

CURRICULUM
FOR
ADE (ASSOCIATE DEGREE IN EDUCATION, 2-YEAR)
B. ED., (4-YEAR) AND
B. ED. (2-YEAR) IN EDUCATION
2023 AND ONWARD



DEPARTMENT OF EDUCATION
UNIVERSITY OF MALAKAND


HEAD
Department of Education
University of Malakand


Assistant Registrar
(Academics)
University of Malakand
05-Dec-2023

SCHEME OF STUDIES FOR

ADE (Associate Degree in Education, 2-Year)

B. Ed., (4-Year) and

B. Ed. (2-Year) in Education

Semester wise Distribution of Courses

Total Credit Hours: Semester I-IV= 69 Cr. Hrs

Credit Hours General Education= 30 Cr. Hrs

Field Experience= 03 Cr. Hrs

Capstone Project/Thesis= 03 Cr. Hrs

Allied Courses= 18 Cr. Hrs

Major Courses= 80 Cr. Hrs

Total Credit Hours: Semester I-VIII= 134 Cr. Hrs

Semester-I				
Codes	Title of the Courses	Cr. Hrs.	Remarks	Marks
ISL 113	Seerah and its Contemporary Applications سیرت رسول ﷺ اور اس کی عصری معنویت / (any course can be selected from Humanities for Non Muslims)	02	Gen-Edu	50
SOC 116 / PSY 113 / PSC 112	Introduction to Sociology / Introduction to Psychology / Introduction to Political Science	02	Gen-Edu	50
PSC 111	Ideology and Constitution of Pakistan	02	Gen-Edu	50
ENG 101	Functional English	03	Gen-Edu	100
PHYS 111/ BOT 112	Basic Physics / Plant Sciences	03	Gen-Edu	100
EDU 111	General Methods of Teaching	03	Major	100
	Teaching of the Holy Quran with Translations	Non Credit		
Total Credit Hours		15		450

Semester-II				
Codes	Title of the Courses	Cr. Hrs.	Remarks	Marks
SOC 114 / SOC 231	Civic and Community Engagements / Human Rights	02	Gen-Edu	50
MGT 215	Entrepreneurship	02	Gen-Edu	50
ISL 112/ ETH 118	Islamic Studies / Ethics (for Non Muslims)	02	Gen-Edu	50
QR 101	Quantitative Reasoning-I (Mathematics)	03	Gen-Edu	100
CS 110	Introduction to Information and Communication Technologies	2+1	Gen-Edu	100

EDU 121	Child Development	03	Major	100
EDU 122	Foundations of Education	03	Major	100
	Teaching of the Holy Quran with Translations	Non Credit		
Total Credit Hours		18		550

Semester-III				
Codes	Title of the Courses	Cr. Hrs.	Remarks	Marks
QR 101	Quantitative Reasoning-II (Statistics)	03	Gen-Edu	100
ENG 102	Introduction to Expository Writing	03	Gen-Edu	100
EDU 231	Teaching of Mathematics	03	Major	100
EDU 232	General Science (Content)	03	Major	100
EDU 233	Art, Craft and Calligraphy	03	Major	100
EDU 234	Classroom Management	03	Major	100
	Teaching of the Holy Quran with Translations	Non Credit		
Total Credit Hours		18		600

Semester-IV				
Codes	Title of the Courses	Cr. Hrs.	Remarks	Marks
EDU 241	Teaching of Urdu	03	Major	100
EDU 242	Teaching of General Science	03	Major	100
EDU 243	Instructional and Communication Technology	03	Major	100
EDU 244	Teaching Practice-I	03	Major	100
EDU 245	Classroom Assessment	03	Major	100
EDU 246	Teaching of English	03	Major	100
	Teaching of the Holy Quran with Translations	Non Credit		
Total Semester Credit Hours		18		600

Semester-V				
Codes	Title of the Courses	Cr. Hrs.	Remarks	Marks
EDU 351	Educational Psychology	03	Major	100
EDU 352	Teaching Literacy Skills	03	Major	100
EDU 353	Curriculum Development	03	Major	100
URD 111	<u>Discipline-I</u> * Urdu Zuban: Qawaed O Imla	03	Allied	100
MATH 117	<u>Discipline-II</u> ** Discrete Structures			
ZOOL 111	<u>Discipline-III</u> *** Principle in Animal Life -I			
ENG 121	<u>Discipline-I</u> * Phonetics and Phonology	03	Allied	100

PHYS 101	<u>Discipline-II</u> ** Mechanics			
CHEM 236	<u>Discipline-III</u> *** Inorganic Chemistry			
	Teaching of the Holy Quran with Translations	Non Credit		
Total Semester Credit Hours		15		500

* Discipline-I= Content Course in English and Urdu

** Discipline-II= Content Course in Mathematics and Physics

*** Discipline-III= Content Course in Chemistry and Biology

Semester-VI				
Codes	Title of the Courses	Cr. Hrs.	Remarks	Marks
EDU 361	Guidance and Counselling	03	Major	100
EDU 362	Contemporary Issues and Trends in Education	03	Major	100
EDU 363	Comparative Education	03	Major	100
EDU 364	Field Experience/Internship	03	Major	100
ENG 122	<u>Discipline-I:</u> * Introduction to Drama and Prose Fiction	03	Allied	100
PHYS 103	<u>Discipline-II:</u> ** Electricity and Magnetism			
BOT 111	<u>Discipline-III:</u> *** Diversity of Plants			
URD 121	<u>Discipline-I:</u> * Urdu Tashkeel O Irtiqa	03	Allied	100
MATH 110	<u>Discipline-II:</u> ** Calculus and Analytical Geometry			
ZOOL 121	<u>Discipline-III:</u> *** Principle in Animal Life -II			
	Teaching of the Holy Quran with Translations	Non Credit		
Total Semester Credit Hours		18		600

* Discipline-I= Content Course in English and Urdu

** Discipline-II= Content Course in Mathematics and Physics

*** Discipline-III= Content Course in Chemistry and Biology

Semester-VII				
Codes	Title of the Courses	Cr. Hrs.	Remarks	Marks
EDU 471	Pedagogy-I of Discipline-I: (English)	03	Major	100
EDU 472	Pedagogy of Discipline-II & III: (Physical Science)			
EDU 473	Pedagogy of Discipline-II: (Mathematics)			
EDU 474	Research Methods in Education	03	Major	100
EDU 475	Teaching Practice-II	03	Major	100
URD 221	<u>Discipline-I:</u> Adbi Istelahat	03	Allied	100
MATH 114	<u>Discipline-II:</u> Linear Algebra and Applications			
CHEM 127	<u>Discipline-III:</u> Organic Chemistry			
ENG 231	<u>Discipline-I:</u> Introduction to Poetry	03	Allied	100
PHYS 201	<u>Discipline-II:</u> Modern Physics-I			
BOT 123	<u>Discipline-III:</u> Cell Biology, Genetics and Evolution			
	Teaching of the Holy Quran with Translations	Non Credit		
Total Semester Credit Hours for Discipline-I & II:		15		500
EDU 476	<u>Discipline-III:</u> Lab Work in Chemistry	02	Allied	50
Total Semester Credit Hours for Discipline-III		17		550
Semester VIII				
Codes	Title of the Courses	Cr. Hrs.	Remarks	Marks
EDU 484	School Management	03	Major	100
EDU 485	Teaching Practice-III	03	Major	100
EDU 486	Test Development and Evaluation	03	Major	100
EDU 481	Pedagogy-II of Discipline-I: (Urdu)	03	Major	100
EDU 483	Pedagogy-II of Discipline-III: (Biology)			
EDU 500	Capstone Project / Thesis	03	Major	100
	Teaching of the Holy Quran with Translations	Non Credit		
Total Semester Credit Hours for Discipline-III		15		600
EDU 490	Discipline-II: Lab Work in Physics	02	Major	50
Total Semester Credit Hours for Discipline-II		17		650
EDU 491	Discipline-I: Teaching of Social Studies	02	Major	50
Total Semester Credit Hours for Discipline-I		17		650

Annexure-I

Courses for General Education Scheme in the Cluster of Social Sciences

Codes	Title of the Courses	Cr. Hrs.	Remarks	Marks
EDU 123	Introduction to Sciences Education	02	Gen-Ed-01	50
EDU 113	Introduction to Teaching and Learning	02	Gen-Ed-01	50

Semester-I				
Codes	Title of the Courses	Cr. Hrs.	Remarks	Marks
ISL 113	Seerah and its Contemporary Applications سیرت رسول ﷺ اور اس کی عصری معنویت / (any course can be selected from Humanities for Non Muslims)	02	Gen-Edu	50
SOC 116	Introduction to Sociology	02	Gen-Edu	50
PSY 113	Introduction to Psychology			
PSC 112	Introduction to Political Science			
ECON 111	Fundamentals of Economics			
SW 116	Introduction to Social Work			
ISL 112/ ETH 118	Islamic Studies / Ethics (for Non-Muslims)	02	Gen-Edu	50
ENG 101	Functional English	03	Gen-Edu	100
PHYS 111	Basic Physics	03	Gen-Edu	100
GEOL 101	Introduction to Geology			
CHEM 110	Chemistry in Everyday Life			
BOT 112	Plant Sciences			
EDU 111	General Methods of Teaching	03	Major	100
Total Credit Hours		15		450

Note:

Courses included in the General Education Category are designed by the respective departments including their course codes, credit hours and titles (reflected in the scheme of studies). All such courses approved by the Syndicate are available on the university website (www.uom.edu.pk). For any query the office of the Registrar Academics may be approached for clarification/guidance.

Course Title: General Methods of Teaching
Course Code: EDU 111
Cr. Hrs: 03

Course Outcomes

After completing this course, Student Teachers will be able to:

1. Describe and discuss their personal theory of teaching and learning based on a critical analysis of implicit theories formed as Student Teachers.
2. Summarize and debate the pros and cons of teacher-centred and learner-centred teaching methods and state their position as a teacher.
3. Make records of structured, reliable classroom observations and draw conclusions based on these observations.
4. Participate in a cooperative learning group that plans, teaches, and critiques a lesson.
5. Create and critique plans for teaching and learning in primary school classes.

Unit 1

Sources of information about effective teachers

1. Your experience as a student,
2. Students currently in school,
3. Published research,
4. Observations in classrooms,
5. Reflections on classroom observation by yourself and with others,
6. Conversations with experienced teachers,
7. Theories about education and instruction,
8. The relationship between teaching and learning

Sources of information about learning in schools

1. Your experience as a student
2. Current students' self-descriptions
3. Published research, especially in cognitive and educational psychology
4. Observations in classrooms
5. Reflections on student interviews by yourself and with others
6. Conversations with experienced teachers
7. Theories about learning
8. Cultural influences on teaching and learning

Unit 2

Sources of complexity in the classroom

1. Managing a crowded space
2. Working with groups and individuals
3. Managing different activities occurring at the same time
4. Diversity among children
5. Managing scarce resources
6. Coping with unexpected events

Managing complexity

1. Learn names, interests, and learning strengths fast
2. Establish rules and routines
3. Group students

4. Organize books and other materials for easy access
5. Create pairs of students to help each other

Unit 3

Key concepts

1. Distinction between lower- and higher-order learning
2. Outcomes from lower-order learning
3. Outcomes from higher-order learning
4. Instructional activities that enable lower-order learning
5. Instructional activities that enable higher-order learning
6. Direct instruction: a method to enable lower- order learning
7. Indirect instruction: a method to enable higher- order learning
8. Different roles for teachers and student

Model lessons

1. Template for direct instruction lessons
2. Sample lessons
3. Template for indirect instruction lessons
4. Sample lesson
5. Inquiry-based, problem-solving, and project-based learning: are these the same or different?
6. Choice: teacher-centred, learner-centred, or both?

Unit 4

Cooperative learning

1. Peer teaching practice
2. Rationale for cooperative learning
3. Different models of cooperative learning
4. Cooperative learning procedures
5. Incentive structure of cooperative learning
6. Limitations of cooperative learning
7. Checklists as assessment devices

Lecture, demonstration, and discussion

1. Reasons to lecture
2. Structure of a lecture
3. Active lectures
4. Structure of a demonstration
5. Characteristics of good discussion
6. Purposes of questions
7. Questions in lectures, demonstrations, and discussions
8. Wait time

Asking Questions

1. Open and closed questions
2. Lessons taught in class

Unit 5

Constructive interactions between teacher and students

1. Respect
2. Credibility
3. Fairness (justice)

4. Trust
5. Interest
6. Enthusiasm
7. Adaptive teaching

Constructive interactions between teacher and students

1. Cooperative working relationships are central
2. Examples of cooperative working relationships
3. Feelings are the foundation of thought
4. Importance of trust and confidence

Unit 6

Sources of knowledge for designing lessons

1. Learning principles
2. Pakistan's primary school curriculum
3. Definitions of standards, goals, and objectives
4. Examples of standards, goals, and objectives
5. Bloom's Taxonomy of Educational Goals and Objectives

Assessment

1. Definition of assessment in schools
2. Personal experience with assessment
3. Assessment practices in schools in Pakistan
4. Purposes of assessment
5. Distinction between formative and summative assessment
6. Examples of formative assessment

Instructional materials

1. Sources of instructional materials, including textbooks, in Pakistan
2. School budgets for instructional materials
3. Low- and no-cost materials to supplement or substitute for materials provided by the government
4. Examples of materials created from local resources by teachers for mathematics, science, and literacy

Unit 7

Self-regulated learning

1. Becoming your own teacher
2. Parents and teachers attitudes towards self-regulated learning
3. Interdependence between learning and motivation
4. Intrinsic and extrinsic motivation
5. Mastery learning goals and performance learning goals

Recommended Books

1. B. Rosenshine, Principles of Instruction (Educational Practice Series No. 21) (Geneva: International Bureau of Education, 2010). Available at: [Øhttp://www.ibe.unesco.org/en/services/online-materials/publications/educational-practices.html](http://www.ibe.unesco.org/en/services/online-materials/publications/educational-practices.html)

2. UNICEF, 'What Makes a Good Teacher? Opinions from Around the World' (1996) <<http://www.unicef.org/teachers/teacher/teacher.htm>>, accessed on 23 February 2013.
3. S. Vosniadou, How Children Learn. (Educational Practice Series No. 7) (Geneva: International Bureau of Education, 2001). <http://www.ibe.unesco.org/en/services/online-materials/publications/educational-practices.html>
4. West Virginia Department of Education, 'Examples of Formative Assessment', <<http://wvde.state.wv.us/teach21/ExamplesofFormativeAssessment.html>>, accessed 5 March 2013

Semester-II				
Codes	Title of the Courses	Cr. Hrs.	Remarks	Marks
SOC 114	Civic and Community Engagements	02	Gen-Edu	50
SOC 227	Social Problems of Pakistan			
SOC 231	Human Rights			
SW 112	Citizenship Education			
MGT 215	Entrepreneurship	02	Gen-Edu	50
PSC 111	Ideology and Constitution of Pakistan	02	Gen-Edu	50
QR 101	Quantitative Reasoning-I (Mathematics)	03	Gen-Edu	100
CS 110	Introduction to Information and Communication Technologies	03	Gen-Edu	100
EDU 121	Child Development	03	Major	100
EDU 122	Foundations of Education	03	Major	100
Total Credit Hours		18		550

Course Title: Child Development
Course Code: EDU 121
Cr. Hrs: 03

Course Outcomes

After completing this course, Student Teachers will be able to:

1. describe major theories and themes about how children develop
2. compare the characteristics of various developmental stages according to different theorists
3. identify factors influencing the learning process
4. design age-appropriate teaching methods based on developmental theory
5. identify individual differences of students and children with special needs
6. reflect on their conceptions about child development and its implications for teaching and learning

Unit 1

1. Overview of growth and development
2. Psychosocial models
3. Behaviourism and socio-cultural models
4. Cognitive models
5. Factors that affect the child: Key issues and controversies
6. Approaches to classroom development

Unit 2

1. Unit introduction: Infant development
2. The three domains of toddler development
3. Developmentally appropriate practices for toddlers
4. The three domains of preschool child development
5. Developmentally appropriate practices for preschool child development
6. Unit review

Unit 3

1. Introduction to primary school-age child development
2. Aspects of physical development
3. Encouraging healthy physical development
4. Cognitive development: Overview and Piaget's concrete operational theory
5. Cognitive development: Industriousness and intelligences
6. Emotional development
7. Social development: Changes and parental roles
8. Social development: Peer interaction, friendship, and growth
9. Utilizing play in the classroom
10. Teacher's influence on student motivation and unit conclusion

Unit 4

1. Introduction and overview of physical development
2. Social and emotional development I: Erikson and development of self-identity
3. Social and emotional development II: The adolescent peer group

4. Social and emotional development III: Motivation and self-regulation
5. Cognitive and linguistic development I: Piaget
6. Cognitive and linguistic development II: Vygotsky
7. Cognitive and individual differences
8. Conclusion and review

Unit 5

1. Differences in student learning and performance strengths
2. Child development review I
3. Child development review II
4. Recognizing disability and learning disorders I: Emotional and behavioural
5. Recognizing disability and learning disorders II: Language, physical, and sensory
Cognitive differences: Delays and giftedness
6. Addressing special needs in the classroom: Differentiated instruction
7. School resources and support services for special-needs students
8. Reflection and review

Unit 6

1. The role of the nuclear and extended family
2. Role of community, culture, and society within families
3. Role of culture and society: Gender balance
4. Role of culture and society: Influence of media
5. Role of school, peers, and teachers
6. Teachers' influence on child development
7. Schools, families, and communities as partners in child development
8. Unit review
9. Course reflection and review

Recommended readings

1. Books Laura E. Berk, Child Development, 2nd ed. (Needham Heights, MA: Allyn and Bacon, 1991).
2. Alison Lee, Childminder's Guide to Child Development (New York: Continuum, 2008).
3. J. Santrock and S. Yussen, Child Development: An Introduction, 13th ed. (New York: McGraw Hill, 2010).
4. Web resources Child-development-guide.com. 'Child Development Theories and Major Contributors'. Ø www.child-development-guide.com/child-development-theories.html
5. Cognitive and Language Development. A comparison of Piaget and Vygotsky. Ø www.psyc.bbk.ac.uk/people/academic/thomas_m/MRCPsych_thomas_cogdev_140305.pdf
6. 'Erik H: Erikson: A Life's Work' (video). Ø <http://www.youtube.com/watch?v=mtlKXofxT-4>
7. Erikson's stages. (PowerPoint presentation of all eight stages; you may wish to use through the slide for 15–18 years): Ø <http://www.drchrustowski.com/DevelopmentalImplicationsofLearning.pdf>
8. PowerPoint presentation with a detailed presentation of Piaget's theory and critique: Ø www.virtualpsychology.co.uk/powerpoint/PiagetsCognitiveDevelopment.ppt
9. Studies in Social and Moral Development and Education. 'Moral Development and Moral Education: An Overview'. Theories of moral development (including Kohlberg). Ø <http://tigger.uic.edu/~lnucci/MoralEd/overview.html>
10. Noam Chomsky's nativist approach to language development. Ø <http://www.chomsky.info>

11. An overview of 'Chomsky's Stages of Language Development' is available at: Ø http://www.ehow.com/info_7864707_chomskys-stages-language-development.html#ixzz1PowsC2xB
12. Read 'Carl Rogers, Core Conditions, and Education' about Carl Rogers' holistic theory of personality and its implications for education at: Ø <http://www.infed.org/thinkers/et-rogers.htm>

Course Title: Foundations of Education
Course Code: EDU 122
Cr. Hrs: 03

Course Outcomes

After completing this course, Student Teachers will be able to:

1. The concepts of foundations and education
2. The influence of the disciplines that constitute the foundations of education on educational thought and practice
3. The interaction of the social, political, and economic structures of Pakistani society
4. How social structure and culture cause individual action
5. How these structures and cultures interact with the disciplines of the foundations and actually bear on instruction.

Student Teachers will be able to:

1. Differentiate between the various schools of thought that have influenced education on the whole and education in Pakistan in particular
2. Explain the idea of education and the social and philosophical influences on it
3. Evaluate the social structure of Pakistani society and the role of education in strengthening it.

Unit 1

The ideological foundations

1. The Islamic foundation (objectives) in light of the Quran and the Hadith
2. The Islamic concept of peace
3. The interaction of other religions with Islam in an Islamic state
4. The roles and expectations of the teacher

Unit 2

The philosophical foundations

1. The nature, scope, and function of the philosophy of education The role of educational philosophy
2. Main philosophical thoughts or schools of thought Idealism in education
3. Realism in education
4. Pragmatism in education
5. Critical philosophical theories in education

Unit 3

The sociological foundations of education

1. The functionalist perspectives on education
2. The conflict perspectives on education
3. The interactionist perspectives on education

Unit 4

The psychological foundations of education

1. The behaviourist perspective on education
2. The constructivist perspective on education
3. The social cognitivist perspective on education

4. The humanist perspective on education
5. Instruction, learning process, and assessment strategies in light of the psychological perspective

Unit 5

The historical foundations of education

1. The education system before the British invasion of the subcontinent
2. Darul Uloom Deoband
3. Darul Uloom Nadwat-ul-Ulma
4. Mohammedan Anglo Oriental College
5. Pakistan's education system (in light of education policies)
6. The state of elementary education
7. The state of secondary education
8. The state of tertiary education and the role of the HEC
9. The influence of the 18th amendment on education and thereafter

Recommended readings

1. Canestrari, A. & Marlowe, B. A. (eds.) (2009). Foundations of education: An anthology of critical readings. New York: Sage Publications.
2. Semel, S. F. (2010). Foundation of education: The essential text. New York: Routledge.
3. Holt, L. C. & Kysilka, M. (2005). Instructional patterns: Strategies for maximizing student learning. New York: Sage Publications.
4. Moore, R. (2004). Education and society: Issues and explanation in the society of education. Cambridge: Cambridge Press.
5. Sharma, A. (1999). Modern educational technology. New Delhi: Commonwealth Publishers.

