

CURRICULUM OF EDUCATION

Bachelor of Education, B. Ed. (Hons)

Associate Degree in Education (ADE)

(Revised 2023)

The courses and programs have been approved by worth Vice Chancellor and members of Board of Studies in held on Thursday, 9th February, 2023, 11th meeting of Board of Faculty dated 19 May, 2023, 18th meeting of Academic Council dated, 24 May, 2023, and 46 Syndicate held on 10th August, 2023.



DEPARTMENT OF EDUCATION

**SHAHEED BENAZIR BHUTTO WOMEN UNIVERSITY
PESHAWAR**

All Codes for complete program are classified as: Applied on Session-2018-Onwards

S. No	Compulsory Courses/Core Courses	Symbol of Code	Alphabetical Code	Level of Study/Year	Semester
1	Functional English-1, Islamic Studies/Ethics, Urdu/Regional Languages, General Science	Will be given by other Department	Will be given by other Department	3	1
2	English-II, Computer Literacy, General Mathematics, Pakistan Studies	Will be given by other Department	Will be given by other Department	3	2
3	Art, Craft and Calligraphy	Will be given by other Department	Will be given by other Department	4	3
5	Content course I from Discipline I, Content Course I from Discipline II	Will be given by other Department	Will be given by other Department	5	5
6	Content course II from Discipline I, Content Course II from Discipline II	Will be given by other Department	Will be given by other Department	5	6
7	Content course III from Discipline I, Content Course III from Discipline II	Will be given by other Department	Will be given by other Department	6	7

S.No	Foundation Courses/Basic Courses/Introductory Courses	Symbol of Code	Alphabetical Code	Level of Study/Year	Semester
1	Child Development, General Methods of Teaching, General Methods of Teaching	0	EDU	3	1
2	Classroom Management	0	EDU	3	2
3	Classroom Assessment, School Community and Teacher	0	EDU	4	4
4	Foundation of Education, Curriculum Development, Educational Psychology	0	EDU	5	5
5	Introduction to Guidance and Counseling	0	EDU	5	6

S. No	Major Courses	Symbol of Code	Alphabetical Code	Level of Study/Year	Semester
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1	Teaching Practice (Short Term)	1	EDU	4	3
2	Teaching Practice (Short Term)	1	EDU	4	4
3	Teaching Practice (Short Term), Pedagogy-I, Pedagogy-II	1	EDU	6	7
4	Teaching Practice (Long Term)	1	EDU	6	8

S. No	Minor Courses	Symbol of Code	Alphabetical Code	Level of Study/Year	Semester
1	Contemporary Issues and Trends in Education, Comparative Education, Learning Innovation & Interactive Teaching	2	EDU	5	6
2	School Management, Test Development and Evaluation, Educational Law	2	EDU	6	8

S. No	Professional Courses	Symbol of Code	Alphabetical Code	Level of Study/Year	Semester
1	Methods of Islamic Studies	3	EDU	3	2
2	Teaching Literacy Skills, Teaching of Urdu, Teaching of General Science, Instructional & Communicational Technology	3	EDU	4	3
3	Teaching of English II, Teaching of Mathematics, Teaching of Social Studies	3	EDU	4	4
4	Teaching of English III	3	EDU	5	5

S. No	Advance Courses	Symbol of Code	Alphabetical Code	Level of Study/Year	Semester
2	Research Methods in Education	9	EDU	6	7
3	Research Project	9	EDU	6	8

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EDU-437 Teaching of Mathematics (Professional)	133
EDU-405 School, Community and Teacher (Foundation)	136
EDU-438 Teaching of Social Studies (Professional)	142
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Note: After completing 2 years, the universities / institutions may award an **Associate Degree in Education (ADE)**. However, the students admitted for B.Ed. (Hons) 4 Years Degree Program will continue for 3rd and 4th Year.

B.Ed (Hons.) 4 year Degree Program Scheme of Studies

Eligibility Criteria

1. FA/F.Sc / A level or equivalent with minimum 2nd Division.
2. FA/F.Sc / A level with school subjects.

Duration:	4 years
Semester Duration:	16-18 weeks
Semesters:	8
Course Load Per Semester:	16-18 Credit Hours
Number of Courses per semester:	5-6 (not more than 3 lab/ practical courses)

Structure of the Scheme

Courses	Credit Hours
Compulsory Courses	19
Professional Courses	40
Foundation Courses	24
Content Courses	27
General Courses	03
Pedagogy I & II	06
Teaching Practice	15
Total Credit Hours:	134

Year / Semester wise Scheme of Studies of B.Ed. (Hons.)**Ist Year****SEMESTER I**

S.NO	CODES	COURSES	CREDIT HRS
1	ENG-301	Functional English-I (Compulsory)	3
2	ISL-320	* Islamic Studies/** Ethics (Compulsory)	2
3	EDU-301	Child Development (Foundation)	3
4	URD-302	Urdu / Regional Languages (Content)	3
5	ZOL-301	General Science (Content)	3
6	EDU-302	General Methods of Teaching (Foundation)	3
		Total Credit Hours	17

SEMESTER II

S.NO	CODES	COURSES	CREDIT HRS
1	ENG-302	English-II (Communication Skills Compulsory)	3
2	CSC-303	Computer Literacy (Compulsory)	3
3	EDU-303	Classroom Management (Foundation)	3
4	MTH-301	General Mathematics (Compulsory)	3
5	PST-323	Pakistan Studies (Compulsory)	2
6	EDU-331	** Methods of Teaching Islamic Studies (Professional)	3
		Total Credit Hours	17

2nd Year**SEMESTER III**

S.N O	CODES	COURSES	CREDIT HRS
1	EDU-432	Teaching Literacy Skills (Professional)	3
2	AD-305	Basic of Arts (Content)	3
3	EDU-433	Teaching of Urdu/ ** Regional Languages (Professional)	3
4	EDU-434	Teaching of General Science (Professional)	3
5	EDU-435	Instructional and Communication Technology (ICT) in Education (Professional)	2
6	EDU-411	Teaching Practice (Short Term)	3
		Total Credit Hours	17

SEMESTER –IV

S.NO	CODES	COURSES	CREDIT HRS
1	EDU-404	Classroom Assessment (Foundation)	3
2	EDU-436	Teaching of English (Professional)	3
3	EDU-437	Teaching of Mathematics (Professional)	3
4	EDU-405	School, community and Teacher (Foundation)	2+1
5	EDU-438	Teaching of Social Studies (Professional)	2
6	EDU-412	Teaching Practice	3
		Total Credit Hours	17

3rd Year**SEMESTER –V**

S.NO	CODES	COURSES	CREDIT HRS
1	EDU-539	English –III (Technical Writing & Presentation Skills) (Compulsory)	3
2	EDU-506	Foundations of Education (Foundation)	3
3		Content Course –I (from selected discipline –I)	3
4		Content Course –I (from selected discipline –II)	3
5	EDU-507	Curriculum Development (Foundation)	3
6	EDU-508	Educational Psychology (Foundation)	3
		Total Credit Hours	18

SEMESTER –VI

S.N O	CODES	COURSES	CREDIT HRS
1	EDU-521	Contemporary Issues and Trends in Education (Professional)	3
2		Content Course –II (from selected discipline –I)	3
3		Content Course –II (from selected discipline –II)	3
4	EDU-522	Comparative Education (Professional)	3
5	EDU-509	Introduction to Guidance and Counseling (Professional)	3
		Total Credit Hours	17

4th Year**SEMESTER VII**

S.N O	CODES	COURSES	CREDIT HRS
1		Content Course –III (from selected discipline – I)	3
2		Content Course –III (from selected discipline – II)	3
3	EDU-613	Pedagogy –I (Methods of Teachings related to specialization –I)	3
4	EDU-614	Pedagogy –II (Methods of teaching related to specialization –II)	3
5	EDU-691	Research Methods in Education (Professional)	3
6	EDU-615	Teaching Practice (Short Term)	3
		Total Credit Hours	18

SEMESTER VIII

S.NO		COURSES	CREDIT HRS
1	EDU-624	School Management (Professional)	3
2	EDU-627	Statistics in Education (General)	3
3	EDU-616	Teaching Practice (Long Term)	6
4	EDU-699	Research Project (Professional)	3
		Total Credit Hours	15
		Grand Total Credit Hours	134

Note: After completing 2 years, the universities / institutions may award an **Associate Degree in Education (ADE)**. However, the students admitted for B.Ed.(4 Years) Degree Program will continue for 3rd and 4th Year.

* Same as published in HEC Curriculum of Education 2010.

** Universities will develop the courses.

Eligibility Criteria

3. FA/F.Sc / A level or equivalent with minimum 2nd Division.
4. FA/F.Sc / A level with school subjects.

Duration:	4 years
Semester Duration:	16-18 weeks
Semesters:	8
Course Load per Semester:	16-18 Credit Hours
Number of Courses per semester:	5-6 (not more than 3 Lab/ practical Courses)

Structure of the Scheme

Courses	Credit Hours
Compulsory Courses	19
Professional Courses	40
Foundation Courses	24
Content Courses	27
General Courses	03
Pedagogy I &II	06
Teaching Practice	15
Total Credit Hours:	134

Associate Degree in Education (ADE) Two Years Scheme of Studies

Eligibility Criteria

1. FA/F.Sc/ A levels with minimum 2nd Division.
2. FA/F.Sc/ A levels with school subjects.

Duration:	2 years (4 Semesters)
Semester Duration:	16-18 weeks Semesters: 4
Course Load per semester:	15-18 Cr hr
Number of Courses per semester:	5-6 (not more than 3 lab/ practical courses)

Structure of the Scheme

Courses	Credit Hours
Compulsory Courses	16
Professional Courses	22
Foundation Courses	15
Content Courses	09
Teaching Practice	06
Total Credit Hours:	68

**Year / Semester wise Scheme of Studies of Associate Degree in Education
(ADE)**

1st Year

SEMESTER I

S.NO	COURSES	CREDIT HRS
1	Functional English-I (Compulsory)	3
2	* Islamic Studies/** Ethics (Compulsory)	2
3	Child Development (Foundation)	3
4	Urdu / Regional Languages (Content)	3
5	General Science (Content)	3
6	General Methods of Teaching (Foundation)	3
	Total Credit Hours	17

SEMESTER II

S.NO	COURSES	CREDIT HRS
1	English-II (Communication Skills Compulsory)	3
2	Computer Literacy (Compulsory)	3
3	Classroom Management (Foundation)	3
4	General Mathematics (Compulsory)	3
5	Pakistan Studies (Compulsory)	2
6	** Methods of Teaching Islamic Studies (Professional)	3
	Total Credit Hours	17

2nd Year

SEMESTER III

S.NO	COURSES	CREDIT HRS
1	Teaching Literacy Skills (Professional)	3
2	Art, Crafts and Calligraphy (Content)	3
3	Teaching of Urdu/ ** Regional Languages (Professional)	3
4	Teaching of General Science (Professional)	3
5	Instructional and Communication Technology (ICT) in Education (Professional)	2
6	Teaching Practice (Short Term)	3
	Total Credit Hours	17

SEMESTER –IV

S.NO	COURSES	CREDIT HRS
1	Classroom Assessment (Foundation)	3
2	Teaching of English (Professional)	3

3	Teaching of Mathematics (Professional)	3
4	School, community and Teacher (Foundation)	2+1
5	Teaching of Social Studies (Professional)	2
6	Teaching Practice	3
	Total Credit Hours	17

COURSE SYLLABI

for

ADE and B.Ed. (Hons.) Programs

Note:

The primary audience for course syllabi is student teachers although teaching faculty will also find them useful.

