning' at the heart of classroom management. That is, it views the best-managed classrooms as ones where each learner is effectively engaged in constructing knowledge. To this end, teachers must manage teaching content, plan lessons, develop responsive instructional strategies, differentiate instruction, create predictable structures and routines and connect learning to the real world outside the classroom. It also views the best-managed classrooms as learning communities with shared values of respect and caring. In this course, prospective teachers will be encouraged to explore their own beliefs about teaching and learning to arrive at a philosophy of classroom management that places 'learning' as an ultimate goal. Prospective teachers will be given the chance to explore curricular concerns of 'what to teach' and 'how to teach it' and view lesson planning as the consequence of these decisions. They will also study and go through the process of micro-teaching for their teaching skill development.

Contents

1. Introduction: Rules and Procedures
2. Discipline and Consequences
3. Teacher-Student Relationship
4. Student Responsibility
5. Strategies for Conflict Prevention and Resolution
6. Getting Off to a Good Start
7. Management at the School Level
8. Establishing Norms of Conduct for Faculty and Staff
9. Microteaching
10. Implementation of Microteaching in Teacher Education
11. Steps and Requirements of Microteaching
12. Microteaching Practice Sessions

Recommended Texts

1. Singh, Y. K. (2010). *Micro Teaching.* Delhi: APH Publishing.
2. Tauber, R. T. (2016). *Classroom management: sound theory and effective practice*. Westport: Praeger Publishers.

Suggested Readings

1. Marzano, R. J., Gaddy, B. B., Foseid, M. C., Foseid, M. P., & Marzano, S. J. (2015). A *Handbook for classroom management that works*. Alexandria: ASCD.
2. Singer, A. J. (2013). *Teaching to learn, learning to teach*. London: Lawrence Erlbaum Associates, Publishers.

English language teaching is not achieving its objectives in real life teaching situations in Pakistan. Lack of inability on part of the teachers is one of the major reasons behind this issue. The focus of teaching practice is to train the prospective English teachers to teach English according to the demands of today's global community. As this course is of practical nature, prospective teachers will spend most of their time in the real-life teaching situation in the schools. First of all, prospective teachers will be given orientation in the department about the teaching assignment they are going to perform in the schools. They will be briefed about the classroom norms and expected attitude of the teacher with respect to those norms. They will also be briefed about school rules and regulations and record keeping which they will be likely to come across and maintain some of the record during practice teaching. Then prospective teachers will be sent to the allotted schools for practical teaching for the duration of six weeks.

Contents

1. Teaching Practice; Introductory Sessions
2. Identify different topics for English language lesson plans
3. Sessions on Lesson Planning in accordance with English Language Teaching Methodology
4. Developing 40 Lesson Plans for teaching English
5. Paraphrasing & Summarizing
6. Development of assessment tools and AV-aids
7. Students' Teaching Practice at Schools
8. Activities Related to School Management during Teaching Practice
9. Draft Final Lesson Plans
10. Accuracy in Writing
11. Final Lesson

Recommended Texts

1. Norton, P. & Sprague, D. (2016). *Technology for teaching*. Boston Allyn & Bacon.
2. Sharma, S. R. (2015). *Effective classroom teaching: modern methods, tools and techniques*. Jaipur: Mangal Deep Publications.

Suggested Readings

1. Feden, P. D. and Vogel, R. M. (2015). *Methods of teaching*. Boston: Mc-Graw Hill.
2. Norton, P. & Sprague , D. (2010). *Technology for teaching*. Boston Allyn & Bacon.

MPhil

EDUCATION

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.

Contents

1. Introduction to Research
2. Problem Identification
3. Hypotheses Formulation
4. Constructs and Variables
5. Quantitative Research Methods
6. Qualitative Research Methods
7. Mixed-methods research
8. Sampling Designs
9. Data Collection
10. Data Analysis
11. Developing a Research Proposal
12. Writing a Research Report

Recommended Texts

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.

Contents

1. Introduction to Statistics
2. Inferential Statistics
3. Comparing Measures of Central Tendency between Groups
    a) Paired or Dependent Measures
    b) Two-way ANOVA
    c) Factorial Analysis of Variance
4. Correlation and Regression
5. Probability and Distribution of Sample Means
6. Tests for Ordinal Data and Nominal Data
7. Multivariate Analysis
8. Data preparation: screening data prior to Analysis
9. Multiple Regression
10. Discriminant Analysis
11. Logistic Regression
12. Multivariate Analysis: Analysis of Variance, Covariance, and MANCOVA

Recommended Texts

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.