Semester-III				
Codes	Title of the Courses	Cr. Hrs.	Remarks	Marks
QR 101	Quantitative Reasoning-II (Statistics)	03	Gen-Edu	100
ENG 102	Introduction Expository Writing	03	Gen-Edu	100
EDU 231	Teaching of Mathematics	03	Major	100
EDU 232	General Science (Content)	03	Major	100
EDU 233	Art, Craft and Calligraphy	03	Major	100
EDU 234	Classroom Management	03	Major	100
Total Credit Hours		18		600

Course Title: Teaching of Mathematics
Course Code: EDU 231
Cr. Hrs: 03

Course Outcomes

After completing this course, Student Teachers will be able to:

1. Demonstrate a deep understanding of key mathematical concepts in Pakistan's National Curriculum for mathematics in elementary grades
2. Identify and assess areas of youngsters' understanding and misconceptions to inform their teaching practices
3. Begin using the pedagogical skills and competencies required to teach mathematics in elementary grades
4. Describe the nature, history, and development of mathematics education in Pakistan and international

Content outlines

1. Prime and composite numbers
2. Factors and multiples
3. Division of whole numbers
4. Prime factorisation
5. Greatest common factor
6. Operations with fractions I
7. Least common multiple
8. Operations with fractions II
9. Fractions, decimals, per cents
10. Pie charts
11. Geometric ratios
12. Proportional thinking
13. Linear functions and simultaneous linear equations
14. Symmetry
15. Volume and surface area
16. Measurement and precision
17. Estimation and large numbers
18. Introduction and/ or review of seminal thinkers in mathematics and mathematics education

Recommended readings

1. National Council of Teachers of Mathematics, 'Illuminations'. Ø <http://illuminations.nctm.org>
2. New Zealand Ministry of Education, 'New Zealand Maths', Curriculum. Ø <http://nzmaths.co.nz>
3. University of Cambridge, 'NRICH: Enriching Mathematics'. Ø <http://nrich.maths.org>

4. Suzanne Donovan, John Bransford, eds. How Students Learn: History, Mathematics, and Science in the Classroom (Washington DC: National Academies Press, 2005). Ø www.nap.edu/catalog.php?record_id=10126#toc
5. Nancy Protheroe, 'What Does Good Mathematics Instruction Look Like?' Ø <http://www.naesp.org/resources/2/Principal/2007/S-Op51.pdf>
6. Tom Basserear, Mathematics for Elementary School Teachers (Belmont, CA: Brooks/ Cole, 2012).
7. Derek Haylock, Mathematics Explained for Primary Teachers, 4th ed. (Thousand Oaks, CA: SAGE Publications, 2010).
8. J. A. Van de Walle, K. Karp, and J. Bay-Williams, Elementary and Middle School Mathematics: Teaching Developmentally (Boston: Pearson Education, 2013)

Course Title: General Science (Content)
Course Code: EDU 232
Cr. Hrs: 03

Course Outcomes

After completing this course, Student Teachers will be able to:

1. Describe the interdependence of ecosystems and the organisms within and how changes affect populations and the equilibrium of a system. Relate evolutionary forces to the diversity of ecosystems and of the species within them
2. Identify the effects of human activities and naturally occurring changes on ecosystems and the consequences of those changes
3. Begin to see the Earth as a system consisting of major interacting components that consistently undergo change. Physical, chemical, and biological processes act within and among them on a wide range of timescales
4. Describe physical and chemical properties and physical/chemical processes with a special focus on the change of state of matter and how this change relates to energy
5. Develop an understanding of common misconceptions about matter and particle theory
6. Describe a chemical reaction in the context of a rearrangement of atoms and also in the context of the formation of a new substance with new properties
7. Investigate the relationships among force, mass, and motion of an object or system
8. Apply various models to science teaching while recognizing their limitations. Prevent potential misconceptions that could result from the use of some widely used models
9. Read, record, and analyse data and present that data in meaningful way

Course Outlines

Unit 1

1. Science in personal and social perspective
2. The nature of science and scientific investigation (observations and inferences)
3. Teaching of science: reflect upon the way Student
4. Teachers learned science and how they want to teach science when they graduate

Unit 2

1. Basic needs of living things
2. Interdependencies of living things (symbiotic relationships)
3. Ecosystems and habitats
4. Population growth: survival and extinction
5. Ecosystems and habitats
6. Population growth: survival and extinction

Unit 3

1. Diversity of living things
2. Systems of classification
3. Adaptations for survival

4. Evolution and diversity
5. Teaching ‘diversity and adaptations’ in elementary grades

Unit 4

1. Earth: an inhabitable planet
2. Weather and seasons
3. Categorizing the world by continents, biomes, vegetation zones, climate zones, etc
4. Introduction to maps; reading and creating simple data charts
5. Constant changes on Earth: rock cycle
6. Rivers (erosion/sedimentation)
7. Earthquakes and volcanoes
8. Teaching ‘diversity and adaptations’ in elementary grades

Unit 5

1. Relationship among force, mass, and motion of an object
2. Interaction of objects as it relates to force and linear, constant motion
3. Graphing of motion and basic calculations of speed and average speed
4. Non-linear motion and accelerated motion (laws of motion)
5. Graphing of non-linear and accelerated motion
6. Teaching ‘force and motion’ in elementary grades

Unit 6

1. Physical properties of matter, including melting point, boiling point, hardness, density, and conductivity
2. Atoms, molecules, mixtures, elements, and compounds
3. Introduction to the periodic table
4. States of matter: solid, liquid, gas (examples of water)
5. Introduction to models and their limitations in science teaching
6. Teaching ‘properties of matter’ in elementary grades

Recommended Readings

1. Target Science: Physics by Stephen Pople
2. Target Science: Chemistry by Michael Clugston and Rosalind Fleming
3. The Teaching of Science in Primary Schools by Wynne Harlen
4. Inquiry: Thoughts, Views, and Strategies for the K–5 Classroom – National Science Foundation
5. Ready, Set, Science! Putting Research to Work in K–8 Science Classrooms – National Research Council
6. Taking Science to School: Learning and Teaching Science in Grades K–8 – National Research Council
7. Lederman, N., and Abd-El-Khalick, F. ‘Avoiding De-Natured Science: Activities That Promote Understandings of the Nature of Science’. Retrieved from: http://toolbox.learningfocused.com/data/0000/0014/2125/Teaching_the_NatOSci.pdf.

Course Title: Art, Craft and Calligraphy
Course Code: EDU 233
Cr. Hrs: 03

Course Outcomes

After completing this course, Student Teachers will be able to:

1. explain the importance of art education and its role in child development recognize and appreciate artists, art styles, and artwork
2. explain the origins and development of a variety of crafts in Pakistan
3. use a variety of tools and materials to make art, crafts, and calligraphy
4. explain and apply elements and principles of design
5. identify links between art and other school subjects
6. assess children's work in art, crafts, and calligraphy
7. plan appropriate art, craft, and calligraphy activities for children in elementary grades
8. present a portfolio of their work that conveys their appreciation and interest in art, crafts, and calligraphy and presents evidence of their knowledge, skills, and dispositions for teaching these subjects

Unit 1

Introduction to the Art, Crafts, and Calligraphy course

1. Introduction to Art Education

1. Overview of the course
2. What is art? What is craft?
3. The course portfolio

2. Approaches to Art Teaching

1. Art and child development
2. Why teach art and craft in elementary grades
3. The role of the teacher in teaching art, crafts, and calligraphy
4. Calligraphy in different cultures and traditions around the world
5. Persian artists and their calligraphy
6. Pakistani calligraphers (Anwar Jalal Shemza, Syed Sadequain Ahmed Naqvi, Ismail Gulgee, and Shakir Ali)
7. Making calligraphy using different tools and mediums

Unit 2

History and culture

1. Art and culture in ancient Indus Valley civilizations
2. Art and crafts (the development of pottery and metalwork, printing on cloth, bead making)
3. Planning teaching and learning based on the art and culture of ancient
4. Indus Valley civilizations

20th-Century Art in Pakistan

1. Introduction to Cubism (Pakistani artists Shakir Ali and Mansoor Rahi)

2. Introduction to realism (Pakistani artists Ali Imam, Iqbal Hussain, Khalid Iqbal, and Anna Molka Ahmed)
3. Introduction to abstraction (Pakistani artists Ahmed Parve

Unit 3

Elements and principles of design

1. The elements and principles of design (lines and colour)
2. Elements of art and their importance: line, shape, form, space, texture, value, and colour
3. Lines and what they do in art
4. Types of lines: vertical, horizontal, diagonal, zigzag, and curved
5. Line variation, length, width, and texture
6. Colour and the colour wheel (primary, secondary, and tertiary colours)
7. Characteristics of colour: hue, value, and intensity

The elements and principles of design (size, shape, and texture)

1. Use of space
2. Two dimensions and three dimensions in art
3. Geometric shapes and forms
4. Organic shapes and forms
5. Texture

Printing and patterns

1. Printing: vegetable printing, leaf printing, and block printing
2. Pattern making: geometrical and organic patterns

Drawing and painting

1. Pencil drawing, graphite drawing, crayons, pastels, etc.
2. Shading techniques
3. Painting
4. Still life
5. Landscape

Unit 4

Crafts

1. Crafts in Pakistan
2. Crafts practiced and made in Pakistan
3. Crafts and technology
4. Doing craftwork and making handicrafts (for example, puppets and puppetry, textiles, making beads, making mosaics and mirror work, and pottery)
5. Doing crafts with children in the elementary grades
6. Doing craftwork and handicrafts
7. Crafts across the curriculum
8. Doing crafts with children in the elementary grade

Unit 5

Assessing art, crafts, and calligraphy in the classroom, and exhibition

1. Preparing to teach art, crafts, and calligraphy
2. Connecting art, crafts, and calligraphy across the curriculum
3. Managing art, crafts, and calligraphy in the classroom
4. What is assessment in art, crafts, and calligraphy education?

5. Preparing to teach art, crafts, and calligraphy, continued
6. Assessing children's learning during an art activity
7. Assessment rubrics
8. Planning for art, crafts, and calligraphy
9. Exhibition and portfolios
10. Arts and crafts exhibition
11. Display and assessment of Student Teacher projects and portfolios

Tour to Historical Places

1. Taxila Remains,
2. Takhtbhai Remains,
3. Jamal Garhi remains,
4. Pakistan Monument,
5. Lahore Museum
6. Lok Versa

Recommended readings

1. What is an art sparker? It's a creative prompt that excites your imagination. For a list of art sparkers: Ø <http://artjunction.org/resources/sparkers-resource/>
2. Generating art ideas: Ø <http://www.bartelart.com/arted/ideas.html>
3. Kinder Art has many ideas around which to plan arts and crafts activities for young children: Ø <http://www.kinderart.com/>
4. Principles of art and design 'The Elements and Principles of Art' is a useful PowerPoint presentation: Ø http://mullermaker.weebly.com/uploads/8/4/0/5/8405497/elements_and_principles.ppt
National Curriculum National Curriculum for Drawing Curriculum, Grades V1–V111. Search for the title of this document to download a soft copy (or search <http://unesdoc.unesco.org>)
Child development and art, children's artistic development
5. Caroline Sharp, 'Developing Young Children's Creativity: What Can We Learn from Research?' National Foundation for Education Research (2004), available at: Ø <http://www.nfer.ac.uk/nfer/publications/55502/55502.pdf>
6. Grace Hwang Lynch, 'The Importance of Art in Child Development': Ø <http://www.pbs.org/parents/education/music-arts/the-importance-of-art-inchild-development/>

Course Title: Classroom Management
Course Code: EDU 234
Cr. Hrs: 03

Course Outcomes

After completing this course, Student Teachers will be able to:

1. Define classroom management as a means to maximizing student learning.
2. Identify key features of a well-managed classroom.
3. Plan lessons, activities and assignments to maximize student learning.
4. Differentiate instruction according to student needs, interests and levels.
5. Design and practice predictable classroom routines and structures to minimize disruptions
6. Plan for a culture of caring and community in the classroom

Course Outline

UNIT 1:

Learning Theories and Classroom Management

1. Why a course on Classroom Management?
2. How does a teacher's personal philosophy about teaching and learning affect his or her beliefs about classroom management?
3. What happens in a well-managed classroom?
4. Classroom Observations and Data Collection (students spend 6 hours in a classroom including class and out-of-class hours)
5. What are the features of Classroom Management? (physical environment, social environment)
6. What challenges must teachers negotiate in the management of a classroom?
7. How do classroom discipline and management differ?
8. What kind of classroom environment do I want?
9. What do I need to think about in designing the effective classroom environment?
 - i. Identifying resources for learning
 - ii. Using displays and visuals for enhancing the learning environment in the classroom
 - iii. Seating arrangements for different kinds of learning experiences
 - iv. Physical facilities to enhance the learning environment
10. Building the social environment

UNIT 2:

Curriculum and Classroom Management

1. How can my curriculum support the classroom management?
2. In what ways can the teacher create a plan for teaching and learning that is consistent with her/his philosophy?
3. Planning, motivation, teaching and assessing the curriculum
4. Differentiation of instruction
5. Multi-grade classrooms
6. Over-crowded classrooms

UNIT 3:

Routines, Schedules and Time Management in Diverse Classrooms

1. What are classroom ‘routines’ and ‘structures’ and how do they help in the management of classroom time?
2. How do you create structures and routines in a multi-grade context?
3. How can routines and structures help me deal with special needs and situations?
4. How might routines and structures be used to teach specific subject content like Math, Science or Literacy?
5. How might routines and structures be used to promote cooperation and collaborative learning?

UNIT 4:

Creating Shared Values and Community

1. What is community inside and outside the classroom and school?
2. What is community participation and involvement?
3. What are typical practices of community participation?
4. How can I manage involvement of the community in my classroom?
5. What routines and structures need to be put in place?
6. In what ways might community involvement be different in multi-grade classroom?
7. How can I create an “ethic of care” in my classroom?
 - i. Diverse classrooms as caring, democratic communities
 - ii. Respectful relations between teacher and students, students and students
8. How can a caring classroom help me build responsible actions and personal accountability?
9. What happens when behavior breaks down?
10. How do I deal with unexpected events?

UNIT 5:

Planning the Classroom Environment I Would Like

1. I use what I have learned to create the classroom I want?
 - i. Peer critique and review of final projects
 - ii. Summary and closure

Recommended Readings

1. Evertson, C. M., & Emmer, E. T. (2009). *Classroom management for elementary teachers* (8th Ed.). Upper Saddle River, NJ: Pearson.
2. Marzano, R. J. (2003). *Classroom management that works: Research-based strategies for every teacher*. Alexandria, VA: Association for Supervision and Curriculum Development.
3. Fiore, C. (2009). *Characteristics of Classroom Management*. How Contributor.
4. Glasser, W. (1977). 10 steps to good discipline. *Today's Education*, 66, 61-63.
5. Hollowell, K. (2010). *How to Get Off to a Good Start with a Classroom Management System*. eHow Contributor.
6. Kohn, A. (1996). What to look for in a classroom. *Educational leadership*, 54(1), 54-55.
7. Moore, K. D. (2003). *Classroom Teaching Skills* (5th Ed.). New York: McGraw-Hill.

8. Yost, D., & Mosca, F. (2002). Beyond Behavior Strategies: Using Reflection to Manage Youth in Crisis. *The Clearing House, A Journal of Educational Strategies, Issues and Ideas*, 75, 264-267.

Semester-IV				
Codes	Title of the Courses	Cr. Hrs.	Remarks	Marks
EDU 241	Teaching of Urdu	03	Major	100
EDU 242	Teaching of General Science	03	Major	100
EDU 243	Instructional and Communication Technology	03	Major	100
EDU 244	Teaching Practice-I	03	Major	100
EDU 245	Classroom Assessment	03	Major	100
EDU 246	Teaching of English	03	Major	100
Total Semester Credit Hours		18		600


HEAD
 Department of Education
 University of Malakand

Assistant Registrar
 (Academics)
 University of Malakand
 05-Dec-2023

Course Title: Teaching of Urdu
Course Code: EDU 241
Cr. Hrs: 03

یونٹ ۱

نظریہ زبان (THEORY OF LANGUAGE)

تعارف:

زبان کے متنوع ماحول میں بچے کے لیے کثرت سے ماحولیاتی مواد زبانی اور تحریری صورت میں موجود ہوتا ہے جو والدین، عزیز واقارب اور اساتذہ کی جانب سے میسر آتا ہے۔ اس یونٹ میں زیر تربیت اساتذہ فراوانی زبان کی نمایاں خصوصیات (CHARACTERISTICS OF A LANGUAGE-RICH ENVIRONMENT) کو سمجھنے ہوئے آموزش زبان کے وسیلوں کے مطابق زبان کے فطری سانچوں پر تدارک حکمت عملی تیار کریں گے۔ مثلاً بچوں کو بات کرنے کے مواقع فراہم کرنا، ارد گرد کے ماحول پر رائے لینا، خواہش دریافت کرنا اور منظوم و نثری آسان فہم فراہم کرنا وغیرہ۔ اردو کی لسانی خوبیاں صوتی، قواعدی، بیتی نوعیت کی حامل ہیں۔ ان خوبیوں سے استفادہ کرتے ہوئے زیر تربیت اساتذہ جماعت اول ہشتم کے تدریسی مسائل پر کیسے قابو پاتے ہوئے جدید سبھی ڈیزائن میں کارآمد تدریسی تدابیر اختیار کرتے ہیں۔ اس یونٹ کا کام عملی تدریسی ماحول فراہم کرنا ہے تاکہ اساتذہ عملی مشق کی تیاری کر سکیں۔

پہلا ہفتہ

- ۰ نظریہ زبان (THEORY OF LANGUAGE)
- ۰ آموزش زبان کے وسیلے (پیدائش سے پہلے اور بعد کے محرکات، والدین، اساتذہ)
- ۰ اردو زبان کا متنوع ماحول

دوسرا ہفتہ

- ۰ اردو کی بنیادی لسانی خصوصیات (صوتی، قواعدی، بیتی)
- ۰ اردو سے متعلق غلط فہمیوں کا ازالہ
- ۰ اردو کی تدریسی تدابیر

تیسرا ہفتہ

- ۰ جدید سبھی ڈیزائن

نصاب برائے نفس مضمون/اردو ماہیہ (Content)

سال اول سیمسٹر - ۱

ایسوسی ایٹ ڈگری آف ایجوکیشن/ADE

بی ایڈ ایلیمینٹری/ (آنرز)

کریڈٹ: ۳

پیش لازمہ: (PREREQUISITES)

ایف اے سطح تک اردو لازمی پڑھنے والے طلبہ اس کورس میں داخلے کے اہل ہوں گے۔

کورس کا بیان: COURSE DESCRIPTION

یہ کورس خاص طور پر زیر تربیت اساتذہ کے لیے ترتیب دیا گیا ہے۔ اور یہ اہتمام کیا گیا ہے کہ زیر تربیت اساتذہ بنیادی لسانی مہارتوں (سننا، بولنا، پڑھنا، لکھنا، سمجھنا) میں کمال حاصل کر سکیں۔ ان مہارتوں میں دسترس حاصل کرنے کے لیے عملی طریق Functional Method استعمال کیا جائے گا۔

فکشنل (عملی) طریقے میں ساخت اور معنی دونوں کی اہمیت پر زور دیا جاتا ہے۔ اس طریقہ تدریس کے ذریعے زبان کے سیاق و سیاق یا سانچے یعنی کسی موقع پر ”کیا کہنا چاہیے“ پر خاص توجہ دی جائے گی۔ تاکہ زیر تربیت اساتذہ نظم و نثر میں فکری، فنی اور عملی سطح پر مہارت حاصل کر سکیں۔ یہ امر بھی قابل توجہ ہے کہ اس کورس میں اساتذہ قواعد دوران مطالعہ اسباق پر دسترس حاصل کریں گے۔

سادہ لکھائی کو متعارف کروایا جائے گا۔ تاکہ کورس کے اختتام پر طلبہ محض ادب کے نہیں بلکہ زبان کے استادا کہلائیں۔ کسی بھی زبان کی تدریس سے پہلے اس کے متن پر عبور ہونا ضروری ہے اس لیے نصاب میں وہ شعراء و ادباء شامل کیے گئے ہیں جو جماعت اول تا ہفتم تک درسی کتابوں میں پڑھائے جاتے ہیں۔ اردو کو بہ طور گول لینگوئج جدید رجحانات (ضرورتوں/ تقاضوں/ تعمیر جہتوں) کے حوالے سے بھی زیر بحث لایا گیا ہے۔ علاوہ ازیں ابتدائی جماعتوں میں پڑھانے کے طریقے ترکیبی (الف بائی + صوتی) تحلیلی، جملوی، فکشنل اردو کی تدریس پر خصوصی توجہ دی گئی ہے تاکہ ایلیمینٹری اساتذہ مہارت سے ان جماعتوں میں اردو پڑھا سکیں۔

حاصلات کورس: (COURSE OUTCOMES)

- اس کورس کی تکمیل کے بعد زیر تربیت اساتذہ اس قابل ہو جائیں گے کہ وہ:
- اردو زبان کی ساخت، وسعت اور اہلیت سے آگاہی حاصل کر سکیں۔
 - ادبیات کو زبان کے عملی تناظر میں زندگی کے حوالے سے سمجھ سکیں۔
 - مختلف موضوعات کو عملی و تحریری انداز میں بیان کر سکیں۔
 - اردو کے ابلاغ میں جدید رجحانات کے تحت نئی جہتوں پر عمل کر سکیں۔
 - زبان کے استاد کی حیثیت سے اپنی صلاحیتوں کی تنظیم نو کر سکیں۔

- تدریس زبان کے عملی پہلو کو ابتدائی و درمیانی سطح کی جماعتوں استعمال کر سکیں۔
- عملی طریق (Functional Method) سے نصاب پر دسترس حاصل کر سکیں۔

تعلیمی اور تدریسی رسائی: (LEARNING AND TEACHING APPROACH)

اس کورس کی ترحیب نو کے مقاصد کو پیش نظر رکھتے ہوئے تعلیمی اور تدریسی رسائی میں جدید و قدیم تدریسی طریقے مثلاً ترکیبی، تحلیلی، مخلوطی، استقرائی، استخراجی، انکشافی اور خصوصاً فنکشنل و عملی جیسے مستند طریقے استعمال کیے گئے ہیں سوالات کا اسلوب، سمعی بصری معاونات کا بروقت استعمال، انٹرنیٹ سے استفادہ، پیر لرننگ جیسی تدریسی تکنیکوں کا ماہرانہ انداز میں موقع پر برتنا سکھایا گیا ہے جو ایک مشاق استاد کی تدریسی حکمت عملی سے مزید کارآمد ہے۔

یونٹ 1

تعارف زبان

تعارف:

اس یونٹ میں زبان کی اہلیت کے وسیع تر موضوعات کو شامل کیا گیا ہے تاکہ اردو کے استاد کو ادب پر فنی اور زبان پر حتی الامکان دسترس حاصل ہو۔ جہاں زبان کی تاریخی حیثیت کے حوالے سے بابائے اردو مولوی عبدالحق کی کاوشوں کو سراہا گیا ہے وہیں ڈاکٹر محمد صدیق خان شبلی کے مضمون عملی، فنکشنل اردو سے بھرپور استفادہ کیا گیا ہے تاکہ نو آموز اساتذہ جدید تدریسی تکنیک اور مہارتوں کو بروئے کار لاسکیں۔ ان طریقوں سے تدریس کو ایک منظم سائنس کی صورت میں پڑھانے کے لیے کئی ایک اصولوں کو بھی اختیار کیا جائے گا۔ مثلاً: الفاظ کی بار بار مشق، تذکیر و تانیث، واحد و جمع، جملہ سازی، انتخابی مشقیں۔ ان طریقوں میں بنیادی تدبیریں استعمال کی جائیں گی۔ جو مثبت نتائج کا باعث بنیں گی۔ تاکہ انٹیمپٹری سطح کے اساتذہ زبان و ادب کی تدریس میں جدید طریقے استعمال کر سکیں۔