Course guides for faculty are also available for most of the courses in the first two years of the B.Ed. and ADE. The course guides provide ideas and resources for teaching the courses.

Course guides can be downloaded from:

www.pakteachers.org/Curriculum-Material

Islamic Studies (Compulsory) Semester 1

Title of Course: Islamic Studies

Credit Hours: 03

Objectives

This course is aimed at:

1. To provide Basic information about Islamic Studies
2. To enhance understanding of the students regarding Islamic Civilization
3. To improve Students skill to perform prayers and other worships
4. To enhance the skill of the students for understanding of issues related to faith and religious life.

Course Outline

Introduction to Quranic Studies

- 1) Basic Concepts of Quran
- 2) History of Quran
- 3) Uloom-ul -Quran

Study of Selected Text of Holly Quran

- 1) Verses of Surah Al-Baqra related to Faith (Verse No-284-286)
- 2) Verses of Surah Al-Hujrat related to Adab Al-Nabi (Verse No-1-18)
- 3) Verses of Surah Al-Mumanoon related to Characteristics of faithful (Verse No-1-11)
- 4) Verses of Surah al-Furqan related to Social Ethics (Verse No.63-77)
- 5) Verses of Surah Al-Inam related to Ihkam(Verse No-152-154)

Study of Selected Text of Holy Quran

- 1) Verses of Surah Al-Ihzab related to Adab al-Nabi (Verse No.6,21,40,56,57,58.)
- 2) Verses of Surah Al-Hashar (18,19,20) related to thinking, Day of Judgment
- 3) Verses of Surah Al-Saf related to Tafakar,Tadabar (Verse No-1,14)

Seerat of Holy Prophet (S.A.W)

- 1) Life of Muhammad Bin Abdullah (Before Prophet Hood)
- 2) Life of Holy Prophet (S.A.W) in Makkah
- 3) Important Lessons derived from the life of Holy Prophet in Makkah

Seerat of Holy Prophet (S.A.W) II

- 1) Life of Holy Prophet (S.A.W) in Madina
- 2) Important Events of Life Holy Prophet in Madina
- 3) Important Lessons Derived from the life of Holy Prophet in Madina

Introduction to Sunnah

- 1) Basic Concepts of Hadith
- 2) History of Hadith
- 3) Kinds of Hadith
- 4) Uloom –ul-Hadith
- 5) Sunnah& Hadith
- 6) Legal Position of Sunnah

Selected Study from Text of Hadith

Introduction to Islamic Law & Jurisprudence

- 1) Basic Concepts of Islamic Law & Jurisprudence
- 2) History & Importance of Islamic Law & Jurisprudence
- 3) Sources of Islamic Law & Jurisprudence
- 4) Nature of Differences in Islamic Law
- 5) Islam and Sectarianism

Islamic Culture & Civilization

- 1) Basic Concepts of Islamic Culture & Civilization
- 2) Historical Development of Islamic Culture & Civilization
- 3) Characteristics of Islamic Culture & Civilization
- 4) Islamic Culture & Civilization and contemporary issues

Islam & Science

- 1) Basic Concepts of Islam & Science
- 2) Contributions of Muslims in the Development of Science
- 3) Quranic & Science

Islamic Economic System

- 1) Basic Concepts of Islamic Economic System
- 2) Means of Distribution of wealth in Islamic Economics
- 3) Islamic Concept of Riba
- 4) Islamic Ways of Trade & Commerce

Political System of Islam

- 1) Basic Concepts of Islamic Political System
- 2) Islamic Concept of Sovereignty
- 3) Basic Institutions of Government in Islam

Islamic History

- 1) Period of Khlaft-E-Rashida
- 2) Period of Ummayyads
- 3) Period of Abbasids

Social System of Islam

- 1) Basic Concepts of Social System Of Islam
- 2) Elements of Family
- 3) Ethical Values of Islam

Reference Books:

- Ahmad Hasan, *Principles of* (1993), *Islamic Jurisprudence* "" Islamic Research Inst Pakistan, International Islamic University.
- Bhatia, H *Studies. in Islamic. (1989) Law, Religion and Society* "" New Delhi: Deep & Publications Dr. Muhammad Zia-ul-Haq, (2001) *Introduction to Al. Sharia* "" Al Islamia" Islamabad, Pakistan: Allama Iqbal Open University
- Hameed ullah *Introduction Muhammad, to Islam Mulana Muhammad,, Yousaf Islahi,*""
- Hameed ullah *Emergence Muhammad, of Islam* "" Islamabad: "" IRI.
- Hameedullah *Muslim Muhammad, Conduct of State* "" Islamabad "" Pa kistan: Hussain Hamid Hassan, u leaf Publication.
- Mir Waliullah, *Muslim Jrisprudence (1982), and the Quranic Law* "" of Crimes"" Islamic Book Publication

Course Title: Child Development (Foundation)**Course Code: EDU-301 Semester: 1****Year, Semester**

Year 1, Semester 1

Credit Value: 3 credits (48 contact hours)**COURSE DESCRIPTION**

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

COURSE OUTCOMES

On the successful completion of this course the prospective teacher will be able to:

- describe major theories and big themes in how children develop compare the characteristics of various developmental stages according to various theorists
- identify factors influencing the learning process design different age appropriate teaching methods based on developmental theory
- identify individual differences of students and children with special needs design different age
- identify the role of teacher, schools and parents in child socialization
- describe various types of learning disabilities and frame suitable learning strategies according to the need of students.

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge. The techniques outlined below are not exclusive and therefore, other effective techniques and methods can be used:

- Lecture & Discussion, Inquiry Methods
- Case Observation and Study Methods
- Field visit, Observation Methods
- Library Assignments, Peer Assessment
- Project Work & Quizzes
- Pair, Group and Individual Assignments/Activities
- Self-Study Tasks
- School Survey/Community survey
- Individual and Panel presentations
- Course & Students Portfolios
- Mid-Tem, Final-Term Exams

Grading: The final grade is based on the total points from Classroom Assessment i.e assignments, quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

Distribution of Course Grading:

- Internal Class assessments: 20%
- Mid-Term Exam: 30%
- Final Term Exam: 50%
- Total: 100%

COURSE OUTLINE

UNIT 1: Introduction to child development (3 weeks/6 hours)

- 1.1 Overview of growth and development
- 1.2 Holistic Concept of Child development
- 1.3 Islamic Models of Child Development
- 1.4 Imam al-Ghazali Views on Islamic Environment in Child Development
- 1.5 Models of Child Development
 - i. Behaviorism
 - ii. Socio-cultural model
 - iii. Psycho-Social model
 - iv. Cognitive model

UNIT 2: Early childhood development (3 weeks)

- 2.1 Introduction
- 2.2 Physical, Cognitive, social and Emotional development
- 2.3 Developmentally appropriate practices for Early Childhood Education

UNIT 3: Nurturing Creativity and Imagination For Early Child Development(2 weeks/6 hours)

- 3.1 Role and importance of creativity and imagination in early childhood Education
- 3.2 Techniques for nurturing creative minds
- 3.3 Fostering Creative Process
- 3.4 Creative Play

UNIT 4: Elementary School-Age Child Development (2 weeks/6 hours)

- 4.1 Introduction
- 4.2 Physical, Cognitive, Social and Emotional development
- 4.3 Developmentally Appropriate Practices for Elementary School Aged Children

Unit 5: Adolescence and Development (2 weeks /9 hours)

- 5.1 Introduction
- 5.2 Physical, Cognitive, Social, and Emotional development
- 5.3 Developmentally Appropriate Practices for Adolescence Education

UNIT 6: Differences in classrooms: Developmental variation and special needs (2 weeks/9 hours)

- 6.1 Individual Differences

- 6.2 Types of Individual Differences
- 6.3 Learning Disabilities
- 6.4 Types of Learning Disabilities
- 6.5 Diagnosis and treatment of Learning disabilities

UNIT 7: Teacher, family, schools, and society (2 weeks/6hours)

- 7.1 Socialization
- 7.2 Agents of Socialization
- 7.3 Parenting Styles
- 7.4 Role of Teacher and school in child socialization

Suggested Books and Readings

- Neil J. Salkind (2002), *Child Development*, Macmillan Reference USA
- S. Bredekamp and C. Copple (eds.), *Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth through Age 8* (Washington, DC: National Association for the Education of Young Children, 1999).
- C. Howes and S. Ritchie, *A Matter of Trust: Connecting Teachers and Learners in the Early Childhood Classroom* (New York: Teachers College Press, 2002).
- C. Howes, *Culture and Child Development in Early Childhood Programs: Practices for Quality Education and Care* (New York: Teachers College Press, 2012).
- Laurence Steinberg, *Adolescence*, 9th ed. (New York: McGraw-Hill, 2011).
- Vygotsky L.S., *Mind in society: The development of higher psychological processes*, (United Kingdom: Harvard University Press, Cambridge, 1978AD).
- Imam Shafi Aziz. (2022). *Parenting in Islam: An Islamic guide to parenting based on principles found in Qur'an and Authentic*
- Bernier A, Carlson SM, Whipple N., "From external regulation to self-regulation: Early parenting precursors of young children's executive functioning", *Child Development*, 81, (2010AD), 326-339.
- Jameela Ho , Irna Fathurrubayah , Weronika Ozpolat , Nabila Ikram , Afshan Mohammed , and Hannah Morris. (2019). *Understand Your Child's Development (For the Muslim Parent)*. Djarabi Kitabs Publishing. Dallas, Texas.
- McCabe, J.E., "Maternal personality and psychopathology as determinants of parenting behavior: A quantitative integration of two literatures", *Psychological Bulletin*, 140, (2014AD), 722-750.
- Carolyn Meggit (2006), *Child Development ;an Illustrated guide* , Heinmann Educational Publishers Jordan Hall ,Oxford .
- Sally Neaum (2010), *Child Development for early Childhood Studies* ,Bell & Bain Ltd, Glassgow.
- S. Anandalakshmy (2008) *Child Development, Your Questions Answered*, Bywords Books Private Limited .
- Abbott, Rob, Burkitt, Esther (2015), *Child Development and the Brain*, University of Chicago Press .
- Rosalind Charlesworth (2016), *Understanding child Development*, Cengage Learning Boston USA.
- **Web resources**
- Child Development Institute website, designed to provide information and tools parents need to understand their children.
- <http://childdevelopmentinfo.com>
- Early Childhood Development (ECD) Pakistan website.
- <http://www.ecdpak.com>