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.

Contents

1. Educational and psychological measurement –Basic concept
2. Types of Scales/ measures
3. Paradigms of Approaches to Scale Development
4. An Overview of Psychometric Properties of a Scale
5. Assessment of Scale Reliability
6. Assessment of Scale Validity
7. Construction of Conversation Measures of Tests
8. Classical Test Theory
9. Data Analysis
10. Analysis of Quantitative data through SPSS
11. Data Analysis in Qualitative Research

Recommended Texts

1. Cohen, L., Manion, L., & Morrison, K. (2013). *Research methods in education*. NY: Routledge.
2. Colton, D., & Covert, R. W. (2017). *Designing and constructing instruments for social research and evaluation.* San Francisco: Jossey-Bass.

Suggested Readings

1. Aneshensel, C. S. (2012). *Theory-based data analysis for the social sciences*. Thousand Oaks: Sage Publications.
2. Bordens, K.S. and Abbot, B. B. (2002). *Research design and methods: A process approach.* Boston: McGraw-Hill.
3. Fraenklen, J. R. and Wallen, N. E. (2017). *How to design and evaluate research in education*. NY: McGraw Hill Book Co.

The world of public policy has become an increasingly small one as a consequence of dramatic changes to global political and economic institutional structures and to nation states themselves. These changes at the structural level of the global system have impacted upon the work of public organizations either directly or indirectly and have broadened the field of action in policy studies. This course intends to give students' fundamental understanding of Education policies of Pakistan. Objectives of this course are to make students able: to examine the influence of political and organizational factors on policy process; to understand how to implement a policy in its true spirit; to apply analytical tools for the effective implementation of policies and programs; to explore into the ethical challenges confronting public policymaking and the normative obligations of public actors in serving the public interest; to apply statistical techniques in policy analysis and decision-making analysis. This course will help learners promote constructive debate on theoretical, methodological and empirical issues in policy analysis and will encourage them to have greater interaction between the world of academia and the world of practice.

Contents

1. Applied Micro and Macroeconomics for Policy Decision-making
2. The Policy Process
3. Policy Tools
4. Policy Implementation
5. Values, Ethics, and Public Policy
6. Education Policy Practicum
7. Policy Analysis
8. Statistical Analysis for Policymaking
9. Policy Evaluation

Recommended Texts

1. Bowe, R., Ball, S. J., & Gold, A. (2017). *Reforming education and changing schools: Case studies in policy sociology.* NY: Routledge.
2. Mingat, A. and Tan, J. P. (2013). *Tools for education policy analysis.* Washington, DC: The World Bank. www.worldbank.org

Suggested Readings

1. Bengali, K. (1999). *History of educational policy making and planning in Pakistan.* Islamabad: Sustainable Development Policy Institute.
2. Cairney, P. (2016). *Policy and policymaking in the UK*. Retrieved from, https://paulcairney.files.wordpress.com/2013/08/polu9uk-handout-autum-2016.pdf
3. Hameed-ur-Rehman, M., & Sewani, S. M. S. (2013). Critical Analysis of the Educational Policies of Pakistan. *Dialogue (Pakistan)*, *8*(3).

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

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.

Contents

1. Basic Concepts in Assessment and Evaluation
2. Taxonomies of Educational Objectives
3. Alternative Assessment Strategies
4. Tests
5. Assessment and Evaluation at School in Pakistan
6. Assessment and Evaluation at Higher Level in Pakistan
7. Computer Assisted Assessment in Higher Education
8. Seminar in Assessment and Evaluation

Recommended Texts

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-7106   **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.

Contents

1. Test Theories in Historical Perspectives
2. Test Development Process (both NRT and CRT Perspectives)
3. Test Equating and DIF
4. Models for Assembling Test Items
5. Models of Assembling Multiple Tests
6. Models of Assembling Tests with Item Sets
7. Item Generation and computer-based test designs
8. Contemporary Relevant Themes

Recommended Texts

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-7107   **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.