پہلا ہفتہ

- تعارف زبان (اردو زبان کی ترقی کا پس منظر و پیش منظر)
- زبان کی اہمیت و افادیت (فکری/فنی/عملی سطح پر)
- اردو کے فروغ میں درپیش مشکلات (تدارک/غلط فہمیوں کا ازالہ)

دوسرا ہفتہ

- اردو زبان کی کہانی از بابائے مولوی عبدالحق (مضمون کا مطالعہ)
- عملی/ فنکشنل اردو ڈاکٹر محمد صدیق خان شبلی (مضمون کا مطالعہ)
- مصنفین کا تعارف اور تعمیری کردار (اردو زبان کے حوالے سے)

اصنافِ ادب

(صرف محمد ترسیں ادبیات کا حصہ ہیں)

تعارف:

اس یونٹ میں اردو ادب کی اصناف کا مختصر تعارف شامل ہے۔ نثری اصناف میں داستان، ناول، ڈراما، مضمون، آپ بیتی، مکالمہ اور طنز و مزاح شامل ہیں۔ تاکہ ایلیمینٹری اساتذہ نثر کی تمام اصناف سے واقفیت حاصل کر سکیں۔ مثلاً مزاح ادب کی صنف ہے اور طنز صفت ادب ہے۔ علاوہ ازیں فن پارے کا تنقیدی جائزہ لینے کے اس کی ہیئت کا ادراک ضروری ہے۔ اس یونٹ میں ادبی اصطلاحات/قواعد کو جدید، عملی، فنکشنل اور ثقافتی طریقوں کے ذریعے روزمرہ زندگی سے مربوط کر کے پڑھایا جائے گا تاکہ قواعد نفس مضمون کا حصہ بن جائے اور زبان شناسی پر عبور کا باعث بن جاسکے۔ اسی ضرورت کے تحت اس کورس میں ادبی اصطلاحات کے ساتھ طلبہ جدید تعلیمی اصطلاحات کا استعمال بھی سیکھیں گے۔

مثلاً (زبانی انداز تعلیم) (Oral Approach) اور صورت حال کے مطابق تدریس زبان (Situational Language Teaching) جیسی اصطلاحات حالیہ دور کی پیداوار ہیں جن کا مقصد لسانی سانچوں کی تدریس کو بہتر بنانا ہے۔ تاکہ اسباق کی تدریس کے ساتھ جانچ (Testing) اور مشق (Exercise) کا کام بھی چلتا رہے۔ ان مقاصد کے حصول کے لیے سب سے پہلا قدم بے تکلف گفتگو کے مواقع پیدا کرنا ہے۔ مثلاً سننا بولنا تو سننے اور بولنے ہی سے آتا ہے۔ لہذا اس یونٹ میں سننے اور بولنے کے زیادہ سے زیادہ مواقع فراہم کیے جائیں گے۔

تیسرا ہفتہ

- ۰۔ اصناف نثر کا مختصر تعارف اجزا و اقسام/اصناف کا تقابل
- ۰۔ داستان (اجزا/ناول و داستان کا فرق)
- ۰۔ ناول (اقسام/ناول و افسانہ کا فرق)

چوتھا ہفتہ

- ۰۔ ڈراما (اقسام/اجزائے ترکیبی/روایت)
- ۰۔ افسانہ نگاری کا تعارف اشفاق احمد کے ”گڈ ریا“ کے حوالے سے (فکری و فنی تجزیہ)
- ۰۔ طنز و مزاح مشتاق احمد یوسفی کی مزاح نگاری کے حوالے مزاح اور طنز میں فرق کی وضاحت

پانچواں ہفتہ

- ۰۔ ماخوذ اقتباسات (صرف یعنی الفاظ سے بحث، نحو مکمل جملوں اور عبارتوں سے بحث)
- ۰۔ اغلاط زبان (بلحاظ قواعد فقروں کی تصحیح)
- ۰۔ محاورات (دوران گفتگو/عام بول چال میں استعمال)

نصاب اردو SYLLABUS URDU

نصاب برائے نفس مضمون / اردو ما فیہ (Content)

- ۰ کورس کا بیان (COURSE DESCRIPTION)
- ۰ حاصلات کورس (COURSE OUTCOMES)
- ۰ تعلیمی اور تدریسی رسائی: (LEARNING AND TEACHING APPROACHE)
- ۰ یونٹ (UNIT)

- ۱- تعارف زبان
- ۲- اصناف ادب
- ۳- اصناف سخن (نظم و غزل)
- ۴- انشا پر دازی
- ۵- اردو کے جدید رجحانات

- ۰ حوالہ جات (REFERENCES)
- ۰ اسائنمنٹ (مختلف موضوعات) (ASSIGNMENTS)
- ۰ کورس سے متعلق لازمی معلومات
- ۰ اردو سے متعلق غلط فہمیوں کا ازالہ
- ۰ تفصیلی سبقی خاکے

ساتواں ہفتہ

- ۰ سہمی اشارات/طریقہ ہائے تدریس (ابتدائی تا وسطانی سطح کی جماعتیں)
- ۰ سہمی ڈیزائن/تکنیکی مہارتیں/تدریسی حکمت عملی نظم و نشر

یونٹ ۳

عملی تدریسی طریقے (پڑھنا اور لکھنا) ابتدائی تا وسطانی سطح کی جماعتیں

تعارف:

اس یونٹ میں عملی تدریسی طریقوں (پڑھنا اور لکھنا) کی مشق کروائی جائے گی۔ تاکہ زیر تربیت اساتذہ الف بائی طریقے سے حروف کی ساخت اور تجللی طریقے سے مرکب جملے بنانے کی مشق کا استعمال اشارات سہمی کی تیاری میں خوب کر سکیں۔ مثلاً ابتدائی جماعتوں کے لیے حروف کی پہچان پر آزمائش تیار کرنا یا وسطانی جماعتوں میں مولانا روم کی حکایات پڑھا کر کہانی لکھنے کا ہنر سکھانا۔ تصویر دکھا کر کہانی کے مختلف پلاٹ تیار کرنا اور پھر سننے بولنے کی مشق کروانا جو ہر سطح پر کی جاسکتی ہے۔ تاہم ابتدائی تا درمیانی سطح کی جماعت کا معیار، استحسان و استدلال مد نظر رکھ سہمی اشارات تیار کیے جائیں گے۔ کیوں کہ اشارات سہمی کی تیاری اور عملی مشق ہر یونٹ کا حصہ ہیں۔ تاکہ زیر تربیت اساتذہ عملی مشق کی اہمیت سمجھ سکیں۔

آٹھواں ہفتہ

- ۰ طریقہ ہائے تدریس کا تعارف (ابتدائی و وسطانی سطح کے مطابق)
- ۰ الف بائی، جملوں کی تجللی طریقے
- ۰ فنکشنل/عملی اردو

نواں ہفتہ

- ۰ زبان شناسی کی تدریس (ابتدائی و ثانوی سطح کے مطابق)
- ۰ تدریس قواعد (بہ ذریعہ نظم)
- ۰ تدریس قواعد (بہ ذریعہ اقتباس)

دسواں ہفتہ

- ۰ رول پلے، بازی (FEED BACK)
- ۰ فنکشنل/عملی طریقے (ابتدائی و ثانوی سطح کے مطابق)
- ۰ تدریسی تدابیر (ابتدائی و ثانوی سطح کے مطابق)

گیارہواں ہفتہ

- ۰ منظومات پر مبنی اسباق کی منصوبہ بندی جماعت اول تا سوم
- ۰ نثر پر مبنی اسباق کی منصوبہ بندی جماعت اول تا سوم
- ۰ نثر پر مبنی اسباق کی منصوبہ بندی جماعت چہارم تا ششم

چھٹا ہفتہ

- ۰ ضرب الامثال (تعارف، تلخیص اور ضرب الامثال میں فرق)
- ۰ اوصاف خوش خوانی (تلفظ، لب و لہجہ، روانی، تاکید، تفصیل)
- ۰ تحت اللفظ (نثر و نظم سے عملی مشق)

یونٹ ۳

اصنافِ سخن (نظم و غزل)

تعارف:

زیر بحث یونٹ میں شعری اصناف، حمد، نعت، غزل، پیروڈی اور گیت شامل ہیں۔ اس یونٹ کا عملی پہلو یہ ہے کہ شعرائے کرام کے منظوم فن پاروں کا ایک استاد کی حیثیت سے فکری و فنی، تقابلی و تجلیلی تجزیہ پیش کر سکے۔ مثلاً میر کا ترکیبی شعر ہے۔

فقیرانہ آئے صدا کر چلے
میاں خوش رہو ہم دعا کر چلے

یہی خیال غالب کے ہاں تجلیلی رنگ میں ملاحظہ فرمائیے!

بنا
تماشائے اہل کرم دیکھتے ہیں

تو تہ حافظہ، فکر اور تخیل کی تربیت اس جہت کا لازمہ ہے۔ اس کوشش کو عملی رنگ دینے کے لیے تمثیل، رول پے، تحت اللفظ اور فی البدیہہ نظم گوئی کے رجحان کو فروغ دیا جائے گا۔

ساتواں ہفتہ

- ۰ اصنافِ سخن کا تعارف
- ۰ اردو نظم (تعارف، اقسام)
- ۰ اردو غزل (نظم اور غزل میں فرق)

آٹھواں ہفتہ

- ۰ علامہ محمد اقبال کی نظم ”روح ارضی آدم کا استقبال کرتی ہے“۔

Learning Outcome

At the end of the course the learners will be able to teach Urdu effectively at elementary level in an innovative and creative manner

Specific Objectives of course:

The course will provide the knowledge of:

1. To appreciate Urdu as a language
2. To make learner aware of how to teach Urdu in an interesting and interactive manners
3. To make the content of Urdu language acquisition skills vocabulary, and grammar easily comprehensible for students
4. To analyze the Urdu teaching skills through micro teaching

Course Outline

1. Four skills of a language learning
2. Listening and speaking in Urdu
3. Reading Development in Urdu
4. Writing Development in Urdu
5. Vocabulary manipulation in Urdu
6. Explaining Grammar in Urdu
7. Prose & Poetry teaching
8. Lesson Planning
9. Assessment

Recommended Books

فرمان فتح پوری 2005 تدریس اردو، قطار پبلشرز لاہور
سلیم فارانی 1990 اردو زبان اور اسکی تعلیم ادارہ مطبوعات فارانی لاہور
سید ساجد حسین 1987 اردو اور اسکے تدریسی طریقے کفایت اکیڈمی کراچی

Course Title: Teaching of General Science
Course Code: EDU 242
Cr. Hrs: 03

COURSE OUTCOMES

After completing this course, student teachers will be able to:

1. Apply inquiry to the teaching of science at the elementary level.
2. Identify, adapt, and modify investigations that lead to conceptual understanding.
3. Design science investigations around core concepts.
4. Understand the need for learning progressions.
5. Recognize common misconceptions and be able to respond with appropriate remedies.
6. Use open-ended questions to assess students' conceptual understanding.
7. Provide their students with exciting science experiences that extend their natural fascination with the world and help them learn the science skills and concepts they will need in later schooling and in life.
8. Reflect on their teaching to develop a personal approach to the teaching of science.

SEMESTER II OUTLINE

Unit 1

Course Overview Week (Topics/Themes)

Overview of course content (science and teaching)

Life of scientists and the role of science in society

Nature of science and its application for teaching

Introduction to independent course project, possible topics, and criteria

During this unit, prospective teachers will:

1. Understand that science reflects its history and is an ongoing, changing enterprise.
2. Read and reflect about the nature of science, and apply it to their own learning and teaching.
3. Distinguish between observation and inference.
4. Read about famous scientists and their lives, and relate their scientific quest to their own lives.
5. Investigate and present a science topic of their choice, applying their science and teaching of science knowledge following specific criteria (research component, science explanations, conclusions, transfer to teaching in elementary school grades).

Unit 2:

Energy Transfer, Transformations, and Conservation Week Topics/Themes

Types of energy (heat, light, sound, kinetic, potential, gravitational, etc.)

Investigating light

Energy transfer and transformation - Concept of conduction, convection, and radiation

Law of conservation of mass and energy

Teaching "Energy transfer, transformation, and conservation" in elementary grades

During this unit, prospective teachers will:

1. Distinguish among different forms of energy (kinetic, potential) and demonstrate that energy can be transferred and transformed.
2. Provide examples of kinetic energy being transformed into potential energy and vice versa.
3. Recognize that heat can spread from one place to another in predictable ways.
4. Provide examples of the transfer of energy from hotter to cooler objects by conduction, radiation, or convection.
5. Explain that energy can be transferred (e.g., by collisions and radiation) but never destroyed (conservation of energy).
6. Differentiate the states of matter based on their energy state (e.g., the structure of molecules and atoms in these different states varies from rigid in solids to independent motion in a gas).
7. View thermal energy (i.e., heat) in terms of atomic and molecular motion (i.e., the higher the temperature, the greater the atomic or molecular motion).¹
8. Compare the transmission, reflection, refraction, and absorption of light using different materials.
9. Listen for student misconceptions about properties and particle theory, and try to correct them.
10. Identify the underlying core science concepts in this unit for elementary students
11. Design age-appropriate, inquiry-based activities and identify learning outcomes.

Unit 3:

Interactions of Energy and Matter Week (Topics/Themes)

Review of physical and chemical properties and physical change

Solutions and solubility

Conservation of mass in solutions

Introduction to chemical reactions

Difference between chemical and physical reactions

The role of energy in explaining bonds

Applications of electrolysis

Teaching “Interactions of Energy and Matter” in elementary grades

During this unit, prospective teachers will:

1. Differentiate between physical and chemical properties, and physical and chemical change.
2. Gain an understanding that mass is conserved even when materials are dissolved.
3. Investigate how some common materials interact to form new materials.
4. Explain how in physical change properties of substances remain the same.
5. Provide examples of how the properties of a product of a chemical change are different than the products of the reactants.
6. Provide examples of the natural world in which energy is released (or needed) in chemical reactions (e.g., burning fossil fuels, photosynthesis).

7. Be able to identify some of the underlying core science concepts in this unit for elementary students.
8. Design age-appropriate, inquiry-based activities and identify learning outcomes.
9. Be aware of misconceptions about energy and matter, and learn what to do about them

Unit 4:

Earth's Systems Undergoing Constant Change Week (Topics/Themes)

Water, carbon, and rock cycle

Theory of plate tectonics - Living in the shadow of the big mountains

Climate change

Teaching “Earth’s Systems Undergoing Constant Change” in elementary grades

During this unit, prospective teachers will:

1. See the Earth as a system consisting of major interacting components that consistently undergo change. Identify physical, chemical, and biological processes act within and among them on a wide range of scales.
2. Begin to see that there are complex interactions between the atmosphere, the hydrosphere, and the lithosphere.
3. Apply the theory of plate tectonics to explain the formation of Pakistan’s mountain ranges and the threat of earthquakes.
4. Recognize how the movement of Earth’s lithospheric plates causes slow changes in Earth’s surface (e.g., formation of mountains and ocean basins) and rapid ones (e.g., volcanic eruptions and earthquakes).
5. Give examples of advances in technology that have made it possible to more accurately predict natural disasters.
6. Understand how human activities influence air and water quality, ecosystems, and climate across the globe.
7. Identify the underlying core science concepts in this unit for elementary students.
8. Design age-appropriate, inquiry-based activities and identify learning outcomes.

Unit 5:

Solar System and the Universe Week (Topics/Themes)

Characteristics of our Solar System

Earth and Sun compared to other objects in the sky

Working with and understanding large distances.

Origin and evolution of Earth (and the Solar System).

Teaching “Our Solar System and the Universe” in elementary grades

During this unit, prospective teachers will:

1. Differentiate groups of objects in the Solar System—including the Sun; the planets and their moons and rings; and smaller objects, such as asteroids and comets—by their size, composition, and position in the Solar System.

2. Compare and contrast the properties and characteristics of Earth with those of the other planets in our Solar System.
3. Explain, based on the naked eye and telescopic observation, how objects in the Solar System change position against the background of stars.
4. Begin to understand the scale of time and distance involved in deep space.
5. Describe how the early Earth was very different from the planet we live on today.
6. Identify the underlying core science concepts in this unit for elementary students.
7. Design age-appropriate, inquiry-based activities and identify learning outcomes.

Unit 6:

Human Body as a System Week (Topics/Themes)

Flow of matter and energy in living systems
 Circulatory and digestive system
 Structure, function, and organization of different cells.
 Cell processes
 Cellular respiration
 Teaching “Human Body as a

During this unit, prospective teachers will:

1. Connect an organism’s need for food with cells’ need for food.
2. Explain how multiple body systems work together to meet cell energy needs.
3. Examine and describe the flow of matter and energy in living systems.
4. Demonstrate through investigations that food is a source of energy (fuel) and building materials for cells.
5. Relate cellular respiration to the functions of body systems (e.g., how body systems function to provide cells with the necessary raw materials).

SUGGESTED TEXTBOOKS AND REFERENCES

1. There are many science books and other resources that could be useful during this course. Here is just a selection:
2. Target Science - Physics by Stephen Pople
3. Target Science - Chemistry by Michael Clugston and Rosalind Fleming
4. The Teaching of Science in Primary schools – Wynne Harlen
5. Inquiry – Thoughts, Views, and Strategies for the K-5 Classroom – National Science Foundation
6. Ready, Set, Science! Putting Research to Work in K-8 Science Classrooms – National Research Council
7. Taking Science to School: Learning and Teaching Science in Grades K-8 – National Research Council
8. The “History of Science” is a website that provides standards-aligned resources that make it easier to bring the history of science into a classroom. This site focuses on chemistry standards likely to be found in an introductory chemistry or physical science class.
<http://cse.edc.org/products/historyscience/default.asp>

COURSE ASSIGNMENTS

Suggested assignments are included in the Unit Guides of the course. Some are short-term assignments and some take several weeks to complete. A mix of individual and group assignments is also provided.

Course Title: Instructional and Communication Technology
Course Code: EDU 243
Cr. Hrs: 03

Course Outcomes

After completing this course, Student Teachers will be able to:

1. Explain why technologies are appropriate (and not appropriate) for certain types of learning (knowledge)
2. Utilize a range of technologies (radio, video, computer, online tools, and others) to create, plan, and deliver instruction (application)
3. Model effective use of ICTs to locate, analyse, create, and evaluate information resources to support teaching and learning (application)
4. Engage children in using digital tools and resources as part of an authentic or collaborative learning activity (integration)
5. Provide a well-articulated perspective on ICTs in education informed by personal experience and critical examination of resources, curriculum, and educational practice (evaluation).

Unit 1

Technology for teaching and learning: an examination of Pakistan's national education priorities

Guiding question

How can the use of technology support improved teaching and learning in Pakistan?

Readings

1. National Educational Policy 2009 (NEP):
<http://unesco.org.pk/education/teachereducation/files/National%20Education%20Policy.pdf>
2. National ICT Strategy for Education in Pakistan (excerpt included in the resources section of the course guide)
3. National Professional Standards for Teaching in Pakistan (NPSTP):
<http://unesco.org.pk/education/teachereducation/files/National%20Professional%20Standards%20for%20Teachers.pdf>

Suggested activity 1:

Peer instruction Assign sections of the three documents to individuals and/or small groups and ask them to lead small group discussions and/or make brief presentations to the class. The ideal way of handling this activity would be to have students teach one another via a jigsaw method. Ø <http://www.jigsaw.org>

Suggested activity 2:

Summary paper Ask Student Teachers to prepare a two- to four-page paper on the following question: What are the key points in Pakistan's three policy documents and how do they impact your work as a teacher?

Suggested in-class and online discussion topics Use the following prompts to initiate discussions with and between Student Teachers.

In class:

Look at 'Elements and Action Recommendations' numbers 1 to 3 in the National ICT Plan. The plan outlines very basic action recommendations on ICTs for educational opportunity, strengthening the quality of teaching, and enhancing student learning. As future teachers, how

would you expand on these suggestions? Make sure to include specific and detailed advice and examples.

Online:

Read through the three documents carefully (the NICT Strategy for Education, NEP, and NPSTP). All the documents in their own way spell out a vision for teaching and learning. What is that vision? How will teaching change as a result of this vision?

Portfolio task

How can the use of technology support improved teaching and learning in Pakistan? Ask Student Teachers to reflect on their online and classroom discussions and readings and to summarize their response in one to two paragraphs (word processed) and include it in their portfolios.

Unit 2

1. What do research and international standards say about teaching and learning with technology Guiding question
2. Can technology improve teaching and learning and if so, under what conditions?

Readings and video

1. 'Success, Failure or No Significant Difference: Charting a Course for Successful Educational Technology Integration' (this is a free article but registration is required): <http://online-journals.org/i-jet/login?source=%2Fi-jet%2Farticle%2Fview%2F2376%2F2522>
2. 'Case Study: Dana Elementary School': <http://p21.org/exemplar-program-case-studies>
3. 'Framework for 21st Century Learning': <http://www.p21.org/overview>
4. 'Technology in Education: Debate between Sir John Daniel and Robert Kozma': <http://www.economist.com/debate/days/view/120>

Suggested activity 1:

Debate Organize Student Teachers into debate teams to argue for and against the merits of using technology to support teaching and learning. To do this, Student Teachers will need to do additional research and prepare their debates based on actual evidence about the effectiveness of instructional technology.

Suggested in-class and online discussion topics

Use the following prompts to initiate discussions with and between Student Teachers.

In class: Based on the evidence you have examined, is instructional technology 'worth it'? Should schools spend money on computers? Should technology be used for teaching and learning?

Online: What are 21st-century skills? How can the use of technology support, or distract from, the promotion of these skills?

Portfolio task

Can technology improve teaching and learning and if so, under what conditions? Ask Student Teachers to briefly summarize the arguments that outline the strengths and weaknesses of technology for teaching and learning. As teachers, what strategies will they use to make sure they avoid these weaknesses? Student Teachers should provide between one and two paragraphs for their portfolio, word processed.

Guiding questions

1. What skills and knowledge do learners require in an increasingly global and interconnected world?
2. What knowledge and skills will you as future educators need to have to teach, work, and learn in an increasingly connected global and digital society?
3. Readings and video
4. National Educational Technology Standards for Students (NETS*S): Ø
<http://www.iste.org/docs/pdfs/nets-s-standards.pdf?sfvrsn=2> • National Educational

- Technology Standards for Teachers (NETS*T): Ø <http://www.iste.org/docs/pdfs/nets-t-standards.pdf?sfvrsn=2> • UNESCO ICT Competency Framework for Teachers (Appendix 1 only): Ø <http://unesdoc.unesco.org/images/0021/002134/213475E.pdf>
5. Suggested in-class and online discussion topics Use the following prompts to initiate discussions with and between Student Teachers.
 6. In class: Many Asian nations have adopted the UNESCO ICT Competency Framework for Teachers, while others have adopted the NETS*T. Based on your careful reading of both, which standards from each do you believe are most important for teachers and why? (List 5 to 10 reasons.).

Online:

Based on a careful reading of these three documents, what are the most important skills and knowledge your students, as learners in an increasingly global and interconnected world, will need? What are the most important skills and knowledge that you as future educators need to have to teach, work, and learn in an increasingly connected global and digital society?