- *Encyclopedia on Early Childhood Development* (available in English and Urdu).
- <http://www.child-encyclopedia.com/en-ca/home.html>
- *Nurture: Pakistan's Pioneer Publication on Early Childhood Development.*
- http://www.ecdpak.com/nurture/about_nurture.html
- Search Institute® is a leading global innovator in discovering what children and adolescents need to succeed in their families, schools, and communities. They present a 'Developmental Asset Lists' at
- <http://www.search-institute.org/developmental-assets/lists>
- https://www.researchgate.net/publication/348182467_CHILDREN'S_CHARACTER_BUILDING_METHOD_IN_ISLAM_ANALYSIS_OF_SURAH_LUQMAN
- <https://numl.edu.pk/journals/subjects/156878649314-03-141-ENG-V8-1-19-Formatted.pdf>
- <https://www.tandfonline.com/doi/abs/10.1080/1364436X.2019.1624254?journalCode=cijc20>
- https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2939027
- <https://studylib.net/doc/11936907/islamic-environment-in-child-development-according-to-the...>
- <https://core.ac.uk/download/pdf/84306928.pdf>
- <https://productivemuslim.com/islamic-parenting/>
- <https://numl.edu.pk/journals/subjects/156878649314-03-141-ENG-V8-1-19-Formatted.pdf>
- Jameela Ho , Irna Fathurrubayah , Weronika Ozpolat , Nabila Ikram , Afshan Mohammed , and Hannah Morris. (2019). *Understand Your Child's Development (For the Muslim Parent)*. Djarabi Kitabs Publishing. Dallas, Texas.
- Imam Shafi Aziz. (2022). *Parenting in Islam: An Islamic guide to parenting based on principles found in Qur'an and Authentic*

نصاب اردو

SYLLABUS URDU

نصاب برائے نفس مضمون / اردو مافیہ (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 پردازی
- 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

نصاب برائے نفس مضمون/ اردو مافیہ (Content)

سال اول سیمسٹر ۱۔

ایسوسی ایٹ ڈگری آف ایجوکیشن/ADE

بی ایڈ پلیمینٹری/(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۔

فنکشنل (عملی) طریقے میں ساخت اور معنی دونوں کی اہمیت پر زور دیا جاتا ہے۔ اس طریقہء تدریس کے ذریعے زبان کے سیاق و سباق یا سانچے یعنی کسی موقع پر ”کیا کہنا چاہیے“ پر خاص توجہ دی جائے گی۔ تاکہ زیر تربیت اساتذہ لفظ 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 و دران 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 استاد 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 یہ طور گھومل لینگونج جدید رجحانات (ضرورتوں/ تقاضوں/ تعمیری جہتوں) کے حوالے سے بھی زیر بحث لایا گیا ہے۔ علاوہ ازیں ابتدائی جماعتوں میں پڑھانے کے طریقے ترکیبی (الف بائی + صوتی) تحلیلی، جملوی، فنکشنل اردو کی تدریس پر خصوصی توجہ دی گئی ہے تاکہ پلیمینٹری 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 تحریری انداز میں بیان کر سکیں۔
- اردو کے الجارغ میں جدید رجحانات کے تحت نئی جہتوں پر عمل کر سکیں۔
- زبان کے استاد کی حیثیت سے اپنی صلاحیتوں کی تعظیم 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 ترتیب نو کے مقاصد کو پیش نظر رکھتے ہوئے تعلیمی اور تدریسی رسائی میں جدید و قدیم تدریسی طریقے مثلاً ترکیبی، تجلیلی، مخلوطی، استقرائی، استخراجی، انکشافی اور خصوصاً فنکشنل و عملی جیسے متنوع طریقے استعمال کیے گئے ہیں سوالات کا اسلوب، سمعی بصری معاونات کا بروقت استعمال، انٹرنیٹ سے استفادہ، پیرلرننگ جیسی تدریسی تکنیکوں کا ماہرانہ انداز میں موقع پر برتنا سکھایا گیا ہے جو ایک مشاق استاد کی تدریسی حکمت عملی سے حرید کا رآمد ہے۔

یونٹ ۱

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 نوآموز اساتذہ جدید تدریسی تکنیک اور مہارتوں کو بروئے کار لائیں۔ 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 بلیمنٹری 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)

یونٹ ۲

اصنافِ ادب

(صرف دو تدریس 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 تعلیمین کی اساتذہ نثر کی تمام اصناف سے واقفیت حاصل کر سکیں۔ مثلاً مزاح ادب کی صنف ہے اور طنز صنفِ 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 اندازِ 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 حصہ

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

چوتھا حصہ

- ۰۔ ڈراما (اقسام / اجزائے ترکیبی / روایت)
- ۰۔ افسانہ نگاری کا تعارف اشفاق احمد کے ”گمڈ 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 حصہ

- ۰۔ مآخذ اقتباسات (صرف یعنی الفاظ سے بحث، جو مکمل جملوں اور عبارتوں سے بحث)
- ۰۔ اغلاط زبان (بلحاظ قواعد فقرات کی تصحیح)
- ۰۔ محاورات (دورانِ گفتگو / عام بول چال میں استعمال)

چھٹا ہفتہ

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

یونٹ ۳

اصنافِ سخن (نظم و غزل)

تعارف:

زیر بحث یونٹ میں شعری اصناف، حمد، نعت، غزل، چہرہ و ڈی 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 تحلیلی 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 تجلی رنگ میں ملاحظہ فرمائیے!

بتا
تماشائے اہل کرم دیکھتے ہیں

قوتِ حافظہ، فکر اور تخیل کی تربیت اس جہت کا لازمہ ہے۔ اس کوشش کو عملی رنگ دینے کے لیے تمثیل، رول پلے، 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 ”روحِ ارضی آدم کا استقبال کرتی ہے“۔

- مولانا الطاف حسین حالی کی نظم مسدس حالی کے پہلے چار بند
- پس منظر کے تحت منظومات کی تشریح

نواں ہفتہ

- مرزا اسد اللہ خاں غالب کی غزل/ ”باز بچہ اطفال ہے دنیا میرے آگے“
- صوفی غلام مصطفیٰ تبسم کی غزل ”یہ کیا کراک جہاں کو کر و وقفِ اضطراب“ کے پہلے پانچ اشعار
- شعرا کا فکری و فنی تقابل

دسواں ہفتہ

- پرائمری سطح کی نظمیں (کلام پرائمر خیال، تخیل)
- وسطانی سطح کی نظمیں (کلام کی خوبیاں، تبصرہ)
- تحت اللفظ اور فی الہدیہ نظم گوئی

یونٹ ۴

انشا پر دازی

تعارف:

آج ضرورت ایسی اُردو کی ہے جو روزمرہ زندگی میں زبان کے استعمال یعنی ”کس موقع پر کیسی زبان بولی جائے“ کے اصول پر سکھائی جائے۔ جس کا مقصد طالب علم کو مختلف صورتوں میں زبان کے استعمال کے قابل بنانا ہے۔ اس لیے فنکشنل اُردو کا مطلب روزمرہ کی اُردو ہے۔ یہ اُردو ادبی اور علمی اُردو سے مختلف ہوگی۔ اس کے مقابلے میں سادہ، آسان اور عام فہم ہوگی۔ اعلیٰ سطح کے اساتذہ انشا پر دازی کے طریقے، تکنیک اور حکمت عملی کے گریسکھ کر اس قابل ہو جائیں گے کہ ان خطوط پر مزید کام کر سکیں اور اُردو میں عملی ضروریات ادبی، صحافتی، دفتری، سائنسی و تکنیکی اور علمی اُردو کے ضمن میں مہارت دکھاسکیں۔ مندرجہ ذیل امور بھی تقریری انشا یعنی بول چال سیکھنے میں مدد و معاون ثابت ہوں گے۔ ان میں سے کئی مذاہیر استعمال کی جائیں گی۔ جیسے کہانیاں، پہیلیاں، لطیفہ گوئی، مکالمے، بہر و پ بھرتا یا ڈراما کاری، بحث مباحثہ/ مذاکرے۔ مثلاً رپورٹ یا ڈکڑا مارا کاری میں تبدیلی کرنا۔ غالب کے خط کو مکالمہ بنا کر پیش کرنا یا مولوی عبدالحق کے خط کو تقریری انداز میں دے دینا۔ اس ضمن میں جماعتی سطح/ معیار/ امتحان کا خاص خیال رکھا جائے گا۔ تاکہ اُردو سے شغف اور زبان سیکھنے کی خواہش فروغ پائے۔

گیارہواں ہفتہ

- اُردو حروفِ چمچی (صوتیات/ اعراب/ حرکات)
- اُردو کا جدید ترین قاعدہ (صوتی، بنی، تصویری، تلازی)
- حروف کا عملی کردار (ابتدائی و درمیانی جماعتی سطح پر)

بار ہواں ہفتہ

- صحیح بولنے کی شرائط (روزمرہ بول چال، عام گفتگو، مکالمے، ذرائع ابلاغ، اخبارات، ٹی وی ڈرامے)
- تعلیم خوش خطی (درست تحریر کے ضروری امور)
- تخلیقی انشا (مشاہدہ تحریر)

تیسرے ہواں ہفتہ

- خطوط، درخواست (بہ شمول برقیاتی خط E-mail، برقیاتی پیغام SMS)
- مکالمہ و ڈراما نگاری (ڈراما نگاری)
- مضمون نویسی (جدید موضوعات پر اظہار خیال)

یونٹ ۵

اردو کے جدید رجحانات

(ضرورت، تقاضے، تعمیری جہتیں)

تعارف :

اردو کے جدید رجحانات: ضرورت، تقاضے اور تعمیری جہت کے حامل ہیں۔ اردو کی ترویج کے لیے زبان و ادب کے حوالے سے نصاب کی اس جہت کو نو آموز اساتذہ کے لیے حتی المقدور سادہ، عام فہم اور پر لطف انداز میں دیا گیا ہے۔ اردو برقی پیغام زیر تربیت اساتذہ کے ہاتھ میں موبائل کی صورت میں موجود ہے۔ اس مختصر سے کمپیوٹر نے اردو اطلاعیات کا مستقبل روشن کر دیا ہے۔ دفتری عملہ عام شہری سے اردو میں گفتگو کرنے پر مجبور ہے تو صحافی اردو میں رپورٹ ترقی کر رہے ہیں۔ مذہب و اخلاق کی ہر گزہ اردو کھول رہی ہے۔ سائنسی و تکنیکی ترقی عام ہو جائے کے مفروضے پر ہی زیر تربیت اساتذہ کو مستند عملی معلومات فراہم کی جائیں گی۔ آرٹ کے بغیر تو یہ کائنات بھی بے رنگ ہے تو اردو ادب کیسے آرٹ سے یا آرٹ ادب سے استفادہ نہ کرے۔ اس خیال کو یہ نصاب عملی صورت دیتا ہے مثلاً اشعار میں پوشیدہ خیالات کو تصویر کے کیوئس پر اتارنا۔ غالب و اقبال کی شاعری پر یہ کام ہو چکا ہے۔ ملی نغمے، نعت اور مضامین کا مقابلہ تو اب شہرتِ عام حاصل کر چکا ہے۔ اردو کے اساتذہ میں زبان کے حوالے سے ملی تشخص اجاگر کرنے اور اسے گوبل لینگویج بنانے کی کارروائی میں حصہ لینے کے قابل بنانا ہی اس کورس کا مرکزی نقطہ ہے۔