Contents

1. Standard Setting for Testing
2. Common Elements in Setting Performance Standards
3. Development of Table of Specifications
4. Test Development
5. Item Analysis
6. Scoring Extended Response Questions (Essay type)
7. Scoring Objective Type Tests
8. Process of Test Standardization
9. Testing Higher Order Learning Seminar on issues in Test Construction and Standardization

Recommended Texts

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-7108 **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. The major objectives of this course are to: build students' confidence so that they can assess their work and others' work effectively, structure an assessment criteria 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.

Contents

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 Texts

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.

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.

Contents

1. Introduction to Leadership
2. Leadership Models and Theories
3. Leadership Styles
4. Roles and Responsibilities of Leadership
5. Instructional Leadership
6. Leadership: Values and Ethics
7. Introduction to Supervision
8. Supervision and Inspection
9. Seminars in Instructional Leadership and Supervision

Recommended Texts

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.

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.

Contents

1. Introduction
2. Educational Policy Making
3. Educational Planning
4. Types of Plans
5. The Process of Educational Planning and Implementation
6. Approaches to Educational Planning
7. Introduction to Management
8. Emerging Issues in Educational Leadership and Management
9. Educational Policy and Planning in Pakistan
10. Seminars on Educational planning and Management

Recommended Texts

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-7111   **Organizational Theory and Behaviour 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 behavior 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.

Contents

1. Organization and Organizational Theory
2. Strategy, Organization Design and Effectiveness
3. The External Environment
4. Fundamentals of Organizational Structure
5. Organization Technology, Size and Life Cycle
6. Organizational Behaviour
7. Group Dynamics and Social Influence
8. Organizational Culture and Climate
9. Innovation, Change and Development
10. Conflict, Power and Politics
11. Communication
12. Motivation
13. Occupational Stress

Recommended Texts

1. Daft, R. L. (2015). *Organization theory and design*. Wadsworth CA: Cengage learning.
2. Robbins, S. P., & Judge, T. (2012). *Essentials of organizational behaviour*. 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 behaviour: An evidence-based approach.* Thousand Oaks, CA: Sage publications.
4. Timothy, J. & Robins, S. P. (2017). *Organizational behaviour (5th ed.).* Boston: Pearson.

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.

Contents

1. Human Resource Management (HRM): An Overview
2. Issues in HRM
3. HRM Framework
    a) A Productive Workforce
    b) An Enabling Work Environment
    c) A Sustainable Workforce
4. Models and Theories of HRM
5. Human Resource Planning
6. Performance Appraisal
7. Human Resource Development
8. Environmental Challenges in HRM
9. Maintaining Effective Relationships
10. Seminar in HRM

Recommended Texts

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.

EDUC-8101   **Philosophical Paradigms of Education**   **3 (3+0)**

Multiplicity in philosophical paradigms of education adds versatility and complementarity to the overall education system in both concepts and functions. Each paradigm of education has a different perspective on the purpose of education, what it means to learn, and the roles of teachers and students in the learning process. These paradigms influence entire education design and practice - how students are taught, how they are assessed, and what is valued and included in the curriculum. Awareness of the different paradigms, and how they work together, can support alignment of teaching and assessment approaches. This course is to inculcate deeper reflection among students so that they may be able to develop better rationale for their intended research project and can appraise critically their point of focus in research. This course intends to: explain, describe and use correctly the significant terms and concepts of philosophy; identify and evaluate main characteristics of leading general philosophies and philosophies of Education in different contexts; critically analyse the essential differences between general philosophies; identify and synthesis the main features of the Islamic view about the concepts of reality, knowledge and values; and apply the philosophical methods to the examination of educational problems /issues.

Contents

1. Meaning and Importance of Philosophy
2. Branches of Philosophy
3. Philosophy of Education
4. Naturalism
5. Idealism
6. Realism
7. Pragmatism/Experimentalism
8. Existentialism
9. Main Types of General Philosophies
10. Contemporary Philosophies of Education
11. Analytical Approach to major concepts in the field of Education

Recommended Texts

1. Haynes, J., Gale, K., & Parker, M. (2016). *Philosophy and education: An introduction to key questions and themes.* London: Routledge.
2. Noddings, N. (2018). *Philosophy of education.* London: Routledge.