Portfolio task

1. Ask Student Teachers to look through the ISTE NETS*T and UNESCO ICT Competency Framework standards again. How easy or difficult do they believe it would be to attain these competencies?
2. Ask Student Teachers to make a three-columned chart and label the top of each, 'Easier to attain', 'Harder to attain', and 'Hardest to attain' in their portfolio, placing the standards from each document under these column headings. When they finish, ask them quickly summarize in a paragraph where you think you are in terms of these standards.

Unit 3

Technology and Active Learning

Guiding question

How can technology support learner-centred instruction and active learning?

Readings and video

Connecting Student Learning and Technology: <http://www.sedl.org/pubs/tec26/flash.html> • Finland: Discovery through Technology: <https://www.teachingchannel.org/videos/discovery-through-technology> • Active Learning with Technology video series (watch three of the videos in this series): <https://www.teachingchannel.org/videos/discovery-through-technology>

Suggested in-class and online discussion topics

Use the following prompts to initiate discussions with and between Student Teachers.

In class: You have viewed a number of videos from the US and Finland and read about learner-centred instruction in the US. Based on the readings and video viewing, what patterns do you see across the examples that point to optimal teaching and optimal learning via technology?

In class:

Earlier we talked about 21st-century learning and looked at a 21st-century case study (Dana Elementary School, in Unit 2). How do learner-centred instruction and 21st-century learning complement one another or blend together? Are there any ways in which they might be contradictory?

Online:

Based on your reading of Connecting Student Learning with Technology, how would you define learner-centred instruction and active learning? How can technology support learner-centred instruction? How does technology support students' ways of working and learning?

Online: In the Finnish video, the teacher reports that ICT is not taught as a subject but integrated across all subject areas. What do you think of this strategy? What might be some of its pros and

cons? More importantly—how does this approach (learning technology within the content area versus through an information technology class) exemplify learner-centred instruction?

Portfolio tasks

Ask Student Teachers, based on what they have read and seen, what is their overall assessment of active learning? Is this really how children learn? Is it how they learn? Or, are there other, more effective strategies?

As Student Teachers, what concrete steps could they begin to take to set up a classroom that promotes active learning? Ask them to think about issues such as the layout of the classroom, materials, technology, communication, and how students would act, etc. Student Teachers should provide between one and two paragraphs for their portfolio, word processed.

Unit 4

Teaching with Technology: Using Technology to find and evaluate content

Guiding question

How do we begin to judge and evaluate and make sense of information from the world-wide web?

Reading ‘Developing Content’ in Distance Education for Teacher Training: Modes, Models, and Methods’ (Open Educational Resources, pp. 233–241): Ø
<http://idd.edc.org/resources/publications/modes-models-and-methods>

Suggested activity 1:

Evaluating perspectives and points of view This activity is very Internet-intensive and calls for Student Teachers to examine and search for a variety of websites. It helps Student Teachers see the diversity of opinions one can find on the Internet regarding any topic.

Organize Student Teachers in groups of three or four, depending on class size, so that each group examines one of the following webpages to answer the question: ‘Does technology improve student learning?’

Group 1: ‘Does ICT Improve Teaching and Learning in Schools?’: Ø
<http://www.bera.ac.uk/system/files/ict-pur-mb-r-f-p-1aug03.pdf>

Group 2: ‘Critical Reflections on the Benefits of ICTs in Education’: Ø
<http://www.tandfonline.com/doi/abs/10.1080/03054985.2011.577938#.UgPDB9LVCS0>

Group 3: ‘Technology and Classroom Practices: An International Study’: Ø
http://robertkozma.com/images/kozma_jrte.pdf

Group 4: ‘Can Computers Help Students Learn?’: Ø
<http://siteresources.worldbank.org/EXTHDOFFICE/Resources/5485726-1288802844934/Brochure-correct-4.pdf>

Group 5: ‘Bridging the Gap: Technology Trends and Use of Technology in Schools’: Ø
http://www.ifets.info/journals/16_2/6.pdf

Group 6: ‘A Retrospective on Twenty Years of Educational Technology Policy’: Ø
http://ocw.metu.edu.tr/file.php/118/Week12/Culp_JECR.pdf

Group 7: ‘Effects of Using Instructional Technology in Elementary and Secondary Schools: What Controlled Evaluation Studies Say’: Ø
<http://citeseerx.ist.psu.edu/viewdoc/download?rep=rep1&type=pdf&doi=10.1.1.207.3105>

These articles all present varying evidence-based responses to the same question. Have Student Teachers make a brief (10-minute) presentation to the class. How credible is the evidence they found in these sites? How rigorous does the research appear to be? To what degree do authors use evidence to support their arguments? How compelling and reliable does this evidence seem to be? Have Student Teachers take their research findings (based on their group number) and ‘triangulate’, or compare, them to the research they read in Unit 2. Ask them to find additional research online that supports or refutes this point of view and ask them again to report to the class.

As this activity concludes, ask Student Teachers, based on their findings, discussion, and new findings, to answer again the question, ‘Does technology improve student learning?’ (The answer is that the research is inconclusive. Hopefully, Student Teachers’ responses will reflect the complexity and conflicting evidence on the effectiveness of instructional technology on student learning. The point here is to help them see that there are multiple points of view and responses to what seem to be simple questions).

Guiding questions

How can the Internet and digital content help students better learn content? As teachers, what guidelines should we have for finding and using web content?

Open Educational Resources

WikiEducator is an online community designed to help teachers plan and teach with open content: Ø http://wikieducator.org/Main_Page • OER Commons is a database of open education content organized by subject area: Ø <http://www.oercommons.org>

Multimedia • National Library of Virtual Manipulatives is a library of interactive, web-based virtual manipulatives or concept tutorials, mostly in the form of Java applets, for mathematics instruction: Ø <http://nlvm.usu.edu/en/nav/vlibrary.html> • Owl & Mouse Software offers free educational games and puzzles: Ø <http://www.yourchildlearns.com/owlmouse.htm> • Khan Academy offers thousands of free online tutorials across a range of subject areas: Ø www.khanacademy.org • The Blood Typing Game is an online game that helps students understand blood types: Ø <http://www.nobelprize.org/educational/medicine/bloodtypinggame/game/index.html>

Lectures and lesson plans

MIT Blossoms is a Science, Technology, Engineering, and Mathematics (STEM) video site offered by the Massachusetts Institute of Technology. There are lectures in Urdu: Ø <http://blossoms.mit.edu/> • Academic Earth offers free lectures by professors at Yale University: Ø <http://academicearth.org/> • Curriki includes free units and lesson plans designed by teachers across the globe: Ø <http://www.curriki.org/> • K-12 Open Ed is a place for educators to share ideas and lessons regarding teaching with OER: Ø <http://www.k12opened.com/>

Guiding questions

How can the Internet and digital content help students better learn content? As teachers, what guidelines should we have for finding and using web content?

Suggested activity 3:

Finding and evaluating web-based content to promote subject area mastery Content mastery here means the ability to 1) organize knowledge around core concepts, or ‘big ideas’, within a particular content topic, 2) recognize meaningful patterns of information within a topic or domain and be able to communicate these clearly, 3) retrieve relevant knowledge of a particular concept or skill and apply it to new situations, and 4) solve problems within a particular domain.

Student Teachers must find 10 web resources or sites that they feel would be most effective to help learners master a particular content topic or generally help learners better understand a

particular content area. The Student Teacher will need to evaluate the sites based on the evaluative criteria in the handout 'Evaluating Educational Content on the World Wide Web: Evaluation Criteria' and must be prepared to share online and in their portfolios ideas on using such sites in their own practice.

Suggested in-class and online discussion topics

Use the following prompts to initiate discussions with and between Student Teachers.

In class: How can the Internet and digital content help students better learn content? As teachers, what guidelines should we have for finding and using web content?

Online:

Based on the websites you examined as part of Assignment 2, how can the web and web-and-digital content support student's content mastery?

Possible responses include: • Organize knowledge around core concepts or 'big ideas' within a particular content topic • Recognize meaningful patterns of information within a topic or domain and be able to communicate these clearly • Retrieve relevant knowledge of a particular concept or skill and apply it to new situations • Solve problems within a particular domain

Online:

How can these sites help you as a teacher better teach a particular content area? If you do not have technology in your classes, do they still provide information and guidance on how you might teach a particular content topic?

Portfolio task

Ask Student Teachers to develop an annotated list of ten resources that they believe are most helpful in teaching a particular subject, or topic within a particular subject. Why did they choose these particular sites? What attributes do these sites have that would improve student learning?

Unit 5

Technology and Instruction

Guiding question

What are some specific technologies for teaching and learning and how can they support improved student learning?

Reading 'Technology, Teaching and Learning:

Research, Experience and Global Lessons Learned' (pp. 56–86 only): Ø
<http://www.unescobkk.org/education/ict/online-resources/databases/ict-in-education-database/item/article/technology-teaching-and-learning-research-experience-global-lessons-learned/>

Suggested activity 1:

A technology for teaching and learning This activity examines the research on commonly found classroom technologies and discusses how they do or do not impact student learning.

Ask Student Teachers, based on their reading of 'Technology, Teaching and Learning: Research, Experience and Global Lessons Learned', to create a matrix for each of the technologies they read

about. The matrix should have three columns: 1) Type of technology (for example, word-processing software) 2) Research-proven learning benefits 3) Ways they could use this technology with students as part of teaching and learning

Ask Student Teachers to post their matrices on Edmodo.

In a whole-class discussion, discuss which of the technologies they studied should, based on research findings and the available technologies at Pakistani schools, be their top three choices to use.

Suggested activity 2:

Integrating technology into teaching and learning This activity focuses exclusively on technology integration—what technology looks like when it is being integrated into teaching and learning. This activity relies heavily on one main resource, the University of South Florida’s Technology Integration Matrix (they will need to download QuickTime unless they have an Apple computer):
Ø www.fcit.usf.edu/matrix/matrix.php

The University of Southern Florida’s Technology Integration Matrix (TIM) models how teachers can use technology to enhance learning for students in maths, science, social studies, and language. The TIM incorporates five interdependent characteristics of meaningful learning environments—active, constructive, goal directed (i.e. reflective), authentic, and collaborative learning—and associates these with five levels of technology integration (i.e. entry, adoption, adaptation, infusion, and transformation).

For this assignment, ask Student Teachers to do the following. 1) Analyse technology integration by subject area. Select one subject area (such as maths, science, etc.) and examine the integration of technology within this particular subject area along a continuum, from entry, adoption, adaptation, infusion, and transformation. Use the Technology Integration Matrix to assess the level of technology integration. 2) Create a similar 5-by-5 matrix (five columns that describes what each level of technology adoption looks like in practice) and the varying levels of learning (active, constructive, goal directed, authentic, and collaborative) that each level of technology integration helps to foster. (These five levels will be in rows.) 3) Analyse technology integration across subject areas. Return to the TIM and divide Student Teachers into groups, each of which analyses the videos across all subject areas by level of integration—entry, adoption, adaptation, infusion, and transformation. One group should look at entry only, one group at adoption, one should examine adaptation, etc. As groups analyse their level of technology integration, they should write down the characteristics that are common to each level. (For example, which characteristics does a classroom at the entry-level stage of technology integration exhibit?) Once they have done this, they make a presentation to the whole class or somehow share findings with the whole class.

Suggested activity 3:

Teaching with technology In this activity, Student Teachers examine examples of teaching with technology.

Videos • Singapore’s 21st-Century Teaching Strategies: Ø <http://www.edutopia.org/education-everywhere-international-singapore-video> • The Power of Collaborative Learning: Ø <http://www.edutopia.org/stw-collaborative-learning-tips> • Real-world Problem Solving: Designing an iPad Case: Ø <https://www.teachingchannel.org/videos/high-school-engineering-lesson>

After watching the videos, Student Teachers will discuss the teaching competencies they need to effectively teach with technology. This can be in the form of a classroom discussion, reflective paper, or small group discussions. Probes may include: • How do these videos illustrate effective

technology integration into teaching and learning? In other words, what is technology used for? What is its function in these examples? • Based on what you have seen in these videos, how does the use of technology promote active learning? • Based on what you saw and heard in these videos, what do teachers do to successfully integrate technology with active learning? And what do teachers not do to allow active learning to occur? • What common characteristics of teachers and teaching do you see in these three video examples?

Suggested activity 4:

Teaching in the one computer classroom In most classrooms that Student Teachers enter, there will be no or limited technology. This activity helps Student Teachers learn how to carry out learnercentred activities with only one computer.

Readings and video • ‘

Managing the Limited Computer Classroom’ (resource in the course guide) • ‘One Computer Classroom: The Possibilities’: Ø <http://eduscapes.com/tap/occl.pdf> • One-computer classroom activity with learning stations (in Indonesian): Ø <http://www.youtube.com/watch?v=LuT5w0QLodU>

Make sure that Student Teachers understand how each of the one-computer classroom models work.

Have Student Teachers begin to brainstorm a lesson plan that meets the following criteria: • Uses a one-computer learner-centred model (navigator model, expert model, learning stations model, collaborative groups model) • Uses one type of software or application (e.g. word processing, PowerPoint, or concept maps) • Learner-centred (see definition in this document for learner-centred instruction) • Lasts one class session

Student Teachers may do this in pairs, meaning they plan together and co-teach the activity. Each submits the same lesson plan as part of their portfolio.

Student Teachers will conduct this activity with students in a classroom in Weeks 12 and 13. They and the Instructor will observe and give them feedback. Examples of activities might include a game (using PowerPoint with students in teams) or a writing activity (with students in stations; each station writes a part of the story on the computer).

Suggested activity 5:

Planning, designing, and practice teaching the computer-based activity For this activity, Student Teachers will need to be able to go to schools. The Instructor will need to arrange visits with schools and arrange for Student Teachers to practice teach the lesson they design. There are no readings. However, if teachers want to use concept-mapping tools, they may use the free online concept-mapping tool Lucidchart. Ø <https://www.lucidchart.com>

The next two to three weeks should involve Student Teachers planning the above one-computer activity. The sequence of events should follow: 1) Brainstorming. Ask Student Teachers to think back to the resources they have examined throughout this course; for example, web-based content, classroom examples from Connecting Student Learning and Technology, video examples from across the globe (Finland, Singapore, and the US), the Technology Integration Matrix, and the ‘Active Learning with Technology’ video series. Use these resources to begin brainstorming ideas, activities, or characteristics of their activity. During the brainstorming period, they should also choose the technology they wish to use, such as the Internet, mobile phone, concept mapping, PowerPoint). 2) Learning objectives. What two to three things do they want students to

know or be able to do as a result of this activity? 3) Lesson planning. Begin sketching out a lesson plan. Include lesson objectives, the activity, what the teacher will do, what the students will do, what technology will be used, by whom, how, and for what purpose. The lesson plan should have a beginning, middle, and end and be extremely detailed. 4) Instructor review and feedback on lesson plan. This must be done in a timely fashion—during class, in face-to-face meetings or in Edmodo.

Suggested in-class and online discussion topics Use the following prompts to initiate discussions with and between Student Teachers.

In class: Of the activities you saw or read about, which to you seemed to represent the best use of technology? Why? By what criteria did you assess these uses?

In class: Progress update. Where are you in the design of your lesson plan? (Have Student Teachers share.) Where do you need help? What else would you like to do during the lesson?

In class: Post-activity debrief. How did your activity go? What were its strengths and weaknesses? How did students react? Is there anything you would do differently the next time? Overall, on a scale from 1 to 10 (1 being lowest and 10 being highest), how would you rate this activity?

Online:

What themes or big ideas do we see from these resources about successfully using technology to improve student learning? • How will you begin to incorporate these big ideas into your own lesson design? • In Unit 3, we discussed the importance of integrating technology and learner-centred instruction (active learning). Going back to the reading, what connections do you see between active learning strategies and research-proven effectiveness of certain types of technology?

Online:

Think back to the standards we reviewed in Unit 2 (review UNESCO standards and ISTE's NETS*S and NETS*T). To effectively integrate technology into teaching and learning, what competencies must students and teachers have? What standards for instruction must be followed?

Online:

Share the outline of your lesson plan. What are your learning objectives? How will technology help attain these objectives? What is your lesson (activities by which students will engage with technology)? Provide feedback to your classmates about these lesson ideas.

Unit 6

Technology and Assessment

Guiding question

How can technology be used to assess student learning?

Web resources • Tools for Assessment: Ø

<http://tep.uoregon.edu/technology/assessment/assessment.html> • Rubistar is an online rubric maker: Ø <http://rubistar.4teachers.org/>

Reading and video • ‘

Technology and Learning: Defining What You Want to Assess’: Ø <http://net.educause.edu/ir/library/pdf/eli3005.pdf> • ‘From Questions to Concepts’ (clickers and peer instruction): Ø <http://www.youtube.com/watch?v=IBYrKPoVFwg>

Suggested activity

Engage in whole-class discussions using the in-class discussion prompts.
Suggested in-class and online discussion topics

In class: Let's focus on Professor Erik Mazur's class in the video example, 'From Questions to Concepts'. This is an example of formative assessment using clickers (or student response systems). How exactly would you explain the sequence of his class? How is technology used as part of formative assessment? What does he mean when he says, 'You can teach facts but you can't teach understanding'?

In class: Of the various technologies for assessment that you examined, which seem most effective as assessment tools? Why?

Online:

In this course, we have used technology for assessment throughout the course. What are these technologies? How have they assessed learning? How have they promoted learning?
Portfolio tasks Explain to Student Teachers that technology is only a tool, but assessment is a practice designed by teachers. Ask Student Teachers to consider the following:

Based on what they have read, examined, and watched, how can technology used as part of assessment check for student understanding, monitor student progress, and ultimately improve student learning? They should provide examples from the resources they have accessed, in addition to any other relevant resources. Student Teachers should write between one and two paragraphs for their portfolio, word processed.

Unit 7:

Alternatives to Computers and the Internet: Interactive Radio Instruction

Guiding question

How might you use Interactive Radio Instruction or Interactive Audio Instruction (IAI) as alternatives to computers and the Internet?

Videos • Interactive Radio Instruction (IRI) Improves Indian Student Learning: Ø <https://edutechdebate.org/ict-tools-for-south-asia/interactive-radio-instruction-iri-improves-indian-student-learning/> • Tuned In To Student Success: Assessing the Impact of Interactive Radio Instruction for the Hardest-to-Reach: Ø http://www.equip123.net/JEID/articles/4_2/HoThukral.pdf • Clips of IRI from several countries, including Pakistan Ø http://idd.edc.org/resources/audio?field_topic_nid=236&field_region_nid=All • Interactive Radio Instruction (watch videos from India and Zanzibar): Ø <http://vimeo.com/channels/238742>

Suggested activity:

IRI or computers for Pakistani classrooms? IRI, unlike computers and the Internet, has a long body of research proving its effectiveness as a learning tool. Yet it is regarded as an old technology, and is not as multimodal or multipurpose as a computer or online learning. Organize Student Teachers to prepare for and debate the question: Which technology should Pakistani classrooms invest in, and why?

Suggested in-class and online discussion topics

Use the following prompts to initiate discussions with and between Student Teachers.
In class: Based on the readings and videos, how do you think a teacher might use IRI/IAI to promote learner-centred instruction?

Online: How does IRI exactly work? Based on what you have read and seen, as a teacher, how would you assess its strengths and limitations as a teaching tool?

Portfolio task

Ask Student Teachers to reflect on the debate. Ask them what ideas IRI and IAI give them about using technology for their own teaching practice. Do they see any learning advantages of audio over video? How might they incorporate audio into your teaching? Student Teachers should write between one and two paragraphs for their portfolio, word processed.

Unit 8

Emerging Technologies and Technology Trends

Guiding questions

How might these new technologies and new ways of technology use impact student learning (for better or worse)?

What do teachers need to know and be able to do to prepare for these changes?

Reading and video ‘The NMC Horizon Report: K-12 Edition’ provides an overview of emerging technologies and technology trends: Ø <http://www.nmc.org/horizon-project/horizon-reports/horizon-report-k-12-edition>

Emerging trends

Robotics: Videos • A teacher talks about middle school robotics: Ø <http://www.schooltube.com/video/984468bef2bbbe866696/> • Changing Classrooms with Robotics: Ø <http://www.schooltube.com/video/079bc2fffdca43ba8cd8/Changing%20Classrooms%20with%20Robotics>

Tablets: Video and website • A teacher talks about using the iPad in her classroom (some commercial content): Ø <http://vimeo.com/51486168> • Teachers Guide on the Use of the iPad in Education: Ø <http://www.educatorstechnology.com/2012/06/teachers-guides-on-use-of-ipad-in.html> • The Best Education Apps for iPad: Ø <http://www.educatorstechnology.com/2012/12/a-list-of-all-best-ipad-appsteachers.html> • The Best Education Apps (Android): Ø <http://www.edudemic.com/best-education-technology/the-best-education-apps-android/>

Mobile phones: Videos • Cell phones for learning: Ø <http://depts.washington.edu/etuwbltblog/?p=1553> • SmartPhones for literacy: Ø <http://www.youtube.com/watch?v=Z2ADAnJo4XQ> • Mobile learning for adult education: Ø <http://www.youtube.com/watch?v=6JbN16oL3Ho>

Digital games: Websites • Educational Games from Canada’s Centre for Digital and Media Literacy: Ø <http://mediasmarts.ca/digital-media-literacy/educational-games> • PBS Kids: Games Ø <http://pbskids.org/lab>

Flipped learning:

Websites •

What is 'flipped learning'? : Ø <http://www.youtube.com/watch?v=ojiebVw8O0g> • Flipped Learning Network: Ø <http://flippedlearning.org/site/default.aspx?PageID=1> • Flipped learning: TED talk: Ø http://www.youtube.com/watch?v=etQJPG_CY78

Blended learning: Videos • The basics of blended learning: Ø <http://www.youtube.com/watch?v=3xMqJmMcME0> • Blended learning and math: Ø <http://www.youtube.com/watch?v=wAvWvP7jvRI>

Massively Open Online Courses (MOOCs): Websites and video • What is a MOOC?: Ø <http://www.youtube.com/watch?v=eW3gMGqcZQc> • Success in a MOOC: Ø <http://www.youtube.com/watch?v=r8avYQ5ZqM0>
Optional resource (Web 2.0) Web 2.0 Tools for Teachers: Ø https://docs.google.com/file/d/0Bww9YyVv1C_MMmhyQUM3V1BQWFE/edit

Suggested activity: Small group exploration and peer instruction Because of the number and diversity of websites to be examined, the Instructor may wish to assign certain sets of websites to small groups and ask Student Teachers to teach one another about these different types of emerging technologies in an in-class setting. This may involve straightforward peer instruction, small group presentations to the whole class, a jigsaw method, or having students hold an online lesson in Edmodo where they teach one another.

Suggested in-class and online discussion topics

Use the following prompts to initiate discussions with and between Student Teachers.

In class Student Teachers will participate based on their assigned group.

As a teacher having viewed these emerging technology trends, what do you think these trends will hold for the role and function of a teacher? What will you need to do or change in your own teaching as a result of these trends?