چودہواں ہفتہ

- اردو کی ترویج (بہ پہلو ضرورت)
- اردو کی بین الاقوامی حیثیت (تقاضے/تعمیریں)
- اردو کمپیوٹر کی زبان (اطلاعیات: اردو کا مستقبل)

پندرہواں ہفتہ

- اردو ذریعہ ابلاغ (دفتر، صحافت، مذہب و اخلاق)

- ۰۔ اردو اور جدید ٹیکنالوجی (ترقیاتی ادارے، معاشرتی شعبے اور کام)
- ۰۔ اردو رابطے کی زبان (عام بول چال کے حوالے سے)

سولہواں حصہ

- ۰۔ اردو آرٹ اور کلچر (نثر و نظم میں آرٹ/ آرٹ میں نثر و نظم)
- ۰۔ اردو تراجم و ٹیلی (قومی و ملی جذبے/ ماخوذ متن)
- ۰۔ اردو و گلوبل اینکولوج (منظر نامہ)

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- ۱۶۔ مقتدرہ قومی زبان سے اشاعت شدہ اخراجات کا استعمال

افسانے/ کہانیاں/ ڈرامے/ خطوط

- ۰۔ ”خودکشی/ ٹوبہ ٹیک سنگ“ سعادت حسن منٹو
- ۰۔ چور، اشفاق احمد
- ۰۔ رستم و سہراب، آغا حشر

- ”مرزا غالب ہندروڈ پر“ خواجہ معین الدین (ڈراما سی ڈی)
- ”یوسف مرزا کے نام“ مرزا غالب
- ”مولانا انشا اللہ خان کے نام“ علامہ اقبال

ماڈل اسائنمنٹ : (ASSIGNMENTS)

- ۱۔ علامہ اقبال کی شاعری مختلف موضوعات کا مرقع ہے۔ کسی ایک موضوع کو بنیاد بنا کر شعر اکٹھے کریں اور ایک کتابچے (booklet) کی صورت میں تیار کریں۔ اشعار کو لیبل کرنے کی وجوہات بھی تحریر کریں اور پہلے ہفتے کے اختتام پر جمع کروائیں۔
- ۲۔ دو گروپوں کو مختلف موضوعات دیے جائیں گے دونوں گروپ اسکرپٹ لکھ کر رول پلے/مشکل تیار کریں گے۔ دونوں گروپ اپنے مکالمے (اسکرپٹ) تحریری صورت میں جمع کروائیں گے۔
- ۳۔ صوفی غلام مصطفیٰ تبسم کی جماعت اول تا ہشتم درسی کتاب میں موجود نظموں کا فنی و فکری جائزہ مباحثے کے ذریعے تحریر کریں۔ ایک ہفتے کے اندر جمع کروائیں۔
- ۴۔ موبائل کے ذریعے اردو کے ادب پاروں پر کتابچہ کی صورت میں مواد اکٹھا کریں۔ مواد کا معیاری ہونا ضروری ہے۔ دو ہفتے کے اندر جمع کروائیں۔

نصاب سے متعلق لازمی معلومات:

اس کورس کا بنیادی لازمہ اردو کو فنکشنل بنیادوں پر استوار کرنا ہے۔ تاہم ادبی ماخذ کی اہمیت سے بھی انکار نہیں کیا جاسکتا۔ اسی وجہ سے کورس کا آغاز تعارف زبان سے کیا گیا ہے۔ زبان کے تاریخی پس منظر پر نظر ڈالیں تو برصغیر میں داخل ہونے والے فاتحین کی اردو معاشرتی ضرورت رہی ہے۔ خاص طور سے انگریزوں نے اس کی تعلیم پر خصوصی توجہ دی۔ غیر ملکیوں کے لیے اردو کی تدریس کا آغاز تو ہندوستان ہی سے ہوا تھا۔ ولندیزیوں نے بھی اس کے لیے مواد تیار کیا مگر انگریزوں نے کلکتہ میں اس مقصد کے لیے فورٹ ولیم کالج قائم کیا۔

اس کے برعکس ادبی حوالے سے سرسید تحریک نے اردو کا مستقبل با مقصد بنیادوں پر متعین کر دیا جبکہ دیگر تحریکات نے بھی اردو کے فروغ میں بھرپور حصہ لیا۔ اردو زبان کے حوالے سے بابائے اردو مولوی عبدالحق اپنے آپ میں ایک تحریک تھے۔ جس کا عملی مظاہرہ اردو یونیورسٹی کا قیام ہے۔ اردو پر کیے گئے کام کو ادبی اور تدریسی بنیادوں پر پرکھنا چاہنا اور معیار مقرر کرنا اس کورس کا مفروضہ ہے۔ اور مفروضہ ہی اس کا فرضیہ ہے۔ اس انداز میں کام کرنا ہی زبان کو سائنسی طرز فکر دے سکتا ہے۔

جدید ماہرین تعلیم فنی امور میں منطقی سے زیادہ نفسیاتی پہلو پر زور دیتے ہیں، اس لیے کہ انسان روزمرہ زندگی میں جو علم براہ راست حاصل کرتا ہے۔ وہ کسی منطق کا پابند یا محتاج نہیں ہوتا۔ مثلاً جب ایک بچہ زبان سیکھنا شروع کرتا ہے تو وہ گروپیشن میں بولی جانے والی زبان کو ضرورت کے مطابق اخذ کرتا جاتا ہے۔ یوں نہیں کہ وہ پہلے اسمائے معرذہ سیکھے پھر اسمائے نکرہ کو پہچانے، پھر ان کی مختلف اقسام کو ترتیب سے اپناتا جائے۔ اس کی ترجیحات، اس کی ضرورت اور اس کے ماحول سے منسلک ہیں۔ استعمال پہلے ہے اور تجزیہ بعد میں۔ یہ کورس خاص طور پر زیر تربیت اساتذہ کے لیے ترتیب دیا گیا ہے۔ اردو دنیا کی دوسری بڑی زبان ہے۔ اردو کو ادبی و علمی/تکنیکی زبان یا محضر (Discourse) کی حیثیت سے سمجھنا اس کورس کا بنیادی نقطہ ہے۔ تدریسی تکنیک کا تعلق کسی خاص طریقہ کار سے نہیں ہوتا بلکہ دور حاضر کے رجحانات، تقاضے اور ترجیحات اسے نئے رخ دیتے رہتے ہیں۔

تمام تدریسی عمل کا بنیادی نقطہ یہ ہے کہ زیر تربیت اساتذہ فکشنل و عملی طریقے سیکھیں۔ عملی فکشنل اُردو کے حوالے سے بلاشبہ ڈاکٹر محمد صدیق خان شیلی کا مضمون قابلِ توجہ ہے۔

علمی ادبی مطالعے کو عملی زندگی کا حصہ بنانا اس کورس کی جہت ہے۔ زیر تربیت اساتذہ ادبی متن کی تدریس اسی صورت میں احسن طریق پر کر پائیں گے جب وہ خود ان کے ادبی معیار پر استدلال حاصل کر پائیں گے۔ اسی لیے اصنافِ ادب کو پڑھاتے ہوئے جدید طریقے استعمال کیے گئے ہیں۔ زبان کی حفاظت بھی ایک اہم ضرورت ہے۔ زبانوں کا بدلتا ہوا منظر نامہ ہی ان کی بقا کی ضمانت ہوتا ہے۔ زبان کا فطری ارتقا اپنے فردِ غ کا راستہ خود بخود ڈھونڈ نکالتا ہے مروج طریقہ ہائے تدریس سے استفادہ کرتے ہوئے نئے تدریسی طریقے، مہارتیں، معاونات اور تکنیک وضع کرنا۔ جو سائنٹفک اندازِ نظر رکھتی ہوں۔ اس کورس کا حصہ ہیں۔

فکشنل طریقے میں زبان کی پانچوں مہارتوں پر توجہ دی جاتی ہے۔ سننے، بولنے اور سمجھنے کی مسلسل مشق کا آغاز مکالمے سے ہوتا ہے۔ ہر سبق میں پڑھنے اور لکھنے کا حصہ الگ ہوتا ہے اس طریقے کا پورا پورا فائدہ اسی قسم کے کورس کی تدریس سے اٹھایا جائے اُردو کی تدریس کو موثر بنانے کے لیے اُردو کے فکشنل کورس مرتب کرنے کی ضرورت ہے۔ مگر اس قسم کے کورس کی تیاری کا امکان بہت کم ہے۔ زبان پر عبور حاصل کرنے کے لیے ضروری ہے کہ نفسِ مضمون پر دسترس ہو۔ اس لیے کورس میں جماعت اول تا ہفتم نصابی کتب میں شامل شعراء و ادباء پر تفصیلی بحث فکشنل انداز میں شامل ہے۔

انشا پر دازی میں مہارت کے لیے زبان کے بنیادی قاعدوں کا علم ضروری ہے۔ حروف کی صوتی، تلازمی اور بنی کیفیتوں کو سمجھنا اور ان کی ابتدائی و وسطانی جماعتوں میں عملی کردار سے واقفیت ہونا ضروری ہے۔ مثلاً روزمرہ بول چال، مشاہدہ، مکالمہ نویسی، درخواست، جدید برقیاتی خط اور مضمون نویسی تک حرف و صوت کی کارفرمائی تخلیق انشا کا باعث ہے۔ عملی اُردو کا تقاضا ہے کہ غالب و اقبال کا انداز سیکھنے والے طلبہ ان کے خیالات کو چاہیں تو مکالمے میں ڈھال لیں یا تمثیل کا رنگ دے دیں۔

کمپیوٹر سے فکشنل زبان سیکھنے میں بے حد مدد ملے گی۔ جہاں کمپیوٹر سے زبان کا سیکھنا ایک سائنس ہے۔ دنیا کا بدلتا ہوا منظر نامہ اُردو کو نئی حیثیت میں تسلیم کر رہا ہے۔ مستقبل کی حکمت عملی، اس کی ہیئت، تکنیک اور تدریسی انداز میں تبدیلی، فردِ غ کے رجحانات کو بہت زائد ہے، تکنیکی سانچے، کمپیوٹر اور محضر فراہم کرے گی۔ ہمیں اپنے اساتذہ کو جدید ترین پیشہ وارانہ علمی تربیت سے آراستہ کرنا ہے۔ ایسوی ایٹ ڈگری آف انجکشن/ADE اور بی ایڈ ایلیمینٹری کی سطح کا یہ کورس اسی خیال (فرہیپے Hypothesis) کے تحت ڈیزائن کیا گیا ہے

اُردو سے متعلق مسائل

بولنے کا عمل زبان کی تدریس میں نہایت اہم ہے کیونکہ جب طلبہ اُردو بولتے ہیں تو انھیں بہت مشکلات درپیش ہوتی ہیں۔ تلفظ، افعال کا سمجھنا، سوال و مثنیٰ جملے، جملہ صحیح نہیں بول پاتے، حرفِ عطف کا مسئلہ اور بھی کئی ایک مسائل کا سامنا ہوتا ہے۔ تلفظ اکثر غلط۔ زبان اکثر طلبہ کی ناقص، بولنے میں جھجک، قرأت معیوب، تلفیص و توضیح کی صلاحیت کم، مطالعے کا شوق کم، تحریری خط اکثر خراب، سچے اکثر غلط مضمون نگاری کی قابلیت کم، خیالات میں ناداری، ذخیرہ الفاظ میں افلاس، سمجھنے کی قوت کم، ذہن ابہامات سے بڑا۔ اس کا سبب غلط طریق تدریس ہے۔ یہ تمام نقائص بے توجہی سے پیدا ہوئے۔ اکثر حالات میں اساتذہ کو خود بھی زبان پر دسترس حاصل نہیں ہوتی۔