Suggested Readings

1. Bhatt, S. R. (2018). *Philosophical foundations of education.* New Delhi: Kanishka Publishers.
2. Blake, N., Smeyers, P., Smith, R., & Standish, P. (2012). *The Blackwell guide to philosophy of education.* NY: Blackwell Publishing.
3. Ozmon, H., & Craver, S. M. (2008). *Philosophical foundations of education.* NJ: Merrill Prentice Hall.
4. Shrivastava, K. K. (2013). *Philosophical foundations of education.* New Delhi: Kanishka Publishers.

EDUC-8102   **Advanced Research Methods**   **3(3+0)**

Research is the systematic investigation of a subject at its forefront in order to find something new. The course is designed to help students improve their writing and research skills, specific to Education. It includes an overview of the writing mechanics and process, how to properly conduct research, cite sources and guidelines for writing specific types of papers. This course will help to produce educational researchers capable of conducting high quality research in their areas of specialization. It will help researchers identifying some researchable questions and devise strategy to find possible answers for them. The main objectives of the course are: critically analysing different approaches of quantitative and qualitative research focusing on the objectives; devising appropriate research methodology and the data analysis strategies; develop and apply major instruments of quantitative and qualitative research i.e. questionnaire, observation and interviewing schedule etc., and writing a comprehensive research report using APA style manual.

Contents

1. Introduction to Research
2. Problem Identification
3. Hypotheses Formulation, Hypotheses testing
4. Review of related literature
5. Quantitative Research Designs: Experimental research, Causal-comparative research**,** Co relational Research**,** Survey research
6. Sampling Designs
7. Foundations of Qualitative Research in Education
8. Qualitative Research Designs: Symbolic interaction, Ethnography, Ethnomethodology, Ethology, Grounded Theory, Phenomenology
9. Qualitative data collection and Fieldwork
10. Data Analysis
11. Mixed Methods Research (qualitative-cum-quantitative)
12. Writing a Research Report

Recommended Texts

1. Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education.* NY: Routledge.
2. Fraenklen, J. R. & Wallen, N. E. (2017) *How to design and evaluate research in education* (4th ed). NY: 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. Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches.* Thousand Oaks, California: Sage publications.
3. Lune, H., & Berg, B. L. (2016). *Qualitative research methods for the social sciences.* NY: Pearson Higher Education.
4. Walliman, N. (2017). *Research methods: The basics.* NY: Routledge.

EDUC-8103   **Contemporary Trends in Education**   **3 (3+0)**

The changing scenario of world economy and advancement in technology has resulted in the beginning of many new trends and issues in education. Modern day education is all about innovation, accessibility, and suitability. From kindergarten to university, students are encouraged to learn through interactive and practical tools. Higher education is more career-oriented today than ever before. The barriers of time and age have also been removed, while geographical boundaries don't matter anymore. At the same time identifying the expected challenges (i.e. Futurology) and its impact on mass education is imperative for making the education market oriented. This course covers: extent of social change and relating it to the various aspects of the educational process; significant changes which have taken place in the field of science and technology, demography and manner in which they are influencing the system of education; relationship between the process of education and the development; the emerging role which education is assigned to play in the socio economic development of the country; implications of the political process for education and their impact on each other and relevant controversial issues in education in Pakistan.

Contents

1. Futurology and Education
2. Social Change and Education
3. Population Dynamics and Socioeconomic Development
4. Education and Development
5. Methods, Media and Material in education
6. Politics and Education
7. Digital Literacy
8. Self-Directed Professional Development
9. Smart Capital
10. Online Teaching and Blended Learning
11. Use of Social Networking for Teaching
12. Problems and Issues in Education

Recommended Texts

1. Altbach, P. G., Reisberg, L., & Rumbley, L. E. (2019). *Trends in global higher education: Tracking an academic revolution*. Paris: UNESCO.
2. Facer, K. (2015). *Learning futures: Education, technology and social change.* NY: Routledge.

Suggested Readings

3. Enaohwo, J. O. (2010). *Education futurology: praxis, problems and the way forward* (No. 27). Nigeria: University of Port Harcourt Press.
4. Halls, W. D. (1999). *Comparative Education: Contemporary Issues and Trends.* United Nations Educational, Scientific, and Cultural Organization, Paris: UNESCO.
5. Singh, R., & Singh, Y. (2017). Perspective of futurology and its implication in education. *Global Journal of Enterprise Information System*, 9(4), 57-61.
6. Szirmai, A. (2015). *Socio-economic development.* Cambridge: Cambridge University Press.