Online In this week's discussion, Student Teachers will do the following: • Share their emerging technology. What is it? Ask them to briefly describe how it is used for teaching and learning. • What value does it add to teaching and learning? • What is it about this particular technology that helps students learn in ways that are different from traditional technologies (e.g. IRI, computers, stand-alone software)?

Portfolio task Ask Student Teachers to think of the emerging technologies they have seen and read about. Ask them to discuss in a one- or two-page paper which they believe to hold the most promise for improved student learning, and why.

Course Title: Teaching Practice-I
Course Code: EDU 244
Cr. Hrs: 03

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 4.

Student Teachers should aim to spend six weeks at school for the practicum in Semester 4.

COURSE DESCRIPTION

The Practicum consists of two important parts:

1. A school placement in an elementary school;
2. A seminar that meets regularly.

1. School Placement:

The practicum experience in Semester 4 should provide elementary grade student teachers with a practicum placement in an elementary classroom This teaching practice builds on experience in semester 3 when student teachers worked with children at two different grade levels. As in semester 3, the practicum should provide student teachers with carefully sequenced and supervised experiences, with student teachers gradually assuming responsibility for teaching several subjects with the whole class, starting with one subject in week 3, and picking up an additional class in week 4, and an additional class in week 5. So for the last two weeks you should assume full responsibility for at least 3 classes

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).³ 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.

Ideally, groups of three or four student teachers should be placed in each school. Avoid having too many student teachers in one school and more than one student teacher per class (unless they are doing an activity or assignment that requires them to work together).

Opportunities for peer coaching as well as coaching by the cooperating teacher and college/university supervisor should be provided. Student teachers should be encouraged to take advantage of the opportunity to interact with parents and to develop skills for communicating with parents under the guidance of the cooperating teacher.

2. The Seminar:

As in semester 3, a weekly seminar will accompany the practicum to help student teachers link the content of the pre-service program content to practice. The seminar should provide an opportunity to clarify and revise their teaching goals and their beliefs about a wide range of educational issues. Although the seminar should be related to and build upon classroom observation and teaching experiences, it should be focused on inducting student teachers into professional practice. Habits of thinking that provide the foundation for continued growth as a teacher are as important as strategies for solving immediate classroom issues and problems. The seminar should also provide a forum for student teachers to share and resolve problems or challenges they are experiencing during their practice.

Student teachers will be asked to complete several types of assignments. Most, but not all, of these assignments will be directly linked in some way to classroom experiences. For example:

1. Present an analysis of own or a peer's teaching;

2. Conduct an observation focused on specific classroom practices or an individual child;
3. Try out a particular method and reflect on its success in achieving its purpose;
4. An interview with of a teacher and a child.

All of the assigned tasks should be flexible enough to allow for adaptation to a wide variety of classrooms.

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.

LEARNING AND TEACHING APPROACHES

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.

SEMESTER OUTLINE

1. School experiences

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.

Each college or university will have its own plan for the practicum. It may be organized in a variety of ways. Student teachers can expect the following types of activity and progression during the practicum in Semester 4:

Week 1: Introduction to the school and classroom context.

1. Complete the Student Teacher Checklist, provided in your handbook.
2. Meeting with the cooperating teacher to discuss how he/she plans for instruction, expectations and the like
3. Non-observational Assignments, which will provide you with an opportunity to familiarize yourself with the school, staff, school rules, policies etc. The

assignments you are required to complete will depend on your current placement. See the note below.

If you are completing this practicum at a different school than the one you worked in for Semester 3, you will need to complete the assignments provided in your handbook.

Inventory of School Resources,
Community/Co-curricular Engagement
Discipline Procedures and Policies
Cooperating Teacher Interview
Interview a Child/Children
Classroom Management

If you are at the same school as you were in Semester 3 – but working with a different teacher you need to complete the assignments provided in your handbook.

Cooperating Teacher Interview
Interview a Child/Children
Classroom Management

1. Log of Daily Activities
2. Daily Reflections (see the forms provided in your handbook)

Classroom Observations which will provide you with an opportunity to learn how your teacher engages with the children using verbal behavior and how to pace a lesson

1. As requested by the Cooperating Teacher, working with children who need extra help and with small groups of children to carry out the teacher's plans

Week 2: Assisting the teacher in classroom instruction as requested and assuming responsibility for planning, teaching and assessing at least part of the lesson.

1. Co-planning and co-teaching with the Cooperating Teacher
2. Working with children who need extra help
3. Completion of any non-observational assignments still outstanding
4. Completion of classroom Observations which will provide you with an opportunity to observe children's engagement through their verbal responses and what types of verbal interaction occur in the classroom (selective verbatim)

Working with small groups of children to carry out the teacher's plans

1. Co-teaching lessons with the Cooperating Teacher
2. Finding out about assessment – what strategies does the teacher use

Week 3 Assuming responsibility for planning, teaching and assessing a at least one subject matter's lesson

1. Co-plan full lessons with the Cooperating Teacher
2. Co-teach lessons for one subject matter each day
3. Working with children who need extra help
4. Classroom observations that will provide you with information on how to use questions effectively to engage children. You should also consider using the observation tools provided in your Semester 3 handbook to learn about other aspects of teaching and learning.
5. Prepare for a formal observation by your Cooperating Teacher using the Formal Observation Cover sheet, pre-observation guide, and post observation reflection sheet.
6. Prepare for a formal observation by your College/University Supervisor using the Formal Observation Cover sheet, pre-observation guide, and post observation reflection sheet.

7. Prepare for a mid-way triad meeting.
8. Use the Notes for Self Assessment sheet indicating all the evidence you have collected and how this meets the NPSTP.

Week 4: Assuming responsibility for planning, teaching and assessing in two subjects.

1. Continue activities above, taking over responsibility for planning, teaching and assessing one subject full lesson) throughout the week
2. Co-plan and co-teach all other subjects with the Cooperating Teacher
3. Prepare for a formal observation by your College/University Supervisor using the Formal Observation Cover sheet, pre-observation guide, and post observation reflection sheet.

Week 5: Assuming responsibility for planning, teaching and assessing at least three subjects

1. Continue activities above, taking over responsibility for planning, teaching and assessing three core subjects with the whole class throughout the week (math, Urdu, science/general studies).

Co-plan and co-teach all other subjects with the Cooperating Teacher

1. Prepare for a formal observation by your Cooperating Teacher using the Formal Observation Cover sheet, pre-observation guide, and post observation reflection sheet.
2. Prepare for a formal observation by your College/University Supervisor using the Formal Observation Cover sheet, pre-observation guide, and post observation reflection sheet.

Week 6: Assume additional responsibilities as agreed with the Cooperating Teacher

1. Continue planning, teaching and assessing the three core subjects throughout the week and add additional subjects as agreed with the Cooperating Teacher
2. Co-planning and co-teaching teaching all other subjects with the Cooperating Teacher
3. Prepare for a formal observation by your College/University Supervisor using the Formal Observation Cover sheet, pre-observation guide, and post observation reflection sheet.
4. Prepare for a final triad meeting.
5. Prepare a Professional Portfolio, addressing the NPSTP. (Use the Rubric provided in your handbook as a guide.)

2. The Practicum Seminar

The seminar runs parallel to your experience at school. The content of the seminar will vary with the Instructor every semester that it is offered.

However, students may expect to discuss issues such as:

1. Practical issues of teaching in learning in their field placements,
2. Language learning,
3. Different perspectives on how to organize and manage a classroom,
4. Planning units of instruction,
5. Content-specific instruction,
6. Selecting and using assessments of learning,
7. How to use standards for primary school teaching practice,
8. Identifying the hidden curriculum in the classroom,
9. Creating classroom environments that recognize physical, emotional, affective, social and intellectual needs of children,
10. Non-instructional roles of the teacher,
11. Working with parents and community

TEXTBOOKS AND REFERENCES

Course readings and assignments will focus primarily on preparation for field assignments. Additional assignments and/or readings will be provided throughout the semester.

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.

Course Title: Classroom Assessment
Course Code: EDU 245
Cr. Hrs: 03

Course Outcomes

After completing this course, Student Teachers will be able to:

1. write a lesson plan that includes assessment targets, criteria for demonstrating success achieving the targets, and appropriate assessment tools
2. explain the purpose of a Table of Specifications for a test (test blueprint) to a colleague
3. show a colleague how to construct a Table of Specifications for a test
4. distinguish between good and weak short-answer, multiple-choice, true-false, and matching questions from an actual test and explain why each question is good or weak
5. identify the characteristics of effective feedback and provide an example
6. construct a rubric for a performance assessment task
7. defend, with conviction, the claim that reliable information from assessments about students' learning status increases the effectiveness of instructional decisions

Unit 1

1. The purpose and content of the course
2. Distinction between the meanings of measurement, evaluation, testing, and assessment
3. Your experience of measurement, evaluation, testing and assessment
4. The distinction between summative and formative assessment
5. The assessment standard in the National Professional Standards for Teachers in Pakistan
 - i. Examples of assessment
 - ii. Asim, age 12, learns how to gain weight
 - iii. The first lesson in a unit on the solar system
 - iv. Ms Khan's grade 4 class
6. The theory of motivation that guides decisions about feedback: A growth mindset
7. Types of feedback and their purposes
8. Characteristics of effective feedback
9. Feedback as encouragement versus feedback as praise
10. Do oral and written feedback have identical effective features
11. A practice exercise
 - i. Study and critique a teacher's first feedback to a student, age 11, on his answers to a test on the solar system
 - ii. Study advice to that teacher about her feedback to the student
 - iii. Study and critique the teacher's feedback to the same student on the same test in response to the advice she received
 - iv. Reflection on what was learned about feedback
12. Assessment policy and practice in government and private schools in Pakistan
13. Presentation of information collected in interviews with teachers, peers, and parents about assessment
14. The concept of culture
15. Contrasting test-based culture in the classroom with an assessment-based culture
16. Create a definition of classroom assessment that is appropriate to culture(s) in Pakistan

Unit 2

1. Definitions for learning goals, learning objectives, learning targets, success criteria, and formative assessment
2. Difference between the terms learning objectives, learning targets, and success criteria
3. Use of example lesson plans ('Sun, Earth, and the Moon') to discuss the process of creating assessment-embedded lesson plan
4. Using examples of assessment-embedded lesson plans to study the relationship between learning objectives, learning targets, success criteria, and formative assessment
5. Working backward to write learning objectives, learning targets, success criteria, and formative assessments after studying the activities included in the lesson plans
6. Practice providing peer feedback on language and clarity of learning objectives, learning targets, success criteria, and formative assessments
7. Working backward to write learning objectives, learning targets, success criteria, and formative assessments after studying the activities included in the lesson plans
8. Recording assessment results
9. Class discussions as opportunities to learn find out what students know and understand about a topic
10. Recording student participation in discussion
11. Drawing conclusions about student participation and student knowledge from records of participation in discussion
12. Student's participation in recording evidence of learning
13. Methods for recording assessment data
 - i. Ms Khan's monitoring notebook
 - ii. Students' science journals
 - iii. Distinguishing between assessment procedures used by teachers and procedures used by students
14. Constructing a class record to document student achievement
15. Test scores do not lead directly to educational decisions, though educational decisions are made and actions are taken on the basis of interpretations of test scores
16. Interpretations and conclusions made from test scores should be valid and reliable
17. Validity as a concept
18. Validity as a psychometric construct
19. Reliability as a concept
20. Reliability as a psychometric construct
21. Validity and reliability are not properties of the tests but of conclusions from test score
22. Frames of reference for interpreting scores from assessment tasks
 - i. Norm-referenced frame of reference
 - ii. Criterion-referenced frame of reference
 - iii. Self-referenced frame of reference
23. Other names for norm-referenced and criterion-referenced interpretations of students' scores on assessment tasks
 - i. Relative interpretations (comparable to norm-referenced interpretations)
 - ii. Absolute interpretations (comparable to criterion-referenced interpretations)
 - iii. Explanation for each of these interpretations of performance
24. Illustrations of each of these interpretations of scores from assessment tasks
25. Create a diagram of the assessment process
26. Identify places in the diagram where assessment connects learning with instruction
27. Create one diagram, if possible, which everyone in the class can endorse

Unit 3

1. Interviews

2. Constructing an interview tool to collect data about teacher practices, opinions, and beliefs about assessment
3. Conducting the interview
4. Discussion and analysis of data collected in the interview
5. Critique of the interview tool
6. Short-answer essays Longer-answer essays
7. Learning goals that can be measured by short-answer essays
8. Learning goals that can be measured by longer-answer essays
9. Advantages and disadvantages of essay tests
10. Guidelines for writing essay questions
11. Practice writing essay questions
12. Guidelines for scoring essay questions
13. Definition of performance-based assessment
14. Use of an example of extended performance-based assessment (the green bean competition) to study different features of performance-based assessments
15. Studying different features of a rubric and its relationship with the learning objectives and assessment tasks included in the performance-based assessment project
16. Understanding different characteristics of performance-based assessment tasks by conducting a short performance-based assessment task in class
17. Using a rubric to grade a performance-based assessment task
18. Understanding usefulness and challenges in using performance based assessment tasks in class
19. Designing a performance-based assessment task
20. What qualifies as a portfolio of student work?
21. Types of portfolios
 - i. Project portfolios
 - ii. Growth portfolios
 - iii. Achievement portfolios
 - iv. Competence portfolios
 - v. Celebration portfolios
 - vi. Working folders Purposes of portfolios
 - vii. Instruction
 - viii. Assessment
22. Guidelines for portfolio entries
23. Reflection and self-evaluation as part of the portfolio process
24. Portfolio conferences
25. Assessing portfolios
26. Advantages and disadvantages of portfolio

Unit 4

1. Exploring personal experiences and feelings about tests
2. Discussing the strengths and limitations of tests as assessment tools
3. Understanding that tests are one of many assessment methods and like any other assessment tool have their own pros and cons
4. Exploring the definition of achievement tests and standardized tests
5. Discussing different characteristics and examples of standardized tests
6. Studying two types of score interpretations for tests: Normreferenced vs. criterion-reference
7. Start of the test construction process
8. Learning to create a Table of Specifications -the first step in creating a test
9. Drawing connections between learning objectives and a Table of Specifications
10. Creating a Table of Specifications to help write test questions
11. Discussing the effectiveness of Table of Specifications in real-life classroom situations

12. Connections between Bloom's Taxonomy and the Table of Specifications
13. Classifying test questions according to Bloom's categories
14. Studying the differences between strong and weak test questions Exploring the characteristics of strong test questions
15. Practicing writing short-answer, sentence completion, multiple-choice, and true-false questions
16. Continue to practice writing test questions
17. Putting the test together
18. Studying characteristics of clear test directions
19. Practice writing test directions
20. Review of Student Teachers' current knowledge about the interpretation of test scores
21. Introduction to assessment tracker (a tool for assessing the quality of the test and of student learning)
22. Studying an example of an assessment tracker in detail to explore its main features
23. Learning to use an assessment tracker to interpret test scores
24. Using the assessment tracker to provide constructive feedback to students

Unit 5

1. Review at least two of the sample science lessons into which you wrote learning objectives, learning targets, success criteria, and assessment tools
2. Review definitions and differences between a learning objective and a learning target
3. Selecting success criteria
4. Listing assessment tools/methods used or studied in the course
5. Designing a template for a lesson plans
6. Choose a topic for your lesson/assessment plan
7. Write your lesson/assessment plan
8. Select a partner with whom you will exchange feedback
9. Exchange feedback on the lesson plans
10. Share feedback with the class
11. Identify the main points about the assessment in lessons that were taught in this course
12. Review the reason(s) for essay questions
13. Review the two types of essay questions
14. Review guidelines for writing essay questions
15. Review the disadvantages of essay questions
16. Identify course topics for essay question
17. Identify the conditions under which final examinations are given in your college or university (for example, the length of the examination period)
18. Identify the course topics you plan to include in your test
19. Writing essay questions based on topics in this course
20. Developing grading criteria for selected questions in the essay test
21. Exchange feedback on essay tests
22. Answer a partner's question and return it to them for marking
23. Marking essays based on grading criteria

Recommended readings

1. P. Black, C. Harrison, B. Marshall, and D. Wiliam, Assessment for Learning: Putting It into Practice (Berkshire, UK: Open University Press, 2010).
2. S. Clarke, Active Learning through Formative Assessment (London: Hodder Education, 2008).
3. J. H. MacMillan, Classroom Assessment: Principles and Practices for Effective StandardsBased Instruction, 5th ed. (Boston: Pearson, 2011).

4. M. D. Miller, R. L. Linn, and N. E. Gronlund, Measurement and Assessment in Teaching, 11th ed. (Upper Saddle River, NJ: Pearson, 2013).
5. R. Stiggins, J. Arter, J. Chappius, and S. Chappius, Classroom Assessment for Student Learning: Doing It Right–Using It Well (Boston: Pearson, 2006). This text has a DVD and a CD.
6. D. Wiliam, Embedded Formative Assessment. (Bloomington, IN: Solution Tree Press, 2011).

Course Title: Teaching of English
Course Code: EDU 246
Cr. Hrs: 03

Course Outcomes

After completing this course, Student Teachers will be able to:

1. explain in basic terms how second languages are acquired and demonstrate a working knowledge of the grammar-translation method, the audio-lingualism method, the natural approach, and communicative language teaching
2. teach listening, reading, speaking, and writing skills to young learners using an interactive, communicative approach
3. design suitable teaching materials which focus on helping learners acquire a basic level of communicative competence
4. assess their students' language performance and progress using their own self-designed assessment procedures
5. help learners develop basic grammatical competence and vocabulary in English using a learner-centred, communicative teaching approach
6. explain differences between teaching and testing when they are designing their own classroom materials and activities

Unit 1 Introduction to Teaching English

1. Introduction to Unit 1 and initial activity exploring Student Teachers' views of how languages are learned
2. What do people need to know to speak a second language well?
3. Four influential ESL approaches
4. The grammar-translation method and its limitations
5. Behaviourism and the audio-lingual method
6. The natural approach
7. The interactionist approach
8. Practical teaching activities using the interactionist approach
9. Criticism of the interactionist approach
10. Quiz reviewing the four approaches to second-language acquisition
11. Implications of the post-method era
12. Factors affecting second-language learning: investigating learner differences and learning styles
13. What is communicative language teaching?

Unit 2

1. What are listening skills?
2. Listening as a skill: some listening theories
3. How do children learn to listen?
4. Suggestions for classroom listening
5. What does real-life listening involve?
6. Extensive and intensive listening
7. Techniques and activities for teaching listening skills communicatively in the classroom

Semester-V				
Codes	Title of the Courses	Cr. Hrs.	Remarks	Marks
EDU 351	Educational Psychology	03	Major	100
EDU 352	Teaching Literacy Skills	03	Major	100
EDU 353	Curriculum Development	03	Major	100
URD 111	<u>Discipline-I</u> * Urdu Zuban: Qawaed O Imla	03	Allied	100
MATH 117	<u>Discipline-II</u> ** Discrete Structures			
ZOOL 111	<u>Discipline-III</u> *** Principle in Animal Life -I			
ENG 121	<u>Discipline-I</u> * Phonetics and Phonology	03	Allied	100
PHYS 101	<u>Discipline-II</u> ** Mechanics			
CHEM 236	<u>Discipline-III</u> *** Inorganic Chemistry			
Total Semester Credit Hours		15		500

* Discipline-I= Content Course in English and Urdu

** Discipline-II= Content Course in Mathematics and Physics

*** Discipline-III= Content Course in Chemistry and Biology

Course Title: Educational Psychology
Course Code: EDU 351
Cr. Hrs: 03

Course Outcomes

After completing this course, Student Teachers will be able to:

1. Describe different schools of thought and differentiate between psychology and educational psychology
2. Define learning and explain different theories of learning and their application in the classroom
3. Categorize individual differences based on physical, intellectual, emotional, and socio-cultural differences.
4. Analyse the concept and theories of motivation
5. analyse the impact of educational psychology on the processes of teaching and learning.
6. To inform student teachers with modern approach to maintain conducive environment for teaching and learning

Unit 1

1. The nature of educational psychology
2. The scope of educational psychology
3. Conceptual approaches to psychology
4. Structuralism and functionalism (Structuralism and functionalism are earlier school of thoughts and have no contribution in the present educational psychology. Therefore it should be excluded)
5. Psychoanalytic approach(These approaches are written in chronological order representing a brief history of educational psychology)
6. Behaviourist approach
7. Gestalt psychology
8. Humanistic theory
9. Cognitive approach
10. Psychosocial approach(This approach is the present era approach and has important contribution in edu psychology)
11. Biomedical approach
12. Constructivism
13. Why do we study educational psychology

Unit 2

1. The definition of learning
2. Process of learning.(Better to inform prospective teachers about process)
3. Learning theories
4. Behaviourist theory and a critique of its use in the classroom
5. Cognitive theory and a critique of its use in the classroom
6. Social learning theory and a critique of its use in the classroom
7. Constructivist theory and a critique of its use in the classroom
8. Brain-based learning and a critique of its use in the classroom
9. Theories of forgetfulness (it should be included as it is also taught to B.ed students in all over Europe)
10. Transfer of learning (It should be excluded as most of the present era educational psychologists consider it a myth)
11. Factors affecting learning

Unit 3

1. The concept of individual differences
2. How do people differ?
3. Why do people differ?
4. An overview of physical, emotional, social, and mental differences
5. How to deal with individual differences
6. Children with special needs
7. Physical disabilities
8. Learning disabilities
9. Emotional disturbance
10. Social and economic disadvantages
11. Gifted learners

Unit 4

(All these should be in a logical sequence and should be: What is motivation. Behaviouristic approach to motivation, Humanistic approach, Cognitive approach, attribution and goal expectancy theory, The role of self esteem in motivation, Psychoanalytic theory of motivation should be excluded as the prospective teacher will have difficulty to understand this theory as it should not be taught at this level)

Unit 5:

Personality and approaches to personality

1. Psycho analytical approach
2. Behaviourist approach
3. Humanistic theory
4. Cognitive approach
5. Psychosocial approach
6. Biomedical approach

Unit 6:

Modern approach to discipline (in this transforming era of education, it is the need of the time to acquaint prospective teachers with democratic type of practical implication of disciplinary plan for non violent, conducive environment for teaching and learning)

Assertive discipline. What to do if students are not cooperating to be imposed rules of assertive discipline on them.