اُردو کا رسم الخط کچھ ایسا ہے کہ تحریر میں اکثر حروف کی شکلیں بدل جاتی ہیں۔ ”بات، بس اور بیج حرف میں ”ب“ میں تین جدا گانہ

صورتیں اختیار کر لی ہیں۔ اُردو حروف ملا کر لکھے جاتے ہیں۔ حروف کو جوڑتے وقت ان کی شکلیں تبدیل ہو جاتی ہیں کیونکہ اُردو میں ہر حرف کی چار مختلف شکلیں ہوتی ہیں۔ ابتدائی وسطی، آخری اور مکمل۔ ان شکلوں کی تبدیلی طالب علم کے لیے مسئلہ بن جاتی ہے اور اسے پڑھنا مشکل ہو جاتا ہے۔ دیگر زبانوں میں حروف کو ملا یا نہیں جاتا بلکہ حروف اپنی شکل میں لکھے جاتے ہیں

اُردو حروف ملا کر لکھے جاتے ہیں۔ حروف کو جوڑتے وقت ان کی شکلیں تبدیل ہو جاتی ہیں کیونکہ اُردو میں ہر حرف کی چار مختلف شکلیں ہوتی ہیں۔ ابتدائی وسطی، آخری اور مکمل۔ ان شکلوں کی تبدیلی طالب علم کے لیے مسئلہ بن جاتی ہے اور اسے پڑھنا مشکل ہو جاتا ہے۔ عربی میں بعض حروف کا تلفظ اور ہے جب کہ اُردو میں اور ہے مثلاً ض کو اُردو والے ڈ کے تلفظ سے ادا کرتے ہیں مگر عرب ”دھ“ کے تلفظ میں بولتے ہیں۔ ع، کو اُردو والے، الف کے تلفظ سے ادا کرتے ہیں مگر عرب طلبہ اسے ”ع“ کے تلفظ ہی میں بولتے ہیں۔ اعراب بدلنے سے بھی لفظ کے معنی تبدیل ہو جاتے ہیں۔ نخر، صخر، صرف، صرف، دور، دور وغیرہ۔ عربی میں جھل کے معنی جذباتی ہیں اور ذلیل کے معنی کمزور کے ہیں جب کہ اُردو میں بالکل الٹ معنی برتے جاتے ہیں۔ تاہم لفظ جس زبان سے مستعمل ہے اس کا خیال لغت کے ذریعے رکھنا چاہیے۔

بنیادی لسانی عادات کی تربیت بھی ناچختہ رہنے سے بچے مسائل کا شکار رہتے ہیں۔ قدیم طریقہ ہائے تدریس ان میں زبان کا متنوع ماحول بیدار ہی نہیں کر پاتا۔ ذخیرہ الفاظ میں وسعت اور بوقت ضرورت ان کے انتخاب کی اہمیت تقریر کے لیے بنیادی آلے کی حیثیت رکھتی ہے۔ اس مقصد کے لیے اُردو لغات اور ”اُردو تھیسارس“ کا استعمال زیادہ مفید ہوتا ہے۔ اُردو میں مترادفات اور متضادات کی کوئی کمی نہیں لیکن تقریر کرتے وقت ان میں سے موزوں ترین الفاظ کا استعمال ان کے سیاق و سباق پر منحصر ہے۔ ظاہر ہے کہ سیاق و سباق اور بر محل استعمال کے لیے وسیع مطالعہ اور لغات یا تھیسارس کا استعمال ہی مدد دے سکتا۔ بعض ارباب تعلیم جو ثانوی سطح پر بولنے کو پڑھنے اور لکھنے پر ترجیح نہیں دیتے۔

- ثانوی درجے کے طلبہ کے پاس ذخیرہ الفاظ کی کمی نہیں ہوتی لیکن ابتدائی درجے میں ایسا نہیں ہے۔
- ثانوی درجے میں طالب علم زیادہ تر پڑھنے اور لکھنے کی کوشش کرنے کے بعد داخل ہوتا ہے۔ اس میں بولنے کی صلاحیت کم ہوتی ہے یا اس پر زیادہ زور نہیں دیا جاتا۔ ابتدائی درجے میں تو یہ صلاحیت بالکل ہی کم ہوتی ہے۔
- اس درجے میں طالب علم کا فی لکھنا پڑھنا سیکھ چکے ہوتے ہیں لیکن تکلم اور تقریر پر توجہ کم ہوتی ہے۔
- امتحان کا کچھ فی صد ثانوی جماعتوں میں زبانی امتحان کے لیے وقف کرنا اشد ضروری ہے تاکہ طلبہ مستقبل قریب کی عملی زندگی میں مسائل و حالات پر مدلل اظہار خیال اور دوسروں کو اپنی تقریر سے مطمئن کر سکیں۔ اس کے لیے ایک عملی پیر اور اس کا عملی امتحان ضروری ہے۔
- اُردو قومی زبان ضرور ہے لیکن اکثر طلبہ کی مادری زبان نہیں، ہمارے اکثر طلبہ گلابی قسم کی اُردو بولتے ہیں اور بعض طلبہ بالخصوص دیہات کے طلبہ اُردو میں چار جملے بھی نہیں بول سکتے۔ لہذا الفاظ کا طرز تکلم سکھانا ضروری ہے۔
- یہ کہنا کہ سارے ملک کے تقریباً تمام باشندے اُردو زبان بولنے پھولنے انداز میں بول سکتے ہیں غلط ہے۔ ہو سکتا ہے کہ یہ بجا ہو لیکن صحیح اُردو بولنا ہی اصل مہارت ہے۔
- اُردو زبان کو اُردو زبان کے استاد ہی پڑھائیں تو بچوں کے زبان کے حوالے سے بہت سے مسائل کا خاتمہ ہو جائے۔

Science 1 (General Science), (Content)

Semester 1

Syllabus: Science I

YEAR/SEMESTER: Year 1 / Semester 1
DURATION (Hours): 48 hours (16 weeks)
CREDIT VALUE: 03 credits
PREREQUISITES: Matriculation (with a science subject)

COURSE DESCRIPTION This Science I course will refresh and strengthen prospective teachers' subject matter knowledge.

It lays a foundation for the pedagogical content knowledge also required to effectively teach general science in elementary school. The course covers core concepts in physical science, life science, and earth science. Also covered are the teaching strategies and instructional approaches that best support the development of conceptual understanding of science.

Science I in Semester 1 is followed by Science II in Semester 3. Both courses integrate science content with science pedagogy and skill building instead of teaching them separately. Both content outcomes and process outcomes have been listed. This division in the objectives between content and process is primarily one of convenience. It allows outcomes to be adequately represented in a written document. In the classroom, content and process should always be addressed simultaneously. After completing Science I and Science II, the prospective student teachers will be well prepared to implement the National Curriculum in elementary grades 1-5.

The Science I and Science II course materials are designed to prepare prospective elementary teachers to teach inquiry science in grades 1-5. The (pedagogical) content knowledge is chosen accordingly. Prospective science teachers who want to teach science in higher elementary grades (6-8) should deepen their science knowledge further by attending additional science classes offered in Year 3 and Year 4 of the B.Ed. (Hons) program.

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. Be able to 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. Be able to apply various models to science teaching while recognizing their limitations.

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge.

The techniques outlined below are not exclusive and therefore, other effective techniques and methods can be used:

- Lecture & Discussion, Inquiry Methods
- Case Observation and Study Methods
- Field visit, Observation Methods
- Library Assignments, Peer Assessment
- Project Work & Quizzes
- Pair, Group and Individual Assignments/Activities
- Self-Study Tasks
- Individual presentations
- Course & Students Portfolios
- Mid-Term, Final-Term Exams

Grading: The final grade is based on the total points from Classroom Assessment i.e assignments, quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

Distribution of Course Grading:

- Internal Class assessments: 20%
- Mid-Term Exam: 30%
- Final Term Exam: 50%
- Total: 100%

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.

Examples of assignments include:

- a) Conduct an investigation on a science topic and present your findings and conclusions.
- b) Develop hands-on activities around a core science concept for an elementary grade.
- c) Write an editorial for a local newspaper on a relevant science topic stating an opinion supported by evidence.
- d) Plan and conduct a science activity with a group of children using the inquiry approach.

COURSE OUTLINE

UNIT# 1 INTRODUCTION TO GENERAL SCIENCE

- 1.1 General science Definition and Meaning
- 1.2 Introduction to major areas of general science (Biology, Physics, Chemistry and Earth science)
- 1.3 Introduction to major branches of Biology
- 1.4 Introduction to major branches of Physics
- 1.5 Introduction to major branches of Chemistry
- 1.6 Introduction to major branches of Earth science

UNIT# 2 CELL- THE BASIC UNIT OF LIFE

- 2.1 Cell as basic unit of life
- 2.2 Cell structure and function
- 2.3 Difference between plant and animal cell
- 2.4 Cells and energy
- 2.5 Cell cycle

UNIT# 3 BIODIVERSITY AND ECOSYSTEM

- 3.1 Biodiversity-Definition, Types and Importance
- 3.2 Systems of classification
- 3.3 Introduction to Ecosystem
- 3.4 Types of Ecosystem
- 3.5 Flow of energy in living things (Food Chain, Food Web, Energy Pyramid)

UNIT 4: MATTER AND PROPERTIES OF MATTER

- 4.1 Matter and States of Matter
- 4.2 Matter Particles (Atoms, Molecules)
- 4.3 Physical Properties of Matter, (Melting Point, Boiling Point, Hardness, Density and Conductivity)
- 4.4 Chemical Properties of Matter, (Reactivity, Flammability and Rusting)
- 4.5 Elements, Compounds and Mixtures

UNIT 5: FORCE AND MOTION

- 5.1 Force- Definition, Unit and Types
- 5.2 Motion- Definition and Types of Motion
- 5.3 Relationship between Force and Motion
- 5.4 Laws of Motion

UNIT 6: EARTH SCIENCE

- 6.1 Categorizing the Earth in Continents, Biomes, Vegetation Zones, Climate Zones, etc.
- 6.2 Constant Changes on Earth –Rock Cycle, (Weathering and Erosion)
- 6.3 Earthquakes and Volcano Eruption
- 6.4 Weather and Seasons

Recommended Readings:

- KP Text books of General Science for elementary level
- Target Science - Physics by Stephen Pople
- Target Science - Chemistry by Michael Clugston& Rosalind Fleming The Teaching of Science in Primary schools –Wynne Harlen
- Inquiry –Thoughts, Views, and Strategies for the K-5 Classroom –National Science Foundation Ready, Set, Science! Putting Research to Work in K-8 Science Classrooms –National Research Council
- Taking Science to School: Learning and Teaching Science in Grades K-8 – National Research Council

- Lederman, N. & Abd-El-Khalick, F. (not-Nature dated) Science: Activities. "Avoiding That
- Promote Understandings of the Nature of Science [http://toolbox.learningfocused.com/data/0000/0014/2125/Teaching the NatOSci.pdf](http://toolbox.learningfocused.com/data/0000/0014/2125/Teaching_the_NatOSci.pdf).
- "A science prototype: Rutherford and the atom <http://undsci.berkeley.edu/lessons/pdfs/rutherford.pdf>.
- Understanding Science is a website that communicates what science is and how it works: <http://undsci.berkeley.edu/index.php>.
- For an easy to understand illustration of Newton's Laws <http://teachertech.rice.edu/Participants/louviere/Newton/>.
- For information about Bloom's Taxonomy, refer http://www.odu.edu/educ/roverbau/Bloom/blooms_taxonomy.htm.