EDUC-8104   **Topical Seminar on Research Design**   **3 (3+0)**

Research design is a critical topic that is central to research studies in Education. The existence of multiple approaches is a powerful source in the development of a research design, but conversely, it is a source of confusion as well. It is required to lessen the confusion over research design and offer a better practical understanding on it. This course aims at creating an enabling guide on how to select topic and write a successful academic thesis. Selecting the topic and writing an excellent thesis requires high level of organization and preparation on the part of the students. After the seminars required for this course, students should have adequate knowledge on research design so as to enable them how to formulate a research problem, conduct literature review, and understand methods of data gathering, analysis and interpretation of research findings. This course includes the discussion of assigned readings, and the presentation and critical evaluation of scholars' research proposals.

Contents

1. Introduction to research designs
2. How to develop a research proposal,
3. How to evaluate a research proposal (Criteria of different high ranked universities)
4. Defining research topics and Writing Objectives
5. Synthesising research findings for literature review
6. Exploring research papers having discourse about research methodologies
7. Exploring novel methodologies
8. Developing a research proposal using descriptive research methodology
9. Developing Research proposal using experimental research design
10. How to evaluate a dissertation (Criteria of different high ranked universities)
11. Developing Research proposal for Presenting a seminar
12. Presenting a seminar by the scholars

Recommended Texts

1. Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education.* NY: Routledge.
2. Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research* (2nd ed). Thousand Oaks, CA: SAGE Publications.

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. Lune, H., & Berg, B. L. (2016). *Qualitative research methods for the social sciences.* NY: Pearson Higher Education.
3. Walliman, N. (2017). *Research methods: The basics*. London: Routledge.

In this course scholars will examine and make a critique on the role of education in national and global development in comparative perspective. They will explore the methods, major concepts and current trends in comparative education, and will explore various facets of societies that impact teacher education system. The course covers a wide range of past and current issues in teacher education. It helps scholars understand the teacher education process, thus enhancing their ability to contribute to addressing problems and resolving challenges within their country. It will help them relate teacher education to national development and explain the contribution of teacher education to national development. This course will enable them to analyse the issues and challenges facing teacher education systems in an era of change. Scholars will compare and contrast teacher education system and highlight key issues in an effort to improve teacher education system (Pakistan in comparison to other teacher education system e.g. developed, developing and under-developed countries of the world).

Contents

1. Introduction to Comparative Education
2. Methods / Approach of Comparative Studies
3. Comparative Studies in Teacher Education
4. Teacher Education of Developed Countries (USA, UK, JAPAN)
5. Teacher Education of Developing Countries
6. Teacher Education of Under Development Countries
7. Comparative Perspectives
    a) Teacher Education in Pakistan in comparison with those of non-developed countries
    b) Teacher Education in Pakistan in caparison with those of under development countries
    c) Teacher Education in Pakistan in comparison with those of developed countries

Recommended Texts

1. Hans, N. (2013). *Comparative education: A study of educational factors and traditions.* London: Routledge.
2. Holmes, B. (2018). *Comparative education: Some considerations of method.* London: Routledge.

Suggested Readings

1. Bray, M., Adamson, B., & Mason, M. (Eds.). (2014). *Comparative education research: Approaches and methods*. NJ: Springer.
2. Jalalzai, M. K. (2005). *The crisis of education in Pakistan: State policies and textbook*. Lahore: Al-Abbas International.
3. Lynd, D. (2007). *The education system in Pakistan: Assessment of the National Education Census*. Islamabad: UNESCO.
4. Phillips, D., & Schweisfurth, M. (2006). *Comparative and international education: An introductory to theory, method and practice*. NY: Continuum International Publishing.

Recommended curriculum is one which identifies the skills, concepts and content that will be emphasized throughout the learning process in a particular context to cater for the appropriation between the individuals and the society in their very context. Curriculum theories help desirably shaping and developing the curriculum. Curriculum model – the process model and the product model – is a broader term referring to the guide used to write curriculum documents used in education to determine specific aspects of teaching, such as subject, time frame, and manner of instruction. This course describes approaches to curriculum development, curriculum design and curriculum change. It will enable students to select appropriate strategies in changing a curriculum for making more effective contribution towards curriculum design. It involves conceptual models of curriculum development, and trends and issues on school program effectiveness. Scholars will be able to plan curricula in terms of needs assessment, writing objectives, conducting task analysis, identifying and interpreting valid measures of performance, and appraising the curricula.