Controlling disruptive and unwanted behavior of students

Role of self esteem

Reflective listening

Recommended readings

1. Elliott, S. N., Kratochwill, T. R., Cook, J. L., & Travers J. F. (2000). Educational Psychology: Effective Teaching, Effective Learning (3rd ed.). New York: McGraw-Hill. Ø Available at <http://www.mhhe.com/socscience/education/elliott/book/today.htm>
2. Felder, R. M., & Brent, R. (2005). Understanding Student Differences. Journal of Engineering Education, 9, 57-72. Ø Available at http://eprints.me.psu.ac.th/ILS/info/Understanding_Differences.pdf

- The following link connects to a resource on the importance of individual differences among children. It offers both practical examples of how teachers can help students by creating effective learning environments and related activities. This resource was developed for B.Ed. students by Asia e University. Ø http://peoplelearn.homestead.com/BEduc/Chapter_7.pdf

Websites

- This website gives foundational information on learning theories and provides examples of how school teachers can integrate each theory of learning into a lesson plan. It is a useful resource for both Student Teachers and Instructors. Ø <http://web.utk.edu/~rmcneele/classroom/theories.html>
- This chapter centres on three concepts: Bloom's Taxonomy, multiple intelligences and learning modalities, and memory theory. It provides a solid foundation that can help Student Teachers hone their lesson planning and instructional skills. Ø http://teachingasleadership.org/sites/default/files/Related-Readings/LT_Ch1_2011.pdf
- Dr C. George Boeree gives a short biography on Abraham Maslow and outlines his theory of personality development. The article critically discusses the limitations and strengths of the theory in simple language. This is a suitable reading for Student Teachers. Ø <http://webpace.ship.edu/cgboer/maslow.html>
- This website offers lecture notes on 14 topics, including cognitive theories, individual differences, assessments, standardized testing, motivation, and classroom management. It is a rich resource for teachers. Ø <http://www2.raritanval.edu/departments/HumanitiesSocSci/Part-Time/Wolfe/edpsych/notes.html>
- Select the 'Educational Psychology' link on the left-hand menu of this site to find topical lecture notes on 16 topics as well as study guides. The notes offer teachers a brief summary of theories and concepts in educational psychology. The materials are all in Word, so they are easy to access. Ø <http://www.karencrawfordphd.com/default.asp>
- The International Academy of Education website features this booklet by Monique Boekaerts, the 10th in the Educational Practice series on improving learning. It provides information on motivation and learning, and explains principles that encourage children to learn. Ø [http://www.ibe.unesco.org/fileadmin/user_upload/archive/publications/Educational Practices Series Pdf/prac10e.pdf](http://www.ibe.unesco.org/fileadmin/user_upload/archive/publications/Educational_Practices_Series_Pdf/prac10e.pdf)

Course Title: Teaching Literacy Skills
Course Code: EDU 352
Cr. Hrs: 03

Course Outcomes

After completing this course, Student Teachers will be able to:

1. Describe reading as a holistic process comprising comprehension, fluency, and word recognition/solving
2. Identify phases of second language development and the implications for reading and writing instruction
3. Identify various phases in reading development
4. Explain the reciprocal nature of reading and writing and the effects of children's language on their development as readers and writers
5. Develop a repertoire of strategies for teaching comprehension, vocabulary, fluency, and word recognition/solving to diverse early readers, including multilingual learners and children learning a new language
6. Differentiate instruction through various classroom organizational structures and teaching strategies
7. Identify supports for learning to read and write, including family and community.

Unit 1

1. What is reading? What is writing?
2. Components of reading Oral language as the foundation of reading and writing
3. Learning to read and write in a multilingual context
4. Stages of second language development
5. Stages and models of reading development
6. Writing development

Unit 2

1. Phonological awareness
2. The alphabetic principle
3. Instructional strategies for word recognition
4. Reading books
5. Literacy-rich classroom environments
6. Types of print resources to use in an early-literacy classroom
7. Differentiating instruction in a print-rich classroom

Unit 3

1. Instruction strategies for fluency
2. Instructional strategies for vocabulary
3. Instructional strategies for comprehension
4. Matching texts to students
5. Guided reading
6. Writing as a window into reading
7. Course wrap-up

Suggested readings

1. Books 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 at: http://www.nap.edu/catalog.php?record_id=6014.
2. Readings and online resources
3. Readings 'Learning to Read and Write: Developmentally Appropriate Practices for Young Children' <http://www.naeyc.org/files/naeyc/file/positions/PSREAD98.PDF>
4. 'Where We Stand: On Learning to Reading and Write' <http://www.naeyc.org/files/naeyc/file/positions/WWSSLearningToReadAndWriteEnglish.pdf>

Course Title: Curriculum Development
Course Code: EDU 353
Cr. Hrs: 03

Course Outcomes

1. After completing this course, Student Teachers will be able to:
2. Understand the concept of curriculum
3. Differentiate between different types of curricula
4. Gain awareness of curriculum design and development
5. Analyze the components of the curriculum development process
6. State the critical issues, problems, and trends in curriculum thinking
7. Recognize the role of the teacher as a curriculum planner and developer to meet the challenges and demands of the 21st century
8. Apply the skills and knowledge to translate intended curriculum into practice.

Unit 1

1. What is curriculum?: Traditional and progressive conceptions
2. Various forms of curriculum
3. Essential elements in curriculum: Objectives, content selection, and milieu
4. Curriculum implementation
5. Curriculum aims, goals, and objectives
6. Taxonomy of educational objectives (Bloom's three domains)

Unit 2

1. The need for and importance of teacher involvement in curriculum design
2. The concept of curriculum design
3. Using the curriculum design process
4. Analysing a unit plan in light of curriculum design concepts

Unit 3

1. The concept of curriculum change and its sources
2. The process and strategies of curriculum change
3. Issues of curriculum change in Pakistan
4. The process of curriculum development in Pakistan
5. Curriculum development at the primary and secondary levels
6. Critique and discuss the unit plan chosen for analysis in Unit 2

Unit 4

1. Traditional and progressive notions of curriculum monitoring and evaluation
2. Forms of curriculum evaluation (formative and summative)
3. The role of evaluation in curriculum improvement
4. Traditional and progressive notions of assessment
5. Types of assessment (norm-referenced and criterion-referenced assessment, portfolio assessment, and performance-based assessment)
6. Practical application of an assessment plan for the unit they have chosen to analyse (developed in another course in the program) through critique and development

Unit 5

1. Future trends

2. Presentation of unit critique and analysis.

Recommended readings

1. Bilbao, P. P., Lucido, P. I., Iringan, T. C., & Javier, R. B. (2008). Curriculum development. Manila: Lorimar Publishing Inc.
2. Murray, P. (1993). Curriculum development & design (5th ed). Sydney: Allen and Unwin.
3. Sharma, R. C. (2002). Modern methods of curriculum organization. New Delhi: Manohar Book Service.
4. Wiles, J. W. & Bondi, J. C. (2011). Curriculum development: A guide to practice (8th ed.). Boston: Allyn & Bacon.

Websites

5. This chapter, 'Curriculum, instruction, assessment, and standards', provides a review of typical approaches to standards and assessments used by schools. It suggests that curriculum is a useful tool in bridging the gap between standards and assessments on one hand and instruction for students on the other.

Ø http://www.sagepub.com/upm-data/6919_squires_ch_1.pdf 'Philosophy of education' (from Wikipedia) Ø http://www.mashpedia.com/Philosophy_of_education Philosophy of education, part 1: Introduction Ø http://www.youtube.com/watch?v=ml95d6kJ4kc&list=LP2-FVzm_zCos&index=1&feature=plcp Curriculum development Ø <http://www.youtube.com/watch?v=AAkKSgSChJA> Introduction to curriculum Ø <http://www.youtube.com/watch?v=dN8oeQoz9NQ&feature=related> Importance of the syllabus in teaching—Part 1 Ø <http://www.youtube.com/watch?v=T7xLD4XfqAw&feature=related> Syllabus basics 1: Course guidelines Ø <http://www.youtube.com/watch?v=f727o5t0Xow&feature=related>

Semester-VI				
Codes	Title of the Courses	Cr. Hrs.	Remarks	Marks
EDU 361	Guidance and Counseling	03	Major	100
EDU 362	Contemporary Issues and Trends in Education	03	Major	100
EDU 363	Comparative Education	03	Major	100
EDU 364	Field Experience/Internship	03	Major	100
ENG 122	<u>Discipline-I:</u> * Introduction to Drama and Prose Fiction	03	Allied	100
PHYS 103	<u>Discipline-II:</u> ** Electricity and Magnetism			
BOT 111	<u>Discipline-III:</u> *** Diversity of Plants			
URD 121	<u>Discipline-I:</u> * Urdu Tashkeel O Irtiqā	03	Allied	100
MATH 110	<u>Discipline-II:</u> ** Calculus and Analytical Geometry			
ZOOL 121	<u>Discipline-III:</u> *** Principle in Animal Life -II			
Total Semester Credit Hours		18		600

* Discipline-I= Content Course in English and Urdu

** Discipline-II= Content Course in Mathematics and Physics

*** Discipline-III= Content Course in Chemistry and Biology

Course Title: Guidance and Counseling
Course Code: EDU 361
Cr. Hrs: 03

Course Outcomes

After completing this course, Student Teachers will be able to:

1. Demonstrate knowledge of the importance of guidance and counseling to teachers and students • critically analyse the concepts, scope, and theories that govern the process of guidance and counseling
2. Use the principles and functions of guidance and counseling to ensure a safe learning environment in school
3. Identify and apply different tools of data collection in different situations
4. Select and apply appropriate counseling techniques to solve students' problems
5. Coordinate and communicate with various stakeholders in the process of guidance and counseling

Unit 1

1. Introduction to guidance and counseling
2. The basic concepts of guidance and counseling: Guidance, counseling, and psychotherapy
3. The Islamic concept of guidance and counseling
4. The scope of guidance and counseling: Community, family, administration, and peer
5. Principles of guidance and counseling
6. Types of guidance and counseling: Educational and personal
7. Types of guidance and counseling: Social and vocational
8. Theories of guidance and counseling
 - i. • Carl Roger
 - ii. • Erik Erikson
 - iii. Alfred Adler
 - iv. B.F. Skinner

Unit 2

1. Qualities of a counselor: Personal and professional
2. Guidance services that a teacher can provide
3. The teacher as an agent of change: Problems in the classroom for guidance and counseling
4. The teacher as an agent of change: Issues in school for change
5. The role of a teacher as a counselor in classroom for improving academic performance
6. The role of a teacher as a change agent in school
7. Ethical considerations of guidance and counseling

Unit 3

1. Steps and procedures of counseling
2. Strategies for solving problems or staging intervention
3. Techniques and strategies for problem-solving
 - i. Observation
 - ii. Interview

iii. Cumulative record

4. Questionnaire
5. Case study
6. Referring cases to the concerned professionals

Unit 4

1. Problems and issues in primary schools: Educational, social, physical, psychological, and career
2. Initiating guidance programmes in schools: Needs assessment
3. Initiating guidance programmes in schools: Support structure
4. Initiating guidance programmes in schools: Vision, mission, and goal-setting
5. Initiating guidance programmes in schools: Tasks and activities
6. Initiating guidance programmes in schools: Assessment of guidance and counseling programmes
7. Involving various stakeholders in the guidance programme: Parents
8. Involving various stakeholders in the guidance programme: Community
9. Visualizing action plans
10. Preparing an action plan
11. Emergency drills: Earthquake, fire, and bomb drills
12. Traumatic stress management
13. Assigning responsibilities
14. Implementation of action plan or doing activity
15. Documentation and report-writing
16. Evaluation Future plan

Recommended readings

1. Butcher, P. A. (2005). *Sociology* (9th ed.). Boston: McGraw-Hill.
2. Hurlock, E. B. (2008). *Developmental psychology* (5th ed.). London: McGraw-Hill. Nayak, A. K. (2007). *Guidance and counselling*. New Delhi: APH Publishing.
3. Shaffer, D. R., & Kipp, K. (2010). *Developmental psychology: Childhood and adolescence* (8th ed.). Belmont: Wadsworth.
4. Nayak, A. K. (2007). *Guidance and counselling*. New Delhi: APH Publishing.
5. Thompson, R. A. (2012). *Professional school counseling: Best practices for working in the schools* (3rd ed.). New York: Routledge.
6. Okum, B. F., & Kantrwitz, R. E. (2008). *Effective helping: Interviewing and counseling techniques* (7th ed.). Belmont:
7. Thomson. Perry, W. (2008). *Basic counselling techniques: A beginning therapist's toolkit* (2nd ed.). Bloomington: Author House.
8. Bannister, C., & McInnes, B. (2005). *RCN working well initiative guidance on traumatic stress management in the health care sector*. Retrieved from: Ø http://www.rcn.org.uk/__data/assets/pdf_file/0009/78543/001804.pdf
9. Dougherty, A. M. (2009). *Psychological consultation and collaboration in school and community settings* (5th ed.). Belmont: Brooks/Cole.
10. Hederson, D. A., & Thompson, C. L. (2011). *Counseling children* (8th ed.). Belmont: Cengage Learning. NDMA (National Disaster Management Authority). (2007). *National disaster risk management framework Pakistan*. Islamabad: NDMA, Government of Pakistan. Retrieved from: Ø <http://unportal.un.org.pk/sites/UNPakistan/OneUN/DRM%20Documents/NDRM%20Framework%20Pakistan.pdf>

11. Sharif, R. S. (2009). Applying career development theory to counseling (5th ed.). Stanford: Brooks/Cole.
12. Zunkar, V. G. (2006). Career counseling: A holistic approach (7th ed.). Belmont: Brooks/Cole.

Course Title: Contemporary Issues and Trends in Education
Course Code: EDU 362
Cr. Hrs: 03

Course Outcomes

After completing this course, Student Teachers will be able to:

1. Examine the social implications of the MDGs and the EFA goals •
2. Identify different issues pertaining to diversity as well as their impact on student learning
3. State the nature and scope of the factors affecting the quality of schooling •
4. Explain how different kinds of schooling affect the quality of schooling •
5. Analyze the changing role of the teacher in contemporary society •
6. Critically evaluate the roles of peace, conflict, and education in the development of human society.

Unit 1

1. Globalization
2. The role of globalization in education
3. The effects of globalization in the education sector
4. MDGs: General description and indicators
5. Implementation of the MDGs
6. Challenges and further strategies in the local context
7. EFA: General description and indicators
8. Implementation of EFA
9. Challenges and further strategies in the local context

Unit 2

1. Diversity
2. The impact of diversity on education
3. Approaches to addressing diversity issues:
 - i. Learning difficulties
 - ii. Language
 - iii. Religion
 - iv. Gender
 - v. Culture
 - vi. Social and economic status
4. The role of education in addressing issues of diversity
5. Strategies and examples of diversity-inclusive pedagogy

Unit 3

1. Introduction to peace education
2. Societal factors affecting peace in the Pakistani context
3. Conflicts in schools:
 - i. Tolerance
 - ii. Bullying
 - iii. Violence
4. Conflict resolution at the school level
5. The impact of peace issues on education

6. Peace education: A strategy for conflict resolution
7. Projects on selected conflicts
8. Presentation of the projects

Unit 4

1. The relationship between school and society
2. Schools as social agents and social critics
3. The need for schools to create active citizens
4. The role of schools in producing workers and professionals
5. The role of schools in imparting democratic education
6. The importance of character education and skills development
7. Factors affecting the quality of schooling
8. Issues faced by schools

Unit 5

1. The various roles of a teacher
2. The teacher's responsibility to value all learners
3. Teachers as world change agents
4. External issues affecting teachers' performance
5. Interpersonal and social issues in education
6. Internal issues affecting teachers' performance
7. Teachers' strategies to tackle the issues

Recommended readings

1. Ø [http://www.interventioncentral.org/behavioral-interventions/bully-prevention/ bullying-what-it-what-schools-can-do-about-it](http://www.interventioncentral.org/behavioral-interventions/bully-prevention/bullying-what-it-what-schools-can-do-about-it)
2. This website has numerous activities and suggestions for teachers to use in helping children learn how to express emotions in positive ways and resolve conflicts effectively: Ø [http://www.responsiveclassroom.org/article/ conflict-resolution-protocol-elementary-classrooms](http://www.responsiveclassroom.org/article/conflict-resolution-protocol-elementary-classrooms)
3. The focus of this website is on helping teachers develop themes in their teaching. Conflict (including responses to bullying) is the thematic emphasis addressed here: Ø <http://www.pbs.org/teachers/thismonth/conflict/index1.html>
4. You might ask Student Teachers to download the Introduction to the UNESCO Integrated Framework of Action on Education for Peace, Human Rights and Democracy (http://www.unesco.org/education/nfsunesco/pdf/REV_74_E.PDF) and assign various points to various groups to discuss and teach each other via a jigsaw activity.
5. This website has five downloadable units of study (detailed curriculum) for peace education: <http://www.un.org/cyberschoolbus/peace/frame3.htm> You might ask Student Teachers to review one or all of these units and to create a sixth unit modelled along the same framework.
6. The Peace Education Foundation has a website with many teaching and learning ideas: Ø <http://www.peaceeducation.org>
7. Ø <http://raisingvoices.org/good-school/>
8. Nayyar, A. H., & Salim, A. (2002). The subtle subversion: The state of curricula and textbooks in Pakistan. Sustainable Development Policy Institute. Retrieved from Ø <http://www.teachereducation.net.pk/reports/rp22.pdf>

Course Title: Comparative Education
Course Code: EDU 363
Cr. Hrs: 03

Course Outcomes

After completing this course, Student Teachers will be able to:

1. Explain comparative education
2. Identify educational comparative approaches and methods
3. Identify the similarities and differences, as well as the strengths and weaknesses, of education systems within Pakistan
4. Compare and contrast the educational systems of selected countries
5. Draw lessons from various systems of education for an informed practice

Unit 1

1. The purposes of comparative education
2. The uses of comparative education
3. What is comparative education?
4. Comparability as a historical journey (2 sessions)
5. Approaches to comparative education
6. Approaches to comparative education
7. Methods of comparative education
8. Methods of comparative education

Unit 2

1. The scope of comparative education
2. Different disciplines from which comparative education draws ideas
3. The importance of the sociology and philosophy of education to comparative education
4. Factors determining a country's education system
5. The role of key factors in determining education (religion, finances, and political and global trends)
6. The role of teachers in appreciating and being critical reviewers of the factors that determine education systems

Unit 3

1. Three pathways to education
2. Public and private education systems
3. Madrassah and formal education
4. Formal, distance, and non-formal education
5. Project presentation

Unit 4

1. Education theories and practices in the United States
2. Historical reforms that have guided education in the United States
3. Education theories and practices in Japan
4. Historical reforms that have guided education in Japan

5. Education theories and practices in Hong Kong
6. Historical reforms that have guided education in Hong Kong
7. Education systems of the United States, Japan, Hong Kong, and Pakistan:
 - i. Similarities and differences
 - ii. Lessons that can be learned and practices that can be adapted and adopted

Unit 5

1. The education system and practices in Afghanistan
2. Issues and challenges in the education sectors of Afghanistan and ways of addressing the
3. The education system and practices in India
4. Issues and challenges in the education sectors of India and ways of addressing them
5. The education system and practices in Bangladesh
6. Issues and challenges in the education sectors of Bangladesh and ways of addressing them
7. Education systems in Afghanistan, India, Bangladesh, and Pakistan:
 - i. Similarities and differences
 - ii. Lessons that can be learned and practices that can be adapted or adopted in Pakistan

Recommended readings

1. Beech, J. (2006). The theme of educational transfer in comparative education: A view over time. *Research in Comparative and International Education*, 1(1), 2–13.
2. Isani, U. A. G., & Virk, M. L. (2006). *Higher education in Pakistan*. Islamabad: National Book Foundation.
3. Kubow, P. K., & Fossum, P. R. (2007). *Comparative education: Exploring issues in international context*. Boston: Pearson Merrill.
4. Cohen, P. (2004). *The idea of Pakistan*. Washington, D.C: Brookings Institute.
5. Cowen, R. (2000). Comparing futures or comparing pasts? *Comparative Education*, 36(3), 333–342.
6. Lawal, B. O. (2004). *Comparative education*.
7. Osogbo: Swift Publishers Nigeria Ltd. Mallinson, V. (1975). *An introduction to comparative education* (4th ed.). London: Heinemann.
8. Tobin, J. J., Hsueh, Y., & Karasawa, M. (2009). *Preschool in three cultures revisited: Japan, China, and the United States*. Chicago: University of Chicago Press.

Course Title: Field Experience/Internship
Course Code: EDU 364
Cr. Hrs: 03

Objectives of the Internship Program

The objectives of the internship programs are to enable the prospective teachers to:

1. Get experience in the field of education,
2. Acquaint the prospective teachers with the realities of schools, and other institutions related to education,
3. Acquaint the prospective teachers with the administrative structure of Pakistan,
4. Broaden the understanding of students about education, educational process

Practical work

1. The prospective teachers will visit the schools and discuss educational issues which they have discussed in theory classes,
2. The prospective teachers will talk to parents and find out their expectations from schools,
3. Meet the prospective teachers in schools and find out their issues about learning and teaching,
4. Work as an apprentice in a school or another education related offices/organization/NGOs.
5. All the prospective teachers will work individually and submit a report of what they have done in the internship, the examiner will evaluate the report

Methodology of Writing the Report

1. Introduction
2. Objectives
3. Method of data collection
4. Data/ reflection
5. References

Semester-VII				
Codes	Title of the Courses	Cr. Hrs.	Remarks	Marks
EDU 471	Pedagogy-I of Discipline-I: (English)	03	Major	100
EDU 472	Pedagogy of Discipline-II & III: (Physical Science)			
EDU 473	Pedagogy of Discipline-II: (Mathematics)			
EDU 474	Research Methods in Education	03	Major	100
EDU 475	Teaching Practice-II	03	Major	100
URD 221	<u>Discipline-I:</u> Adbi Istelahat	03	Allied	100
MATH 114	<u>Discipline-II:</u> Linear Algebra and Applications			
CHEM 127	<u>Discipline-III:</u> Organic Chemistry			
ENG 231	<u>Discipline-I:</u> Introduction to Poetry	03	Allied	100
PHYS 201	<u>Discipline-II:</u> Modern Physics-I			
BOT 123	<u>Discipline-III:</u> Cell Biology, Genetics and Evolution			
Total Semester Credit Hours for Discipline-I & II:		15		500
EDU 476	<u>Discipline-III:</u> Lab Work in Chemistry	02	Allied	50
Total Semester Credit Hours for Discipline-III		17		550

Course Title: Pedagogy-I of Discipline-I: (English)
Course Code: EDU 471
Cr. Hrs: 03

Course Description

The "Teaching of English (Professional)" course is designed to prepare individuals for a career in English language education, equipping them with the knowledge, skills, and pedagogical strategies needed to excel as effective English language instructors. This professional development course delves into the theory and practice of teaching English as a second language (ESL) or as a foreign language (EFL) to learners of various ages and proficiency levels. It also analysis Students Learning Outcomes, Benchmarks, and Standards included in the English curriculum from grade 1-12.