EDU-302 General Methods of Teaching (Foundation) Semester 1 Syllabus: Methods of Teaching

Year /Semester: Year 1/Semester 1

Credit Value: 03 credits

Prerequisites: None

COURSE DESCRIPTION

This course is an introduction to teaching methods used in elementary schools. Since you have been an elementary school student, you will recognize some of the methods, but you know them from a student's perspective.

Teaching methods are often divided into two broad categories: teacher-centered methods (also called Direct Instruction) and learner-centered methods (also called Indirect Instruction or Inquiry Learning). An effective teacher knows several methods, some teacher-directed and others learner-directed. He or she would choose from among these, the one method or combination of methods most likely to achieve group of students.

Because teaching and learning interact, a course about teaching must also be about learning. The content and structure of the course is based on two strong claims about learning. First, learning results from what the student already knows, thinks, and does and only from these actions of the student's mind. A teacher enables does to students learn but the student must do it. Second, as students' progress through school they should learn to become their own teachers. That is, students should learn how to learn using their teachers as models.

COURSE OUTCOMES

- ☐ A personal theory of teaching and learning based on a critical analysis of implicit theories formed as a student and modified/elaborated through reflections prompted by the work done in this course.
- ☐ An argument paper that presents the pros and cons of teacher-centered and learner-centered teaching methods and states your position as a teacher
- ☐ Records of structured, reliable classroom observations and conclusions drawn from reflection on these.
- ☐ Participation in a Cooperative Learning group that planned, taught, and critiqued a lesson to college/university classmates
- ☐ An elementary school lesson plan
- ☐ A reflective journal

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge. The techniques outlined below are not exclusive and therefore, other effective techniques and methods can be used:

- Lecture & Discussion, Inquiry Methods

- Case Observation and Study Methods
- Field visit, Observation Methods
- Library Assignments, Peer Assessment
- Project Work & Quizzes
- Pair, Group and Individual Assignments/Activities
- Self-Study Tasks
- School Survey/Community survey
- Individual and Panel presentations
- Course & Students Portfolios
- Mid-Term, Final-Term Exams

Grading: The final grade is based on the total points from Classroom Assessment i.e assignments, quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

Distribution of Course Grading:

- Internal Class assessments: 20%
- Mid-Term Exam: 30%
- Final Term Exam: 50%
- Total: 100%

Unit 1: Introduction to General methods of teaching

- (i) Introduction to the course
- (ii) Definition, types and characteristics of teaching methods
- (iii) Difference between method and approach

Unit 2: Teacher-centered and Student-centered methods

2.1 lower and higher order learning

- (i) Instructional activities that enable lower order learning
- (ii) Instructional activities that enable higher order learning

2.2 Direct Instruction: a method to enable lower order Learning

- (i) Template for Direct Instruction lessons
- (ii) Sample lessons

2.3 Inquiry Learning: a method to enable higher order learning

- (i) Template for Inquiry/Problem Solving lessons
- (ii) Sample lesson

2.4 Difference among Inquiry, Problem Solving and Project method

2.5 Teachers and Peers as Joint Contributors to Students' Learning

- (i) Scaffolding
- (ii) Mentoring
- (iii) Tutoring
- (iv) Cooperative learning

Unit 3: Lecture, Demonstration, Discussion, Questions

3.1 Lecture, Demonstration, and Discussion

- (i) Structure of a lecture
- (ii) Structure of a demonstration
- (iii) Structure of a discussion

3.3 Asking questions

- (i) Purposes of questions
- (ii) Open and closed questions

Unit 4: Designing Instruction: Goals and Objectives. Assessment; Plans; and Materials

4.1 Sources of Knowledge for Designing Lessons

- (i) Definitions of standards, goals, and objectives
- (ii) Examples of standards, goals, and objectives
- (iii) Bloom's Taxonomy of Objectives

4.2 Assessment

- (i) Definition of assessment in schools
- (ii) Purposes of assessment
- (iii) Distinction between formative and summative assessment
- (iv) Examples of formative assessment

4.3 Instructional Materials

- (i) Sources of instructional materials, including textbooks, in Pakistan
- (ii) School budgets for instructional materials
- (iii) Low/no cost materials as a supplement to or substitute for materials provided by the Government
- (iv) Examples of materials created from local resources by teachers for mathematics, science, and literacy

Unit 5: Self-Regulated Learning

- (i) Self-Regulated Learning
- (ii) Motivation and types of motivation
- (iii) Mastery learning goals and performance learning Goals

Unit 6: Micro – Teaching and Models of Teaching

5.1 Definition, Components, Steps, Advantages and Limitations of micro teaching.

5.2 Meaning, definition, function and characteristics of models of teaching

SUGGESTED REFERENCES

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- Dasgupta, M. A. (n. d.). Low-cost, No-cost Teaching Aids. Retrieved from <http://www.arvindguptatoys.com/arvindgupta/lowcostnocost.pdf>
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- What Makes a Good Teacher? Opinions from Around the World. Retrieve from <http://www.unicef.org/teachers/teacher/teacher.htm>
- West Virginia State Department of Education Resources for Formative Assessment Retrieve from <http://wvde.state.wv.us/teach21/ExamplesofFormativeAssessment.html>

English II (Communication Skills) (Compulsory) Semester 2

Syllabus: English II (Communication Skills)

YEAR/SEMESTER: Year 1/Semester 2

DURATION: 3 credits, 48 class hours

PREREQUISITES: successful completion of courses in semester 1

COURSE DESCRIPTION

This is the second English course for prospective elementary school teachers. It aims to develop skills for effective communication and presentation using clear and appropriate English. The course comprises five units which focus on developing effective communication strategies, making oral presentations, understanding intonation patterns and their role in determining the meaning of a message or text, and how to present information in speech and writing. The first five weeks are devoted to developing student teacher language confidence and interpersonal skills. This is followed by task-based projects which incorporate all four language skills in order to develop their proficiency in English language.

COURSE OUTCOMES

After completing this course, pre-service teachers/teachers will be able to:

- ☐ use English confidently and independently
- ☐ discriminate between formal and informal language use
- ☐ communicate effectively in speech and writing with different audiences for a variety of purposes
- ☐ communicate their own ideas clearly by applying their knowledge of grammar and usage in written and oral presentations
- ☐ identify the main stylistic features of descriptive, narrative, persuasive and argumentative texts

LEARNING AND TEACHING APPROACHES

To make student teachers independent users of language, it is essential to involve them in the learning process. The course requires an integrated approach to language teaching which enables learning of all the four skills of language (i.e. listening, speaking, reading and writing) in natural settings. The learning and teaching approach should be balanced so that student teachers not only learn about language, but also how to use English in different contexts. The teachers and students are encouraged to respond through group and pair work, active learning strategies such as role plays, debates, presentations, brainstorming, etc.

Although student teachers may lack the necessary background at the beginning of the course to communicate in English, instructors will use English as the language of instruction. Instead of switching to Urdu or other languages when there is a problem, instructors will use alternative strategies such as slowing down, repeating a text, asking others to explain, or using simpler vocabulary.

SEMESTER OUTLINE

UNIT 1 –EFFECTIVE COMMUNICATION(3 weeks/9 hours)

The first unit aims at building student teacher confidence and understanding the factors that lead to communicating a thought, an idea or a message clearly and effectively. From a sender to receiver, encoding to decoding a message, the communication cycle comprises various verbal and non-verbal elements as well as calling on the interpersonal skills of individuals. However, various factors may lead to the creation of a gap in oral and written communication. These factors are explored in depth in this unit.

Week 1 **Effective communication**

- ☐ Communicating effectively
- ☐ The communication cycle and process

Week 2 **Language Development of English Language Teachers (ELT)**

- ☐ Communication barriers
- ☐ Understanding group dynamics
- ☐ Understanding ELT as a self directed learner

Week 3 **Organizing a message**

- ☐ Developing Language awareness by using CLT activities
- ☐ Grammatical accuracy in speech and writing
- ☐ Coherence and clarity

- ☐ Opening statement/topic sentence & key words

UNIT 2 –MAKING ORAL PRESENTATIONS(2 weeks/6 hours)

This unit draws the attention of student teachers to the design and delivery of an effective presentation by giving essential tips and allocating sufficient time for practice sessions. A good presentation requires organized planning and preparation, careful selection of language and vocabulary, the correct body language and rapport with the audience. With an understanding of these requirements, the student teachers should be able to develop sufficient confidence to handle the various tasks required in giving a clear and cogent oral presentation.

Week 4 **Effective presentations**

- ☐ The ingredients of a successful presentations
- ☐ Structuring a presentation –the key stages

- ☐ Using visual displays to present key facts and figures

Week 5 **Presenting in a logically organized and interesting manner**

- ☐ Using PowerPoint or overhead transparencies for presentations that describe a process/phenomenon

- ☐ Tips to hold attention of your audience's
- ☐ Preparing for a presentation
- ☐ Delivering a five-minute presentation

UNIT 3 –SOUND PATTERNS, TONE AND PURPOSE(4 weeks/12 hours)	
In this unit, student teachers will be given a one-week refresher to re-learn and articulate basic sounds (consonants and vowels) and sound patterns of English language through practical activities. The unit, furthermore, suggests some critical awareness of intonation patterns in listening and reading texts and how the meaning changes with variation in tone.	
Week 6	Sound patterns and tone ☐ Vowel and consonant sounds and clusters ☐ Phonemes and syllables ☐ Stress and intonation
Week 7	Modes of communication ☐ Audience and purpose - Visual texts: pictures and video clips ☐ Identifying purpose and audience in different texts ☐ The language of media –differentiating between audience and purpose
Week 8	Audience specific ☐ Writing for different audience ☐ Presenting informally vs. formally ☐ Communicating through different mediums
Week 9	Understanding the purpose ☐ Reading for meanings ☐ Reports/Descriptive vs. narrative texts ☐ Argumentative vs. persuasive texts ☐ Writing/Presenting persuasively
UNIT 4 –PERSUADING AUDIENCE (3 weeks/9 hours)	
Once the purpose and goal of a message have been identified, the major task is to ensure the audience follow the thought presented. By giving practice through various modes of communication like formal speeches, public announcements, news broadcast and presentation of a CV, this unit offers opportunities for student teachers to become familiar with the needs of modifications in language and structure according to the requirements of the audience. It also incorporates a section on writing persuasively to make requests and compose applications or letters.	
Week 10	Public speaking ☐ Speech/presentation: extemporary and prepared ☐ Public announcements ☐ News broadcast
Week 11	Being interviewed ☐ Résumé/CV ☐ Interview skills ☐ Interviewing for a job/internship
Week 12	Persuasive writing ☐ Writing persuasively

- ☐ Applications
- ☐ Letters of advice/direct request

UNIT 5 –COLLECTING& PRESENTING INFORMATION(4 weeks/12 hours)

Student teachers will examine learning differences, both normal variation in learning styles and disabilities and disorders. Student teachers will consider the role of the school and the instructor in managing and accommodating learning difference in classroom practice in addition to the perspectives on national educational policy in Pakistan on accommodating diverse developmental needs.