Contents
1. Introduction to Curriculum
2. Portrayal: The curriculum field
3. Curriculum Studies and the Traditions of Inquiry
    a. The humanistic tradition
    b. Philosophical ideas in education
    c. Educational Theories
4. Models of Curriculum Development:
    The Johson's Model, The Tylor, Model, The Taba Model, The Saylor, Alexander and Lewis Model, and The Olivia Model
5. Modern Trends and Issues in Curriculum Development
6. Curriculum Development in Pakistan: Trends and critique
    a. Curriculum development in 1960s (Ayyub Khan Era)
    b. Curriculum development after Dhaka Fall (Bhutto Era)
    c. Curriculum development & Islamization of Knowledge (Zia-ul-Haq Era)
    d. Curriculum development after 18th amendment (Recent Practices)

Recommended Texts

1. Talla, M. (2015). *Curriculum development: Perspectives, principles and issues.* New Delhi: Pearson
2. Pinar, W. F. (2013). *International handbook of curriculum research*. NJ: Routledge.

Suggested Readings

1. Macalister, J., & Nation, I. S. P. (2019). *Language curriculum design*. NY: Routledge.
2. Oloruntegbe, K. O. (2011). Teachers' involvement, commitment and innovativeness in curriculum development and implementation. *Journal of Emerging Trends in Educational Research and Policy Studies*, 2(6), 443-449.
3. Parkay, F. W., Anctil, E. J., & Hass, G. (2014). *Curriculum leadership: Readings for developing quality educational programs*. NJ: Prentice Hall.

EDUC-8107   **Advanced Educational Psychology**   **3 (3+0)**

Advanced Educational Psychology provides a comprehensive analysis of the concepts and theories of psychology related to instructional practice and offers a wide variety of classroom strategies to help students of all ages succeed in the classroom. The study of learning processes, from both cognitive and behavioural perspectives, allows researchers to understand individual differences in intelligence, cognitive development, affect, motivation, self-regulation, and self-concept, as well as their role in learning. It is to enhance educational activities related to instructional design, classroom management, and assessment, which serve to facilitate learning processes in various educational settings across the lifespan. This course is designed to enable scholars to apply the insight of psychology to issues related to learning and development. It will cover schools of psychology and their bearing on education, the processes involved in student's development, thinking and learning, the factors disrupting classroom and maintaining an effective learning environment, the relationship between emotion, attitudes, society and student Learning, the important factors effecting cognition, behaviour, attitude, and emotions for identifying the causes of behaviour.

Contents

1. Psychology; a science and a perspective
2. Educational Psychology
3. Human Development:
    3.1 Behaviourist approach,
    3.2 Cognitivist's view
    3.3 Constructivists view
4. Cognitive Development
5. Social Development
6. Moral Development
    6.1 Piaget's moral development views and its educational implications
    6.2 Kohlberg's Moral Development theory and its educational implications
    6.3 Gilligan and moral voices and Damon's Moral Identity
7. Emotional Development
8. Psychological Testing

Recommended Texts

1. Berliner, D. C., & Calfee, R. C. (2015). *Handbook of educational psychology.* NY: Routledge.
2. Slavin, R. E. (2019). *Educational psychology: Theory and practice.* NY: Pearson

Suggested Readings

1. Kolb, D. A. (2014). *Experiential learning: Experience as the source of learning and development.* NJ: Pearson Education, Inc.
2. Mangal, S. K. (2012). *Advanced educational psychology.* New Delhi: PHI Learning Pvt. Ltd.
3. Neisser, U. (2014). *Cognitive psychology.* NY: Psychology Press.
4. Ormrod, J. E., Anderman, E. M., & Anderman, L. H. (2006). *Educational psychology: Developing learners.* NJ: Pearson.