Learning Outcomes

At the end of the course the students will be able to:

1. have gained a basic understanding of how second/foreign languages are acquired and possess a working knowledge of the grammar-translation, audio-lingualism, the natural approach, communicative language teaching.
2. teach the four skills of listening, reading, speaking and writing to young learners using an interactive communicative approach.
3. design suitable teaching materials which focus on helping learners acquire a basic level of communicative competence.
4. assess their students' language performance and progress using their own self designed assessment procedures.
5. help learners develop basic grammatical competence and vocabulary use learner-centered communicative teaching approach.
6. differentiate between teaching and testing when they are designing their own classroom materials and activities.
7. use action research for improving classroom practices related to the teaching of English

Course outline

Details of the Topics

Unit1: Introduction to Second Language Acquisition

1. Introduction to the Course *Teaching of English*
2. Exploring course participants' views of how languages are learned.
3. Four influential ESL approaches: Grammar-Translation method and its limitations, Behaviorism and the Audio-Lingual Method, The Natural Approach

Details of the Topics

4. The Interactionist Approach
5. Practical teaching activities using the Interactionist Approach
6. Criticism of the Interactionist Approach
7. Factors Affecting Second Language Learning: Investigating learner differences and learning styles

Unit 2. Understanding Students Learning Outcomes SLOs, Benchmarks and Standards for ELT

1. Demonstration of National Curriculum of English Language (grades I through 12),
2. Understanding competencies in the English language
3. Understanding Students Learning Outcomes (SLOs) Practice with reading and thinking skills through presentations
4. Understanding benchmarks in text books of English
5. Evaluating Standards in the English text books (grade 1 to 12)
6. SLO based teaching and assessment
7. Developing question papers based on actual SLOs

Unit3: Integrating Literature into the Teaching of Language

1. Need for and scope of integrating literature into language teaching Using poetry and short stories for the teaching of grammar
2. Using songs and poems to teach grammar
3. Using short stories, dramas, novels and role plays in the teaching of English

Unit4: Academic, transactional, and purposeful, creative writing

1. Opportunities for Student Teachers to use appropriate social and academic conventions for effective written communications in both informal and formal settings
2. Using process writing approach for creative writing
3. Development of ethical and social attributes in a multicultural civil society

Unit 5 Assessing Language Performance

1. Discrete and integrative approaches to language testing
2. Essay-translation approach versus the structuralist approach
3. Integrative and communicative approaches in language testing
4. Some basic principles and key concepts in assessment
5. Basic principles for assessing children's language learning
6. Why do we test students?
7. Tips and special considerations for Testing Young Learners
8. Conflicts between classroom learning and classroom testing and ways of reducing these conflicts
9. Ways of Marking Language Tests and giving feedback
10. Designing Language Tests for Young Learners
10. Developing tests based on the SLOs including in the text books from grade 1 to 12

Details of the Topics

Unit 6 Introducing action research projects in the ELT classroom

1. Scope of action research in the ELT classroom
2. Identifying problematic areas in teaching English
3. Designing a research project
4. Preparing a research tool
5. Collection of data
6. Analysis of data
7. Comparing data by applying statistics
8. Findings and conclusions
9. Report writing

Text book(s) and References

1. Shamim, F. (2011). English as the language for development in Pakistan: Issues, challenges and possible solutions. In H. Coleman (Ed.), *Dreams and realities: Developing countries and the English language*. London: The British Council.
2. Goh, C.M. (2007) Teaching Speaking in the Language Classroom. Singapore: SEAMEO-RELC.
3. Harmer, J. (2001) The Practice of English Language Teaching. Harlow: Pearson Educational.
4. Hughes, A. (2003) Testing for Language Teachers. Cambridge: CUP.
5. Hyland, K. (2003) Second Language Writing. Cambridge: CUP.
6. Lightbown, P. and N. Spada (1999). How Languages are Learned. Oxford: OUP.
6. Nation, P. (2002) Managing Vocabulary Learning. Singapore: SEAMEO-RELC. Phillips, S. (1993) Young Learners. Oxford: OUP.
7. Richards, J.C. (2001) Curriculum Development in Language Teaching. Cambridge: CUP. Richards, J.C. (2005) Communicative Language Teaching Today. Singapore: RELC. Swan, M. (2005) Practical English Usage. Oxford: OUP.
8. Thornbury, S. (2005) Grammar. Oxford: OUP
9. Ur, P. (1996) A Course in Language Teaching. Cambridge: CUP.
10. Textbooks of English from Grade 1 -12, Text Book Board Peshawar Curriculum of English, grade 1-12, Pakistan

Course Title: Pedagogy of Discipline-II & III: (Physical Science)
Course Code: EDU 472
Cr. Hrs: 03

Course Description

The pedagogy of physical science consists of two parts. Part- I; is about brief discussion about science, science education, learning theories and teaching models, curriculum, teaching methods and assessment in science. Following this, in instructional planning unit, prospective student teachers will learn about lesson planning, their steps and writing. Finally, audio-visual aids, their use, purposes, classification will be taught. Part II is about Content, which is from the secondary science books consisting of units from secondary level Physics and chemistry it will also include related topics from Elementary level general science.

Course Objectives

It is expected that after studying this course, the student teachers will be able to:

1. Understand science, science education; the essentials of science education and its role in the life of individual and society.
2. Apply the understanding of learning theories and teaching models in teaching Physical Sciences.
3. Apply activity based teaching and learning strategies in their classrooms;
4. Use a variety of professional skills which can make the learning of Science interesting and engender a lifelong commitment to learning and teaching;
5. Use open-ended questions to assess children's conceptual understanding; provide children with exciting science experiences that extend their natural fascination with the world and help them learn the science skills and concepts they will need in later schooling and in life;
6. Reflect on their teaching to develop a personal approach to the teaching of science.

PART – I METHODOLOGY

Unit: 1 Introduction to Science Education

Nature and universe, Science: concepts, scope and branches, Nature of science, Misconception about science, Introduction to education, Introduction to science education, Pedagogical content knowledge

Unit: 2 Essentials of Science Education

Essentials aims and goals of science education: science process skills, scientific literacy, scientific method, scientific thinking, scientific attitude

Unit: 3 learning theories and Pedagogical Models in Science

Brief role of learning theories in learning with reference to behaviourism, cognitivism and constructivism, teaching models, Ausubel model, Bruner model, Gagne model, Different formats of lesson planning

Unit: 4 Major approaches to Physical science teachings

Teacher centered methods, Students centered methods, Constructivism, Constructivism based methods of teaching: Activity based teaching, Interactive teaching, Laboratory method, Teaching through low cost/no cost material, Teaching through ICT, Teaching through STSE, Experiential teaching, Cooperative and collaborative teaching, Demonstration method, discussion method, Teaching Science through Discovery, Inductive activity approach, Deductive activity approach.

Unit: 5 Curriculums and Teaching aids in Physical sciences

Aims, goals and objectives of science education, Types of curriculum, standards, Strands, bench marks, student learning outcomes (SLOs), Critical analysis of physics curriculum, Taxonomy of educational objectives, development and use of Audio-Visual Aid.

Unit: 6 Assessments and Evaluation in Physical sciences

Introduction to test, testing measurements, assessment, class room assessment and types of assessments, Evaluation: scopes and types, Difference between assessment and evaluation, External and internal evaluation, SLOs based assessment, Critical analysis of assessment practices.

PART – II CONTENTS

The students must go to review the recommended curricula for Physics and Chemistry along with practice practical recommended for 9th and 10th class, Khyber Pakhtunkhwa text book board. The students will be assessed in the content of the secondary level Physics and chemistry.

SUGGESTED BOOKS / READINGS:

1. Terry L. Contant and Joel L Bass .(2017.) Teaching Science Through Inquiry-Based Instruction, with Enhanced Pearson e Text -- Access Card Package (13th Edition) (What's New in Curriculum & Instruction). Pearson Publications, Inc.
2. Kohli, V.K.(2005) How to Teach Science, Shri Krishna Publication, Ambala.
3. Mohan, Radha (2004), Innovative Science Teaching for Physical science Teachers, Prentice Hall of India, New Delhi.
4. Siddiqi & Siddiqi. (2002). Teaching of Science Today and Tomorrow, Doaba House, New Delhi.
5. Anderson, Hans (2011) Readings in Science Education for Secondary School
6. Gupta, S.K.: (2010) Teaching Physical Science in Secondary Schools 5. Kesis and Ogburn, : Modern Science Teaching
7. Richardson, J.S.: (2008) Method and Material for Teaching and Caboon, G.P. General and Physical Science, McGraw Hill Book Co. Inc., New York.
8. Mohan, Radha: (2007) Innovative Physical Science Teaching Method, P.H.I., New Delhi
9. National Curriculum for Physics IX-X (2006). Govt of Pakistan, Islamabad.
10. Khyber Pakhtunkhwa Text Book Board. (2018 & Onward). Physics of Class IX & X.

Course Title: Pedagogy of Discipline-II: (Mathematics)
Course Code: EDU 473
Cr. Hrs: 03

Course description

This course will equip prospective teachers with knowledge and skills to teach Mathematics in grade I through X. They will learn to use a variety of instructional methods and teaching aids which will promote active learning of mathematics. They will plan mathematics lessons and activities and practice teaching Mathematics with peers.

Course Objectives

At the end of the course the prospective teachers will:

1. Be familiar with the nature, history and development of secondary school Mathematics in Pakistan.
2. Appreciate the contribution of Muslims, Hindus and other Mathematics.
3. Acquire the skills and competence required for the teaching of Mathematics at secondary level.
4. Use various methods of teaching Mathematics effectively.
5. Be aware of techniques and strategies of teaching Mathematics at secondary school level.
6. Be able to make competent assessments of pupils' achievements in Mathematics.

Course Content

Part-1: Methodology

Unit 1: History of Mathematics

- 1.1 Historical review of development of Mathematics in Pakistan
- 1.2 Contribution of Muslim and other Mathematicians.
- 1.3 Educational value of Mathematics
- 1.4 Use of Mathematics in everyday life
- 1.5 The relation of Mathematics with other subjects.

Unit 2: Goals, Aims and Objectives of Teaching Mathematics.

- 2.1 Goals and Aims of Teaching Mathematics.
- 2.2 Instructional Objectives.
- 2.3 Objectives of teaching Mathematics with special reference to Blooms Taxonomy of Educational Objectives.

2.4 Students' Learning outcomes, Benchmarks, Standards

Unit 3: Methods of teaching Mathematics.

- 3.1 Inductive Method
- 3.2 Deductive Method
- 3.3 Analytical method
- 3.4 Synthetic Method
- 3.5 Laboratory Method
- 3.6 Project Method

Unit 4: Teaching Aids and Mathematics Laboratory.

- 4.1 Importance of teaching aids.
- 4.2 Different types of teaching aids to be used in the teaching of Mathematics.
- 4.3 Importance of Mathematics Laboratory and its development.
- 4.4 Suggestions for effective use of Mathematics laboratory/ teaching aids.
- 4.5 Computer as a teaching aid.

Unit 5: Techniques of teaching Mathematics.

- 5.1 Difference between a technique and a method of teaching.
- 5.2 Different techniques of teaching to be adopted in the teaching of Mathematics.
 - i. Oral work i.e. questions in the Classroom and group discussion/group work etc.
 - ii. Drill in Mathematics.
 - iii. Homework and assignments.

Unit 6: Teaching of Algebra, Geometry Trigonometry and Information Handling.

- 6.1 Teaching of Algebra.
- 6.2 Teaching of Geometry.
- 6.3 Teaching of Trigonometry.
- 6.4 Teaching of Sets and Information Handling

Unit 7: Lesson planning in teaching of Mathematics.

- 7.1 Introduction.
- 7.2 Importance of planning in teaching of Mathematics.
- 7.3 Component of a lesson plan.
- 7.4 Qualities of a good lesson plan.
- 7.5 Model lesson plans:
 - (a) **Algebra**
 - (b) **Geometry**
 - (c) **Trigonometry.**

Unit 8: Assessments in Mathematics.

- 8.1 Scope of Assessment in Mathematics.
- 8.2 Difference between Assessment, Measurement and Evaluation.
- 8.3 What is Test and its types?
- 8.4 Preparation of different types of tests in Mathematics.
- 8.5 Qualities of a good test.

Part-2: Content

The students are expected to have mastery of Mathematics content as given in curriculum for 9th and 10th class Text Book Board Khyber Pakhtunkhwa

SUGGESTED BOOKS / READINGS

1. Banga, Chaman Lal (2012). Teaching of Mathematics New Delhi; Shipra
2. Chambers, Paul (2010). Teaching Mathematics- Developing as a Reflective Secondary Teacher. New Delhi: SAGE
3. Grouws A. D. (2007). Handbook of Research on Mathematics Teaching and Learning. New York: Information Age Publishing
4. Loudhi, S.M. (2004). Tadrees-E-Riazi. Lahore: Majeed Book Depot
5. National Curriculum for Mathematics IX-X (2006). Govt of Pakistan, Islamabad.
6. Khyber Pakhtunkhwa Text Book Board. (2018 & Onward). Mathematics of Class IX & X.

Course Title: Research Methods in Education
Course Code: EDU 474
Cr. Hrs: 03

Course Outcomes

After completing this course, Student Teachers will be able to:

1. Describe the concept of educational research
2. Identify different models and approaches of action research
3. Identify research problems and develop research questions
4. Develop a research proposal.

Unit 1

1. Definition of research
2. Definition of educational research
3. Research as a scientific method
4. Significance of educational research
5. Principles of educational research

Unit 2

Different research methods in education

1. Qualitative research
 - i. Action research
 - ii. Case study
 - iii. Ethnography
 - iv. Narrative research
2. Quantitative research
 - i. Survey
 - ii. Experimental research
3. Mixed research
 - i. Action research
 - ii. Programme evaluation
4. Research tools
5. Sampling
6. Research process

Unit 3

1. Nature of action research
2. History of action research
3. Difference between action research and other types of research
4. Models of action research
5. Approaches to action research

Unit 4

1. Questionnaire
2. Interview
3. Observation

4. Rating scale
5. Inventories

Unit 5

1. Types of data
2. Validity of data
3. Reliability of data
4. Data analysis

Unit 6

1. Parts of a research proposal
2. Developing a research proposal

Unit 7

1. A research report
2. Components of a research report
3. Sample report
4. Summing up
5. Conclusion

Recommended readings

1. Creswell, J. W. (2012). Educational research: Planning, conducting and evaluating quantitative and qualitative research. Boston: Pearson Education.
2. Gay, L. R. (1987). Educational research: Competencies for analysis and application. London: Pearson Longman Publishing.
3. Jorgensen, D. L. (1989). Participant observations: A methodology for human studies. Thousand Oaks, CA: Sage Publications.
4. Lofland, J., Snow A., Anderson, L., & Lofland, L. H. (2006). Analyzing social settings: A guide to qualitative observation and analysis. Boston: Cengage Learning.
5. Miles, M. B., & Huberman, A. M. (2006). Qualitative data analysis: An expanded sourcebook. London: Sage Publications.
6. Mills, G. E. (2011). Action research: A guide for the teacher researcher. Boston: Pearson Education.
7. Wengraf, T. (2011). Qualitative research interviewing: Semi-structured, biographical, and narrative methods. London: Sage Publications.
8. Yin, R. K. (2008). Case study research: Design and methods. Thousand Oaks, CA: Sage Publications.

Course Title: Teaching Practice-II
Course Code: EDU 475
Cr. Hrs: 03

SYLLABUS: Teaching Practicum

COURSE DESCRIPTION

This course includes two important parts:

1. A school placement in an elementary school.
2. A seminar that meets regularly.

1. School Placement:

The developmental practicum experience in Semester 3 provides elementary grade Student Teachers with carefully sequenced and supervised field experiences in all areas of the elementary curriculum. Opportunities to work with children at two different grade levels, one in an upper and one a lower elementary school classroom are provided. As a Student Teacher, you will work with children from a variety of backgrounds, and with different capabilities. Initially you will conduct formal observations and complete a variety of school based assignments, but you are expected to gradually take a more active role, with increased responsibilities in each classroom.

During this developmental practicum, you are expected to critically select and use appropriate materials, resources (including persons in the community) and technology, and to have opportunities to employ various classroom management techniques, and a variety of formative and summative evaluation techniques (including authentic assessment).² Collaboration with other Student Teachers and professionals in the school setting is encouraged in order to develop team building skills and utilization of all resources to enhance children's learning.

Ideally, groups of three or four Student Teachers are placed in each school. Opportunities for peer coaching as well as coaching by the Cooperating Teacher and College/University Supervisor are provided. You are encouraged to take advantage of any opportunities to interact with parents and to develop skills for communicating with parents under the guidance of the Cooperating Teacher.

2. Seminar:

The seminar which accompanies your fieldwork, will be facilitated by your College/University Supervisor and is designed to link pre-service program content to classroom practice. You will have an opportunity to clarify and revise your teaching goals and your beliefs about a wide range of educational issues. The primary focus of this seminar is the inducting of Student Teachers into professional practice. Habits of thinking that provide the foundation for continued growth as a teacher are as important as strategies for solving immediate classroom issues and problems.

Student Teachers will be expected to complete a variety of seminar assignments during this semester. . Most, but not all, of these assignments will be directly linked in some way to your classroom experiences. For example:

- i. Present an analysis of your own or a peer's teaching
- ii. Conduct observations focused on specific classroom practices or an individual child
- iii. Try out a particular method and reflect on its success in achieving its purpose

All of the assigned tasks are flexible enough to allow for adaptation to a wide variety of classrooms.

COURSE OUTCOMES

Student Teachers will be able to:

- i. Reflect on and learn from connecting theory and their teaching practice.
- ii. Collaborate with peers, Cooperating Teacher, other School Staff, and College/University Supervisor, establishing professional relationships.
- iii. Invite, accept, and utilize formative feedback from the Cooperating Teaching peers, and the College/University Supervisor in a non-defensive manner.
- iv. Produce instructional plans unit plans, which reflect the use of appropriate instructional methods and strategies to meet the needs of all students within the context of the practicum classroom.
- v. Utilize appropriate instruments or techniques for informally and formally assessing student learning and learning needs.
- vi. Recognize cognitive and affective needs of students and establish learning environments and use activities appropriate to meeting those needs.

LEARNING AND TEACHING APPROACHES

Every Student Teacher enrolled in the developmental practicum will be assigned to two different classrooms for this school placement experience, approximately half at early and the other half at upper elementary level. This will mean that by the end of the ADE (first two years of the B.Ed. Honors) Student Teachers will have experienced teaching in two different classrooms during the developmental practicum in Semester 3.

The Practicum Seminar will provide opportunities for structured and guided discussion, but rely heavily on reflective journals, small group and peer interaction.

SEMESTER OUTLINE

School Experiences

The manner in which school experiences for the Practicum are organized will vary from semester to semester. Colleges and Universities will work with their cooperating schools to select the most appropriate model. 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.

Student Teachers can expect the following types of activity and progression during the developmental semester 3 practicum. This sequence of activities presented is for Model A (2 days per week for two school placements for six weeks each). Should Model B or C be adopted, the sequence of activities should remain the same, simply conducted on a daily basis, rather than on a weekly basis.

First Classroom Placement (6 weeks)

Week 1: Introduction to the school and classroom context:

1. Complete School-based assignments which provide you with an opportunity to get to know the school, its resources, the rules, and procedures expected of you;
2. Complete Classroom Observations which will provide you with an opportunity to learn about:
3. The classroom environment, placement of materials, arrangement of work spaces, traffic patterns;
4. Classroom interactions, e.g. whole class teaching, teacher to student, student to student, student to teacher initiated interactions;

5. Assist the Cooperating Teacher as requested with any tasks such as:
6. Small administrative tasks
7. Helping individual children or small groups of children
8. Meet with the Cooperating Teacher to discuss how he/she plans for instruction, expectations and the like
9. Reflect on your learning this week.

Week 2: Becoming more involved in the classroom:

1. Complete school based assignments which will provide you with tools to use to learn to know more about:
 2. Your Cooperating Teacher and his/her educational philosophy;
 3. A small group of children or an individual child.
4. Complete classroom observations:
5. Small group engagement;
6. Individual child engagement.
7. Assist the Cooperating Teacher as requested:
8. Work with children who need extra help;
9. Work with a small group of children to carry out the teacher's plans;
10. Meet with the Cooperating Teacher to discuss plans for teaching.
11. Reflect on your learning this week.

Week 3: Taking an active role in co-planning and co-teaching sections of a lesson alongside your Cooperating Teacher:

1. Complete school based assignments:
2. Learn about how your Cooperating Teacher manages their classroom;
3. Learn to know more about the community (parents and other community members) involvement in the school.
4. Complete classroom observations:
5. Observe your Cooperating Teacher with the aim to rewrite the lesson plan adding ideas of your own;
6. Use one of the additional observation tools to understand how your Cooperating Teacher engages with the children.
7. Assist the Cooperating Teacher as requested:
8. Continue with all the previous tasks in the classroom;
9. Work with your Cooperating Teacher to co-plan a few lessons;
10. Take over routines such as taking children for recess, taking the register, or reading a story to the class
11. Co-teach a few sections of classes with your Cooperating Teacher.
12. Reflect on your learning this week

Week 4: Assuming responsibility for co-planning and co-teaching many in as many classes as you can.

1. Complete school based assignments:
2. Learn to know more about the co-curricular activities available at your school, and specifically those that the children in your classroom do.
3. Complete classroom observations:
4. Use an additional observation tool to learn how your Cooperating Teacher manages the classroom through movement;
5. Use an observation tool to learn how to keep track of student engagement by focusing on their on/off task behaviour.
6. Assist the Cooperating Teacher as requested:

7. Continue with all the previous tasks in the classroom;
8. Co-teach a few lessons with your Cooperating Teacher.
9. Work with children who need extra help
10. Meet with the Cooperating Teacher to discuss plans for teaching whole lessons next week.
11. Reflect on your learning this week

Week 5: Assuming responsibility for planning, teaching and assessing in at least one subject.

1. Complete school based assignments:
2. Complete any school based assignments that might be outstanding;
3. Use this time to start to file all assignments from the seminar and the school experience in your Developmental Portfolio, using your Notes for Self Assessment sheet to indicate how you believe you are meeting the NPSTP.
4. Complete classroom observations:
5. Use the additional observation tools to observe how involved children are in the classroom, in terms of their verbal engagement.
6. Develop your own observation tool to collect data on how engaged children are.
7. Assist the Cooperating Teacher as requested:
8. Plan and teach lesson in at least ONE subject area this week.
9. Continue activities above, taking over responsibility for planning, teaching and assessing for one subject area.
10. Reflect on your learning this week

Week 6: Assuming responsibility for planning, teaching, and any additional responsibilities as negotiated with the Cooperating Teacher and College Supervisor.

1. Complete school based assignments:
2. Continue to make notes about how you are meeting the NPSTP on your Note Sheet.
3. Complete classroom observations:
4. If you are challenged by any particular aspect of teaching this week, complete an additional observation – using the same tool – to learn more about teaching and learning.
5. Assist the Cooperating Teacher as requested:
6. Plan and teach lesson in at least TWO subject areas this week.
7. Continue activities above, taking over responsibility for planning, teaching and
8. Reflect on your learning this week

Second Classroom Placement (6 weeks)

Student Teachers repeat the program in the first six weeks but in a different grade and school.

Note that while the assignments are the same – if you are at a different school, the school-based assignments will provide you with in-depth knowledge of the inner workings of that school.

The Practicum Seminar

The seminar runs parallel to your experience at school. The content of the seminar will vary with the Instructor every semester that it is offered.