Week 13	Collecting information ☐ Power reading/study skills ☐ Note-taking; summarizing ☐ Synthesizing information
Week 14	Graphical information ☐ Reading graphical information: data presented through charts, graphs, etc. ☐ Converting a report to a chart/graph ☐ Summary and outline
Week 15	Collecting and presenting data objectively ☐ Small scale research project ☐ Developing a questionnaire ☐ Gathering data and presenting findings ☐ Reporting results
Week 16	Project presentation Revisions

SUGGESTED TEXTBOOKS AND REFERENCES

- Eastwood, J. (2005) *Oxford Practice Grammar*, Karachi: Oxford University Press. Swan, J. *Practical English Usage* (3rd editions) Oxford University Press
- Thomson and Martinet, *A practical English Grammar (Intermediate)* Oxford University Press Howe, D.H. & Kilpatrick, L. (2008) *English for Undergraduates*, Oxford: Oxford University Press
- Write better, Speak better (2005) Editors of the following websites provide a wealth of resources:
- <http://www.bbc.co.uk/worldservice/learningenglish/>
- <http://learnenglish.britishcouncil.org/en/>
- <http://www.teachingenglish.org.uk/>
- [http://freesoftwarepc.biz/educational-software/download-free-software-3d-grammar-english-portable/\(a\)grammar software free download](http://freesoftwarepc.biz/educational-software/download-free-software-3d-grammar-english-portable/(a)grammar software free download)

GRADING POLICY

A variety of assessments should be used to assess student learning. It is recommended that course work count towards at least 50% of the final grade. Instructors will advise student teachers about which pieces of course work (assignments) will be graded. The remainder of the grade will be determined by mid and end of semester exams.

Computer Literacy (Compulsory) Semester 2

Syllabus: Computer Literacy

Year/Semester: Year 1/Semester 2

Credit Value: 3 credits

Pre-requisites: F.A. /F. Sc.

Course Description

This course will prepare teachers to understand, use and apply technologies (computer, digital camera, mobile phones) in an effective, efficient and ethical ways. Advanced technologies are more pervasive today than they have ever been, and their uses are expanding continually. ICT is significantly enhancing and altering human activity, and enabling us to live, work and think in ways that most of us never thought possible. Prospective teachers will actively explore the fundamental concepts, knowledge, skills, and attitudes for applying technology in educational settings. They will also learn to develop skills like collaboration, higher-order thinking, problem solving, and self-direction through effective use of technology tools and resources thus, enabling them to be a lifelong learner in 21st century.

Course outcomes:

Trainee-teachers develop confidence and an aptitude for using computers and will be able to:

- ☐ use computer technology as a tool for communication & collaboration, problem solving
- ☐ create productivity materials related to teaching profession (lesson plans, result sheets etc)
- ☐ use computers technology for personal & professional growth, for research and generating new knowledge
- ☐ explore new technologies/knowledge for career growth as lifelong learners

Learning & Teaching Approaches:

This is a skills-focused/practical course and it is expected that all the sessions would be implemented practically in the computer lab. The course is based on interactive exploration approach using lecture demonstration method with various teaching techniques including K-W-H-L, brain storming, thought provoking questions, think pair-share, reflections, discussions, etc. The instructional strategies recommended focus the development of knowledge, skills and attitude.

Content Outline

Unit 1		
Introduction to Computer (1.5 weeks/ 4 hours)		
Week #	Session/Main topics	Details of sub-topics
	Session-1: History and classification of Computers	☐ Introduction to computer ☐ Examples of computer - o personal computers (desk-top, laptops, pocket PCs/hand-held computers) - o main-frame computer systems

		☐ Brief history of computers with timeline
Week 1	Sessions 2: Introduction to computers – Learning about Input devices	Knowledge about and interfacing with: ☐ Input devices (Examples: mouse, keyboard, scanner, joystick, webcam, digital camera, bar-code reader, digital voice recorder, etc.) - o Knowing the mouse and keyboard ☐ Interfacing with the computer using mouse and Keyboard - o Practicing to input data using a mouse (left-click, right-click, move, drag, trackball, double-click), etc.
	Sessions 3: Learning about different parts (hardware) of computer and accessories	☐ Output devices (Examples: printer, speaker, projector, etc.) ☐ Storage devices (hard disk, USB-flash disk, CDs/DVDs, memory card, etc.) ☐ Understanding of Central Processing Unit (CPU) ☐ How do computers work?
Week 2	Session 1: Computer Software	☐ Operating/System software introduction ☐ Application software- usage & types (word processing, spreadsheets, multimedia, etc.)

Unit 2

Learning Computer Basics and Internet (3.5 weeks/ 11 hours)

Week 3	Main topics	Sub-topics
Week 2 (contd.)	Session 2: Interfacing with computer	Hands-on activities on: - o User window (Minimizing, maximizing and closing a window, menu, status and other bars, etc.) ☐ Working with the Operating System - o Start/Shut down (menu, purpose, etc.) - o User window (Minimizing, maximizing and closing a window, menu, status and other bars, etc.) - o Basic concepts of Desktop, Icons, shortcuts, etc.
	Session 3: Interfacing with computer (Contd.)	☐ Working with the Operating System (Continued) - o Control Panel - o Using Help - o Selecting a Printer, Changing a Default Printer, Checking the Status of a Printer

Week 3	Session 1: Interfacing with computer (Contd.)	☐ Concept of files and folders (types of files and extension) ☐ File and folder properties o Renaming a folder, etc. (Practicing to input data using a keyboard)
	Session 2: Interfacing with computer (Contd.)	☐ Types of storage devices ☐ Practically knowing and accessing storage devices/drives
	Session 3: Interfacing with computer (Contd.)	☐ Data transfer between different storage devices (Example: to/from USB-flash disk to hard disk, etc.)
Week 4	Session 1: Internet basics	☐ Introduction to Internet and the World Wide Web (www) ☐ Internet browsing applications (Examples: Internet Explorer, Mozilla Firefox, Apple Safari, etc.) ☐ Web addresses and links
	Session 2: Internet basics (Contd.)	☐ Interfacing with the Internet browser window (browser menu-bar, buttons, scrolling, clicking on links, etc.)

		☐ Search engines
	Session 3: Internet basics (Contd.)	☐ Using specialized web-sites (see reference web-links) ☐ Searching for information (search tips, etc.)
Week 5	Session 1: Introduction to different types of Networks (LAN/WAN, wireless)	Brief introduction to: ☐ Local Area Network (LAN); sharing on a LAN; Wide Area Network (WAN); Wireless Networks ☐ Sharing on networks; network-related security Issues ☐ Firewalls
	Session 2: Security (Identity and virus protection)	☐ Security (Identity and virus protection): o Protection against virus and spam emails o What is Hacking, and protecting against it
	Session 3: Troubleshooting,	☐ Software installation (Example: Installing an electronic Dictionary) ☐ Utilities: o What is file compression and why it is needed

	software installation and Protection	- o File compression applications (Winzip, other programs) - o Learning to compress files and folders using Windows default options (Zip, rar)
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Unit 3

Using Productivity Applications (Word Processing) (Microsoft Word, OpenOffice.org Writer) (2 weeks/ 6 hours)

Week #	Session/Main topics	Details of sub-topics
Weeks 6 and 7	(6 Sessions) Using Productivity Applications (Word Processing) (Microsoft Word, OpenOffice.org Writer)	☐ General introduction to application window ☐ Creating, saving & opening documents ☐ Formatting, editing Pages, text & paragraphs ☐ Adding pictures to pages (Clipart & from file) ☐ Working with tables, charts & graphs ☐ Working with Diagrams ☐ Print preferences, printer properties and printing a Document ☐ Using preset and advance features ☐ Using word processing to create classroom instruction documents (diagrams, lesson plan, worksheets, flash cards, brochures, newsletters) and motivation tool (certificate)

Unit 4: Using Productivity Applications (Spreadsheet)

(Microsoft Excel, OpenOffice.org Calc) (2 weeks/ 6 hours)

Week #	Main topics	Sub-topics
Weeks 8 & 9	(6 Sessions) Using Productivity Applications (Spreadsheet) (Microsoft Excel, OpenOffice.org Calc)	☐ General introduction to spreadsheets interface ☐ Creating, saving & opening spreadsheet ☐ Using worksheets (renaming and adding worksheets) ☐ Adding and working with information (formatting cells, adding comments, inserting hyperlinks) ☐ Changing the look of information with spreadsheet (cell alignment, changing font face and size, adding background color to cells and rows, inserting picture) ☐ Doing Mathematics (formulas: addition, subtraction, average, logic formula etc) ☐ Making charts (formatting i.e. background, legend, color of bars, creating pictograph) ☐ Including print properties ☐ Using spread sheets to create class room management documents (seating chart, electronic attendance register, result sheet, student academic performance graph, bio data)

Unit 5: Using Productivity Application (Multimedia)		
Microsoft PowerPoint, OpenOffice.org Impress		
Week #	Main topics	Sub-topics
Weeks 10 & 11	(6 Sessions) Using Productivity Applications (Multimedia Presentation) (Microsoft PowerPoint, OpenOffice.org Impress)	☐ General introduction to multimedia application
		☐ Creating, saving & opening presentation
		☐ Viewing and working with slides
		☐ Building presentations (adding, moving/sorting and duplicating a slide)
		☐ Making slides look good (applying templates, changing color schemes, slide layout, background)
		☐ Adding pictures and artistic effects (inserting compressing pictures , applying borders to pictures and other objects, adding 3-D effects,
		☐ Adding sounds, movies and links
		☐ Adding animations and special effects (applying slide transition, adding & customizing animations, adding action buttons, turning off animations)
		☐ Setting up and playing presentation (printing presentations, setting time)
		☐ Using multimedia to create presentation (school profile, lesson presentation, action plans, assignment presentation, etc)
Unit 6: Making Connections (3 weeks/ 9 hours)		
Week #	Main topics	Sub-topics
Weeks 12 & 13	(3 sessions) Searching and saving web resources (images, audio, videos)	☐ Searching multimedia resources
		☐ Uploading, downloading documents and other files (pictures, audio, etc.)
		☐ Saving information from Web pages
		☐ Interfacing with online multimedia resources (Example: videos on www.youtube.com/about learning computer)
	(3 sessions) Communicating through Internet	☐ Creating and using e-mail to communicate and Collaborate
		☐ o E-mail management (creating, sorting, forwarding, searching, flagging, deleting)
		☐ o Attaching document (files & folders)
		☐ Using Web 2.0, Using chat/talk applications (Skype, GoogleTalk, etc.)
Week 14	(3 sessions) Online collaboration Applications	☐ Introduction to online collaboration
		☐ Working with an online collaboration application (Application: Google docs)
		☐ Creating, importing and editing a file –document, spreadsheet & presentation)

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|--|---|
| | ☐ Sharing and accessing online files |
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Unit-7: Using multimedia devices and resources (1 week/ 3 hours)

Week #	Main topics	Sub-topics
Week 15	(3 sessions) Using multimedia digital devices with a computer	☐ Introduction and examples of digital devices (camera, mobile phone, digital voice recorders, etc.) ☐ Using a digital camera and other technologies i.e. mobile phones to down-load images, and videos ☐ Transferring images and videos to computer from mobile devices (mobile phone, camera) ☐ Using multimedia applications (Examples: Real Player, Windows Media Player, Quick Time Player etc.) to play educational audio & video clips

Unit 8: Use of computer in daily life (1 weeks/ 3 hours)

Week #	Main topics	Sub-topics
Week 16	Session-1: Working in the information society	☐ Uses of computer o at workplace, o in community, o for communication, o education & research, literacy o entertainment
	Session-2: Computer ethics	☐ Code of ethics ☐ Computer crime ☐ Copyrights Law and fair-use guidelines and Plagiarism
	Session-3: Computer-Assisted Instruction (CAI)	☐ Computer as a teacher ☐ Use of computer-assisted instruction ☐ Online education (Example: Virtual University of Pakistan)

Course Grading Policy

The ability to use a computer can only really be judged by having someone complete a task using a computer. A written exam is of almost no use as an assessment method for this course.