EDUC-8108   **Teacher Education**   **3 (3+0)**

Teacher education refers to the policies and procedures designed to equip prospective teachers with the knowledge, attitudes, behaviors and skills they require to perform their tasks effectively in the classroom, school and wider community. Effective teacher learning and professional development is important for student achievement. It is a continuous process that promotes teachers' teaching skills, masters new knowledge, and develops new proficiency, which in turn, help improve students' learning. Efforts are being made globally to improve teacher education programs and enhance teachers' professional development in the wake of the advent of ICT and growing notions of globalization, including theories of free-trade market economy. The course of teacher education will help the scholars to: demonstrate an understanding of the history of teacher education in the Pakistan, articulate how agencies can help experts and administrators develop teacher education, be able to explain the teacher education programs at different levels-their objectives, structure, curriculum, and role and competencies of the teacher, describe the need for teacher education at tertiary level, describe issues, problems and innovative practices in Teacher Education in Pakistan, and be able to synthesize recent research.

Contents

1. Introduction to Teacher Education
2. Teacher Education through Open and Distance Learning
3. Teacher in School Education
4. Teacher in Higher Education
5. Advanced Professional Practice
   a. Integrating ICT into teacher education
   b. E-learning
   c. E-library and E-brary
6. Financing of Teacher Education
7. Technical Teacher Education
8. Teacher Education in Pakistan
9. Future of Teaching Profession

Recommended Texts

1. Murray, J., Swennen, A., & Kosnik, C. (Eds.). (2018). *International research, policy and practice in teacher education: Insider perspectives.* Cham, Switzerland: Springer.
2. Sharma, S., & Lazar, A. M. (2018). *Rethinking 21st century diversity in teacher preparation, K-12 education, and school policy: Theory, research, and practice*. Cham, Switzerland: Springer.

Suggested Readings

1. Casares, J. (2011). *The future of teaching and learning in higher education.* R. I. T. https://www.rit.edu/academicaffairs/sites/rit.edu.academicaffairs/files/docs/future_of_teaching_and_learning_reportv13.pdf
2. Danaher, P. A. and Umar, A. (2010). *Teacher education through open and distance learning.* Vancouver: Pearson Higher Education.

EDUC-8109   **Advanced Educational Assessment and Evaluation Procedure**   **3(3+0)**

Assessment and evaluation are the key directors of education and are vital to teaching and learning. Assessment is classroom research to provide useful feedback for the improvement of teaching and learning; whereas evaluation uses methods and measures to judge student learning and understanding of the material for the purpose of grading and reporting. The focus of this course is the analysis of Assessment and Evaluation, as a means of assessing and disseminating knowledge. This course develops students' abilities to construct, interpret and evaluate information about educational achievement. It enables students to develop a range of assessment skills, including table of specification, internet searches and evaluation of material on a topic of professional interests and assessment in education. The objectives of the course are to plan, conduct and use self-, peer- and teacher-assessment for better learning, adapt latest trends in assessment, identify and address the issues and challenges of assessment, design, conduct and interpret psychological testing for diagnostic purposes in educational settings, and devise a comprehensive strategy for overall quality enhancement.

Contents

1. The World of Psychological Testing: Major categories of tests
2. Test Norms: purpose of norms: norms are based on elementary notion of descriptive statistics, review of statistics variables, types of scales,
3. Types of Norms: percentile ranks, standard score, T-score, SATs, GREs, Deviation IQ's.
4. Reliability: Major sources of reliability, conceptual framework: true score theory, methods of determining reliability
5. Validity: Content validity, criterion-related validity, construct validity.
6. Test Development and item analysis in CTT and IRT: types of test items, item analysis
7. Ability testing: Individual Tests, Group Testing
8. Personality Testing: Self-Report Personality Inventories, Measuring Interests and Attitudes
9. Test Bias: controversial nature of bias. Test Fairness and the law, the traditional defence of testing.
10. The Future of Psychological Testing: current and future trends.
11. Ethical and social consideration in testing

Recommended Texts

1. Cooper, C. (2019). *Psychological testing: Theory and practice.* NY: Routledge.
2. Urbina, S. (2014). *Essentials of psychological testing*. NY: 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.). (2019). *Classroom assessment and educational measurement*. NY: Routledge.
3. Dann, R. (2014). *Promoting assessment as learning: Improving the learning process*. London: Routledge.
4. Hogan, T.P. (2014). *Psychological testing: A practical introduction*. NY: John Wiley & Sons.