However, students may expect to discuss issues such as:

1. Practical issues of teaching in learning in their field placements,
2. Language learning,
3. Different perspectives on how to organize and manage a classroom,
4. Planning units of instruction,
5. Content-specific instruction,

6. Selecting and using assessments of learning,
7. How to use standards for primary school teaching practice,
8. Identifying the hidden curriculum in the classroom,
9. Creating classroom environments that recognize physical, emotional, affective, social and intellectual needs of children,
10. Non-instructional roles of the teacher,
11. Working with parents and community

TEXTBOOKS AND REFERENCES

Course readings and assignments will focus primarily on preparation for field assignments. Additional assignments and/or readings will be provided throughout the semester.

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

Course Title: Discipline-I: Adbi Istelahaht
Course Code: URD 221
Cr. Hrs: 03

COURSE DESCRIPTION : کورس کاتعارف:

اس کورس میں زیر تربیت اساتذہ نظر یہ 'آمورش زبان (the theory of language)

اور زبان متنوع ماحول (Features Of A Language – Rich Environment) کے حوالے سے تدریس زبان کو سمجھیں گے۔ ماہرین زبان کا کہنا ہے کہ زبان کا فطری سافٹ وئیر 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 نظر سے کہے کے تحت اس کورس میں ثانوی کی گئی ہے۔ لسانی مہارتوں کو جماعت 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 نقطہ نظر سے آڈیولنگونل اور ٹوٹل فزیکل جیسے عملی طریقوں سے استفادہ کیا گیا ہے۔

جائزہ و پیمائش اور اس پر تنقید کرنا مدرس کے لئے بہت مفید ہے۔ اشارات سبق کامیاب تدریسی حکمت عملی کی ضمانت ہیں۔ جو اساتذہ کی تربیت کا لازمی ہیں۔ اس لیے اس نصاب ثانوی جدید سبقی اشارات ناصر ف خود تیار لیریں گے بلکہ ثانوی مدارس میں ان کی عملی مشق بھی کریں گے۔

تعلیمی اور تدریسی رسائی (یونٹ ۱ زبان کا نظر یہ (theory of language)

• زبان کا نظریہ (theory of language)

• آمورش زبان کے وسیلے (پیدائش سے پہلے اور بعد کے محرکات، والدین، اساتذہ)

• اردو زبان کا متنوع ماحول

• اردو کی بنیادی لسانی خصوصیات (صوتی، قواعدی، متنی)

• اردو سے متعلق غلط فہمیوں کا ازالہ

• اردو کی تدریسی تدابیر

• جدید سبقی ڈیزائن

• تدریسی تکنیک

• سمعی بصری اعانات

یونٹ: ۲ عملی تدریسی طریقے (سننا، بولنا اور سمجھنا)

اوصاف خوش خوانی / کرداری مقاصد (تلفظ، روانی، تاکید، لب و لہجہ، تفصیل)

• بنیادی لسانی عادات / مہارتیں تعارف (بولنا، سننا، سمجھنا)

• بولنا اور سننا (فنکشنل، آڈیولنگونل اور ٹوٹل فزیکل طریقوں سے مشق)

• قصے کہانی کی تدریس (تمثیل، ڈراما، قصہ گوئی)

- دورانِ کھیل تدریس (مثلاً لفظ کی بناوٹ میں حروف کی کھوج)
- مطالعے کی تدریس (ٹی وی، ریڈیو، کمپیوٹر، مطالعہ کاننات)
- ثانوی تدریس نظم
- فی البدیہہ نظم گوئی
- سبقی اشارات / طریقہ ہائے تدریس (ثانوی سطح کی جاعتیں)
- سبقی ڈیزائن/تکنیکی مہارتیں/ تدریسی حکمتِ عملی (نظم ونثر)

یونٹ: ۳

عملی تدریس طریقے (پڑھنا اور لکھنا) طریقہ ہائے تدریس کا تعارف (ثانوی)

- الف بائی، مخلوطی، تحلیلی، طریقے
- عملی فنکشنل اردو
- زبان شناسی کی تدریس (ثانوی سطح کے مطابق)
- تدریس قواعد (بہ ذریعہ نظم)
- تدریس قواعد (بہ ذریعہ اقتباس)
- رول پلے، بازر سی Feed back
- فنکشنل و عملی طریقے (ثانوی سطح کے مطابق)
- تدریس تدابیر (ثانوی سطح کے مطابق)
- منظومات پر مبنی اسباق کی منصوبہ بندی (جماعت ہشتم)
- نثر پر مبنی اسباق کی منصوبہ بندی (جماعت نہم)
- نثر پر مبنی اسباق کی منصوبہ بندی (جماعت دہم)

یونٹ: ۴

جائزہ و آزمائش

- جائزہ و آزمائش تعارف
- سوالات کی تکنیک، مشق
- کلوز پیسج، کیٹرائنتخابی
- آزمائش (TEST)
- سوالنامے
- پرچہ جات

•اسائنمنٹ

•مڈل سطح کے سانچے

•ثانوی سطح کے سانچے

•منظومات پر مبنی اسباق (جماعت ہشتم)

•نثر پر مبنی اسباق (جماعت نہم)

•منظومات پر مبنی اسباق (جماعت دہم)

•نثر پر مبنی اسباق (جماعت نہم و دہم)

(SUGGESTED BOOKS / READINGS) حوالہ جات/ مطالعاتی مواد

تدریسی مباحث

- ۱۔ فرمان فتح پوری، ڈاکٹر تدریس اردو مقتدرہ قومی زبان اسلام آباد ۱۹۸۶ء
- ۲۔ جی ایم ملک، پروفیسر، نثار احمد جمیل، پروفیسر تدریس اردو مقتدرہ قومی زبان اسلام آباد ۱۹۸۰ء
- ۳۔ ریاض احمد، ڈاکٹر اردو تدریس جدید طریقے اور تقاضے مکتبہ جامعہ لمیٹڈ نئی دہلی، انڈیا ۲۰۱۳ء
- ۴۔ ریاض احمد، ڈاکٹر تعلیم و تدریس کے روشن پہلو ایجوکیشنل پبلشنگ ہاؤس، دہلی ۲۰۱۱ء
- ۵۔ شیریں حسین، ڈاکٹر تعین و تدریس حسین اشاعت گھر جواہر نگر، انڈیا ۲۰۱۰ء
- ۶۔ محمد اکرام خان مشقی تدریس: کیوں اور کیسے؟ مکتبہ جامعہ لمیٹڈ نئی دہلی، انڈیا ۲۰۱۱ء
- ۷۔ رشید حسن خان اردو املا فکشن ہاؤس لاہور ۲۰۱۳ء
- ۸۔ فرمان فتح پوری، ڈاکٹر اردو املا قواعد (مسائل و مباحث) مقتدرہ قومی زبان اسلام آباد ۱۹۹۰ء
- ۹۔ طالب الہاشمی اصلاح تلفظ و املا القمر انٹر پرائز اردو بازار لاہور س-ن
- ۱۰۔ گوپی چند نارنگ، ڈاکٹر املا نامہ (مرتبہ) مکتبہ جامعہ لمیٹڈ نئی دہلی، انڈیا ۱۹۷۴ء
- ۱۱۔ بادشاہ منیر بخاری، ڈاکٹر اردو زبان کے غیر آریائی نظریات بخاری پبلشرز پشاور ۲۰۱۵ء
- ۱۲۔ بادشاہ منیر بخاری، ڈاکٹر مقالات (مرتبہ) بخاری پبلشرز پشاور ۲۰۰۸ء
- ۱۳۔ خلیل صدیقی زبان کیا ہے؟ بیکن بکس ملتان ۱۹۸۹ء
- ۱۴۔ ابولعجاز حفیظ صدیقی کشف تنقیدی اصطلاحات مقتدرہ قومی زبان اسلام آباد ۱۹۸۵ء
- ۱۵۔ شان الحق حق ۲۰۱۰ء مقتدرہ قومی زبان اسلام آباد (مرتبہ) فرینگ تلفظ

Semester VIII				
Codes	Title of the Courses	Cr. Hrs.	Remarks	Marks
EDU 484	School Management	03	Major	100
EDU 485	Teaching Practice-III	03	Major	100
EDU 486	Test Development and Evaluation	03	Major	100
EDU 481	Pedagogy-II of Discipline-I: (Urdu)	03	Major	100
EDU 483	Pedagogy-II of Discipline-III: (Biology)			
EDU 489	Thesis	03	Capstone Project	100
Total Semester Credit Hours for Discipline-III		15		600
EDU 490	Discipline-II: Lab Work in Physics	02	Major	50
Total Semester Credit Hours for Discipline-II		17		650
EDU 491	Discipline-I: Teaching of Social Studies	02	Major	50
Total Semester Credit Hours for Discipline-I		17		650

Course Title: School Management
Course Code: EDU 484
Cr. Hrs: 03

Course Outcomes

After completing this course, Student Teachers will be able to:

1. reconceptualize school as a system and recognize teachers' lead role in its structure and functions at various levels
2. identify elements of transformational leadership and how teachers can contribute to the professional development of a school community
3. critically analyse communication patterns between different groups within a typical school system and participate in different classroom-based and fieldbased activities to develop their core skills in communication within the school community
4. apply their roles within the context of school management to improve student learning outcomes • participate in the decision-making process in school to influence change at the school and community level

Unit 1

1. Systems thinking
2. Reconceptualize the concept of a 'good school'
3. Analyse Student Teachers' roles in the existing practices at various levels of the school structure
4. Conceptualize school as a system (input, output, and process)
5. School as an organizational system
6. School as a social system
7. School as an open system

Unit 2

1. Organization, administration, management, supervision and leadership
2. The functions of management (planning, organizing, leading, and controlling) and teachers' related role
3. The levels of management

• **The teacher as leader:**

- i. As an instructional leader (strategic planning, vision, and mission)
- ii. As an agent of change or a transformational leader

• **Human relationships: The base for educational leadership**

Unit 3

1. Communication skills
2. Communication process
3. Directions of communication
4. Barriers to communication
5. Overcoming barriers to communication
6. Interpersonal skills
7. Managing conflict with the school community
8. School record management (concepts and principles)
9. General records (about school, staff, and students)

10. Financial records
11. Educational records
12. Equipment records
13. Correspondence records
14. Account

Unit 4

1. Conceptualizing the school as a learning organization
2. The establishment and smooth running of school councils
3. Shared leadership
4. Shared decision-making: Empowering teacher
5. Managing cooperation within the school
6. The relationship of the school with society
7. Teamwork
8. Considering schools as organizations and communities
9. Leading purposeful change in schools: People, power, and culture

Unit 5

1. School plant management
2. Building size, shape, design, construction, and maintenance
3. Managing the school library, laboratories, and the playground
4. The school environment (common principles)
5. Scheduling and managing day-to-day activities, considering the available resources
6. Planning and managing co-curricular activities

SYLLABUS 2

Unit 1

1. Introduction to school management
2. Conceptualizing school management and its principles and dynamics
3. The structure of school management
4. Management skills and their implications at different levels of the management hierarchy

Unit 2

- 1. The functions of management: Planning**
 - i. Basic concepts of planning
 - ii. Planning for school management
 - iii. Planning and preparing a year calendar
 - iv. Preparing a timetable and day-to-day activities schedulers
- 2. Organizing**
 - i. The value of organizing for schools
 - ii. The teacher's role in planning and organizing different curricular and co-curricular activities
 - iii. Planning and organizing health, safety, and other co-curricular activities
- 2. The head teacher's role in managing day-to-day activities**
 - i. Arranging classes
 - ii. Staffing arrangement
 - iii. Material provision

1. Unit 3

1. Leading

- i. Leadership qualities
- ii. Challenges in school management processes faced by contemporary educational leaders in Pakistan

2. Controlling for balance in management

- i. The process of controlling (avoiding overspending and underspending human, physical, and financial resources)
- ii. Evaluation and feedback

3. Record-keeping in school

- i. Academic records (attendance, student registration and progress, library, laboratory, etc.)
- ii. Material records (furniture, equipment, etc.)
- iii. Financial records (budget, purchases, fee collection, salaries, etc.)

Unit 4

3. Introduction: Stakeholders and relationship

- i. Inter- and intra-school relationships
- ii. Principles and dynamics of school relationships

4. The head teacher and teachers

- i. The head teacher and students
- ii. The head teacher and support staff

5. Teachers and students

- i. Teachers and teachers
- ii. Teachers and support staff

6. Students and support staff

- i. Students and students
- ii. Cooperation between the school and parents

Unit 5

7. Building a learning organization

- i. Empowering leaders: Becoming a learning organization
- ii. Learning organization and leadership style

8. Organizational leadership

- i. Leading a learning organization
- ii. Charismatic and transformational leadership

9. Team leadership

- i. The leader as a teacher: Shaping the shared vision of a learning organization

10. Communication, coaching, and conflict management skills

11. Team leadership and self-managed teams

Recommended Readings

1. Sidhu, K. S. (2005). School organization and administration. New Delhi: Sterling Publishers, pp. 53–61
2. Shami, P. A., & Waqar, A. (2007). School management and supervision. Islamabad: Academy of Educational Planning and Management, pp. 3–5.

3. Busher, H. (2006). Understanding educational leadership: People, power and politics. New York: Open University Press, pp. 1–11, 148–162
4. Hoy, W. K., & Miskel, C. G. (2008). Educational administration: Theory, research, and practice. Boston: McGraw-Hill, pp. 33–36, 356–371.
5. Khan, D. S. (2009). Educational management. Lahore: Majeed Book Depot, pp. 199–210.
6. Lunenburg, F. C., & Ornstein, A. C. (2007). Educational administration: Concepts and practices. Belmont, CA: Wadsworth Publishing Company, pp. 176–196.
7. Razik, T. A., & Swanson, A. D. (2010). Fundamental concepts of educational leadership and management. Upper Saddle River, NJ: Pearson, pp. 103–126.
8. Northouse, G. (2007). Leadership: Theory and practice. New Delhi: Sage Publications, pp. 175–186

Course Title: Teaching Practice-III
Course Code: EDU 485
Cr. Hrs: 03

Course Description

The Professional Teaching Practicum is a capstone experience for final-semester students pursuing a degree in education. It offers an extended opportunity for students to apply their accumulated knowledge and skills in a real classroom setting, working alongside experienced mentor teachers. The practicum focuses on advanced teaching techniques, curriculum development, and professional growth.

Learning Outcomes

By the end of the practicum, students should be able to:

1. Demonstrate advanced teaching strategies and pedagogical approaches.
2. Develop, implement, and assess curriculum and lesson plans.
3. Engage in reflective practice and data-driven decision-making.
4. Collaborate effectively with colleagues, students, and parents.
5. Create a positive and inclusive classroom environment.
6. Contribute to the field of education through action research or specialized projects.

Course outline and Weekly class plan

Week	Details of the Topics
Week 1+2	Orientation and Setting Goals <ul style="list-style-type: none"> • Introduction to the practicum site and mentor teacher(s) • Setting personal and professional goals for the practicum • Review of expectations and responsibilities
Week 3+4	Advanced Pedagogical Techniques <ul style="list-style-type: none"> • Exploration of advanced teaching methodologies • Observation of mentor teacher(s) in action • Planning and co-teaching lessons with guidance
Week 5+6	Specialized Instructional Materials <ul style="list-style-type: none"> • Developing and adapting curriculum materials • Aligning curriculum with educational standards and objectives • Collaborating with mentor teacher(s) on curriculum planning
Week 7+8	Action Research or Specialized Project <ul style="list-style-type: none"> • Designing and initiating an action research project or specialized teaching project • Data collection and analysis • Regular progress reports and discussions with mentor teacher(s)
Week 9+10	Inclusive Education and Special Needs <ul style="list-style-type: none"> • Strategies for accommodating diverse learners • Collaboration with special education professionals (if applicable) • Developing and implementing individualized education plans (IEPs)
Week 11+12	Assessment and Data-Driven Instruction <ul style="list-style-type: none"> • Designing formative and summative assessments • Analyzing student data to inform instruction • Adjusting teaching strategies based on assessment results
Week	Classroom Management and Behavior Support

Week	Details of the Topics
13+14	<ul style="list-style-type: none"> • Effective classroom management techniques • Addressing student behavior issues • Creating a positive and respectful classroom culture
Week 15+16	Reflection and Future Planning <ul style="list-style-type: none"> • Final reflection on the practicum experience • Presentation of action research or specialized project findings • Developing a professional growth plan for the future
Assessment	Assessment during the practicum will be based on the following: <ul style="list-style-type: none"> • Lesson plans, curriculum materials, and instructional delivery • Contributions to the action research or specialized project • Reflection journals and self-assessment • Collaborative participation with mentor teacher(s) • Classroom observations and feedback

Tour to Various Renowned Educational Institutions:

- i. Cadet Colleges and Elite Schools
- ii. Islmia College University Peshawar
- iii. Edwards College School Peshawar
- iv. Directorate of Curriculum and Teacher Education Abbatabad
- v. Directorate of Professional Development Peshawar
- vi. Curriculum Wing Ministry of Education Islamabad
- vii. Quid-E-Azam University, Islamabad,
- viii. Government College Lahore
- ix. Aitcheson College Lahore
- x. University of the Punjab
- xi. LUMS Lahore
- xii. Regional Professional Development Centre, Malakand Division

Note: Important to note that;

- Regular meetings with the mentor teacher or supervisor to discuss progress and receive feedback.
- Submission of a comprehensive report or portfolio summarizing the practicum experience and its impact on professional growth.
- Completion of any additional school or district-specific requirements or assessments.

Recommended books

- Lawson, T., Çakmak, M., Gündüz, M., & Busher, H. (2015). Research on teaching practicum—a systematic review. *European journal of teacher education*, 38(3), 392-407.
- Buckworth, J. (2017). Issues in the teaching practicum. *The challenge of teaching: Through the eyes of pre-service teachers*, 9-17.
- Hyland, F., & Lo, M. M. (2006). Examining interaction in the teaching practicum: Issues of language, power and control. *Mentoring & Tutoring*, 14(2), 163-186.
- Machado, J. M., & Botnarescue, H. M. (2010). *Student teaching: Early childhood practicum guide*. Cengage Learning.
- Trent, J. (2013). From learner to teacher: Practice, language, and identity in a teaching practicum. *Asia-Pacific Journal of Teacher Education*, 41(4), 426-440.
- White, S., Green, W., Reid, J. A., Lock, G., & Hastings, W. (2008). Teacher education for rural communities: a focus on 'incentives'. In *Australian Teacher Education Association Conference* (pp. 381-390). ATEA.
- Ayumi, J. S., Rezeki, Y. S., & Wardah, W. (2022). EFL PRE-SERVICE

TEACHERS' EXPERIENCES DOING PRACTICUM DURING COVID-19 PANDEMIC. *The Journal of English Literacy Education: The Teaching and Learning of English as a Foreign Language*, 9(1), 65-77.

- White, S., & Kline, J. (2012). Developing a rural teacher education curriculum package. *The Rural Educator*, 33(2), 36-43.
- Dann, C., & Allen, B. (2015). Mobile video collection in preservice teacher practicum placements. *Journal of Technology and Teacher Education*, 23(1), 5-27.
- Ryan, J., Jones, M., & Walta, C. (2012). Creating a sustainable and supportive teaching practicum in rural and regional locations. *Australian and International Journal of Rural Education*, 22(1), 57-72.
- TOCCI, C. (2022). Developing educational websites to supplement clinical fieldwork. *A retrospective of teaching, technology, and teacher education during the COVID-19 pandemic*, 245.

Course Title: Test Development and Evaluation
Course Code: EDU 486
Cr. Hrs: 03

Course Outcomes

After completing this course, Student Teachers will be able to:

1. Describe and explain types of tests including their advantages and limitations
2. Differentiate and apply Bloom's and Structure of Observed Learning Outcomes(SOLO) taxonomies for test construction
3. Describe the role of classical, item response, and generalizability theory in test development
4. Explain the characteristics of an effective test
5. Construct tests systematically
6. Use a variety of essential assessment strategies
7. Describe and use evaluation to improve learning, teacher performance, and school performance based on value added.

Unit1

1. Concepts of testing Kinds of tests
2. Teacher-made tests ,Standardized tests
3. Benefits and limitations of tests
4. Concept of taxonomy in testing
5. Using Bloom's Taxonomy in test development
6. Using SOLO Taxonomy in test development

Unit 2

1. Concept of a good test
2. Reliability of tests, Validity of tests
3. Practice session to calculate reliability of tests
4. Evaluating test items based on their discrimination power ,Utility of a test

Unit 3

1. Determining the behaviours to be assessed
2. Planning the test
3. Ensuring content validity (course coverage, concept coverage, learning outcomes coverage) through a table of specifications
4. Constructing a table of specifications based on Bloom's Taxonomy
5. Constructing a table of specifications based on SOLO Taxonomy
6. Writing good MCQs, and constructing tests with MCQs based on a table of specifications
7. Reviewing peer's tests and scores
8. Performing item analysis (difficulty, discrimination, fairness)

9. Constructing short answer questions Marking guides for short answer questions
10. Constructing essay questions and tests Developing model answers and marking schemes for essay, questions

Unit 4

1. Classroom observations, purpose, Planning and preparing of classroom observation
2. Deriving results from the observation by developing rubrics
3. Assignments and presentations Your intended audience
4. Format, structure, and submission requirements
5. Grading criteria
6. Projects: Definition of a project ,Tasks versus tests ,Five features of a project
7. What makes a project successful? ,Phases of a project
8. How to assess projects and use them for evaluation
9. Double marking, interrater reliability, and the Spearman–Brown prophecy formula
10. Oral questioning: Purpose of questioning (e.g. feedback for improving teaching and learning) ,Guidelines for questioning
11. Peer appraisal: ‘Guess who’ techniques ,Socio-metric techniques Interview strengths and weaknesses Interview format
12. Portfolio assessment: Two types of portfolios (increasing breadth, increasing depth)
13. Steps in the portfolio assessment process
14. Computer assisted testing and generation of parallel forms for the measurement of change

Recommended reading

1. Cohen, R., & Swerdlik, M. (2009). Psychological testing and assessment: An introduction to tests and measurement (7th ed.). Columbus, OH: McGraw-Hill.
2. Gardner, J. (2006). Assessment and learning. Thousand Oaks, California: Sage Publications.
3. Kline, T. J. B. (2005). Classical test theory: Assumptions, equations, limitations, and item analyses. In T. J. B. Kline (Ed.), Psychological testing: A practical approach to design and evaluation (pp. 91–106). Thousand Oaks, CA: Sage Publications. Available from:
4. Miller, M., Linn, R., & Gronlund, N. (2009). Measurement and assessment in teaching (10th ed.). Upper Saddle River, NJ: Pearson.
5. Zeng, J., & Wyse, A. (2009). Introduction to classical test theory. Lansing, MI: Michigan Department of Education.

Note:

Courses included in the General Education Category are designed by the respective departments including their course codes, credit hours and titles (reflected in the scheme of studies). All such courses approved by the Syndicate are available on the university website (www.uom.edu.pk). For any query the office of the Registrar Academics may be approached for clarification/guidance.