Your instructor will give you a series of assignments and tasks to perform throughout the course, with several at the mid-point and end of the course. These will be graded. Your instructor should tell you in advance which courses will be graded.

EDU-303 Classroom Management (Foundation) Semester 2

Syllabus: Classroom Management (Foundation)

YEAR/SEMESTER: Year 1 Semester 2

CREDIT VALUE: 03 credits

PRE-REQUISITES: Successful completion of semester 1 courses

COURSE DESCRIPTION:

One of the foremost reasons cited for teacher burnout is the challenge of classroom management. This comes as little surprise since classrooms are crowded, busy places in which students of diverse backgrounds and learning styles must be organized, directed and actively involved in learning. Many events need to occur simultaneously, the course of these events is often unpredictable, and teachers must react often and immediately to evolving problems and needs. Teaching in such settings requires a highly developed ability to manage people, space, time and activity.

A program of study that aims to prepare prospective teachers must, therefore, equip them with knowledge and strategies for become effective managers of classrooms.

That is, it views the best-managed classrooms as ones where each learner is effectively engaged in constructing knowledge. To this end, teachers must manage teaching content, plan lessons, develop responsive instructional strategies, differentiate instruction, create predictable structures and routines and connect learning to the real world outside the classroom. It also views the best-managed classrooms as learning communities with shared values of respect and caring.

In this course, prospective teachers will be encouraged to explore their own beliefs about teaching and learning to arrive at an ultimate goal. Prospective teachers will be given the chance to explore curricular concerns of what to teach' and 'how to teach it' and decisions. They will also study research and best practices on differentiation of instruction, classroom structures, routines, procedures and community-building.

COURSE OBJECTIVES:

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

- define classroom management as a means to maximizing student learning.
- identify key features of a well-managed classroom.
- plan lessons, activities and assignments to maximize student learning.
- differentiate instruction according to student needs, interests and levels.
- design and practice predictable classroom routines and structures to minimize disruptions
- plan for a culture of caring and community in the classroom

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge. The techniques outlined below are not exclusive and therefore, other effective techniques and methods can be used:

- Lecture & Discussion, Inquiry Methods
- Case Observation and Study Methods
- Field visit, Observation Methods
- Library Assignments, Peer Assessment
- Project Work & Quizzes
- Pair, Group and Individual Assignments/Activities
- Self-Study Tasks
- School Survey/Community survey
- Individual and Panel presentations
- Course & Students Portfolios
- Mid-Term, Final-Term Exams

Grading: The final grade is based on the total points from Classroom Assessment i.e assignments, quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

Distribution of Course Grading:

- Internal Class assessments: 20%
- Mid-Term Exam: 30%
- Final Term Exam: 50%
- Total: 100%

Unit 1—Managing Classrooms to Maximize student learning

1.1 Introduction to the course.

- (i) Definition of classroom and management
- (ii) Characteristics of management
- (iii) Characteristics of well managed classroom

1.2 Features of classroom management

- (i) Physical environment
- (ii) Social environment
- (iii) Establishing Overall Classroom Rules and Procedures
- (iv) Challenges that teachers convey in the management of a classroom

1.3 Difference between classroom discipline and management

- (i) Principles for designing the effective classroom environment

1.4 Identifying resources for learning.

- (i) Using displays and visuals for enhancing the learning environment in the classroom.
- (ii) Physical facilities to enhance the learning environment.
- (iii) Seating arrangements for different kinds of learning experiences
- (iv) Building the social environment

Unit 2-- Curriculum and Classroom Management

2.1 Curriculum needed to support the classroom management

- (i) Planning, motivation, teaching and assessing the curriculum
- (ii) Differentiation of instruction
- (iii) Multi-grade classrooms
- (iv) Over-crowded classrooms

Unit 3—**Routines, Schedules and Time Management in Diverse Classrooms**

3.1 Classroom routines and structures

- (i) Structures and routines in a multi-grade context
- (ii) Use of routines and structures for special needs and situations
- (iii) Use of routines and structures to teach specific subject content like Math, Science or Literacy
- (iv) Use of routines and structure to promote cooperation and collaborative learning

Unit 4—**Creating Shared Values and Community**

- (i) Community inside and outside the classroom and school
- (ii) Community participation and involvement
- (iii) Typical practices of community participation
- (iv) Involvement of the community in the classroom (routines and structures need to be put in place)
- (v) Creating an “ethic of care
- (vi) Diverse classrooms as caring, democratic communities and respectful relations between teacher and students, students and students
- (v) Developing caring classroom for responsible actions and personal accountability
- (vi) Management of behaviour

Unit 5—**Planning the Classroom Environment I Would Like**

- Peer critique and review of final projects
- Summary and closure

SUGGESTED RESOURCES

Note: The PDF versions of each of the books listed below can be read online for free from the web-links given below.

- Alexandria, VA: Association for Supervision and Curriculum Development
- Classroom Management That Works: Research-Based Strategies for Every Teacher By Robert J. Marzano, Jana S. Marzano, Debra Pickering
- <http://smkbp.com/attachments/Ebook%20-%20Classroom%20Management%20That%20Works.pdf>
- Chapter 1—Introduction to Proactive Classroom Management _
http://ptgmedia.pearsoncmg.com/images/9780135010631/downloads/Henley_Ch1_Introducti_ontoProactiveClassroomManagement.pdf
- The Multi-grade Classroom: A Resource handbook for Small Rural Schools-- Book 3: Classroom Management and Discipline by Susan Vincent, Northwest Regional Educational Laboratory, Portland, Oregon 97204.
- http://educationnorthwest.org/webfm_send/1152
- Canter, L. Assertive discipline: More than names on the board and marbles in a jar. [Retrieved on February, 28, 2011] from http://campus.dyc.edu/~drwaltz/FoundLearnTheory/FLT_readings/Canter.htm
- Evertson, C. M., & Emmer, E. T. (2009). *Classroom management for elementary teachers* (8th Ed.). Upper Saddle River, NJ: Pearson.
- Good, T.L., & Brophy, J.E. (2003). *Looking in classrooms* (9th ed.). Boston: Allyn & Bacon.
- Kounin, J. (1970). *Discipline and group management in classrooms*. New York: Holt, Rinehart, & Winston.
- Marzano, R. J. (2003). *Classroom management that works: Research-based strategies for every teacher*.

General Mathematics (Compulsory) Semester 2

Syllabus: General Mathematics

Subject: General Mathematics

Credit value: 3 credit hours

Prerequisite: SSC Mathematics

This course provides opportunities for prospective elementary teachers to strengthen their mathematical knowledge and skills and to gain confidence in their understanding of mathematics. An important outcome of this course is for prospective teachers to be able to teach mathematics successfully in the elementary grades.

Research-based knowledge about good math instruction provides a solid base of information for educators to use as they identify mathematics skills students need to develop, as well as teaching strategies and instructional approaches that best support the development of these skills. The course is designed based on what research tells us about good math instruction.

The overall organization of the course is divided into four units:

1. Number and Operations
2. Algebra and Algebraic Thinking
3. Geometry and Geometric Measurement
4. Information Handling

Each unit of study has a consistent design or organization and is meant to maximize time on learning for prospective teachers.

1. **Content:** Most one hour sessions will begin working on a math problem. Prospective teachers will engage in solving and discussing a math problem and sharing approaches and solutions. The content has been developed to so that prospective teachers will engage in mathematics *in depth* to help them connect concepts within and across the four units.
2. **Pedagogy:** In each lesson prospective teachers will actively engage in doing mathematics in order to experience approaches to teaching and learning math that they can use when they teach. They will recognize that there are often multiple ways of approaching a problem and in some instances more than one correct answer. The instructor will present questions that stimulate curiosity and encourage prospective teachers to investigate further by themselves or with their classmates. The course will also examine how children learn and develop mathematical understanding and skills and how the way children think influences the teaching of mathematics in the primary, elementary, and middle grades.
3. **Assignments:** Students are expected to continue learning about math and the teaching of math after class. There will be assignments to stretch prospective teachers content knowledge and to learn more about teaching math. Assignments will take many forms including independently solving math problems and school based tasks.

Course outcomes:

Students will:

- Increase their mathematical content knowledge for Number and Operations, Algebra and Algebraic Thinking, Geometry and Geometric Measurement, and Information Handling for teaching in the primary, elementary, and middle grades
- Increase their confidence, competence, interest, and enthusiasm for mathematics by exploring and doing mathematics

- Deepen an understanding of how children learn mathematics
- Build a variety of instructional techniques with clear purposes
- Enhance their use of questioning technique
- Learn ways to engage students in mathematical thinking through interactive activities

Semester Outline

Unit 1: Numbers and Operations (5 weeks/15 hrs)

The prospective teacher will:

- Differentiate between various types of numbers in our number system
- Know various models for arithmetic operations (addition, subtraction, multiplication and division) with natural numbers, rational numbers, and integers
- Understand Base-10 place value as it relates to natural numbers and eventually to decimals
- Be able to describe the relationship among and between fractions, decimals, ratios, rates, proportions, and percentages

Week #	Themes	Sub themes
1	Numbers and Operations	• Counting • Models for Addition & Subtraction with natural numbers • Addition and Subtraction as inverse Operations • Word problems involving addition and Subtraction
2	Place Value Numbers and Operations	• Working in the base-10 system • Models for Multiplication with natural Numbers • Multiplication and Division as inverse Operations • Models for Division with natural Numbers • Nature of the remainder in division • Factors, Prime and Composite Numbers
3	Fractions and Decimals	• Models of fractions (sets, number line, area, volume) • Types of fractions (proper, improper and mixed-number) • Decimals as fractions linked to base-10 place value • Concept of GCF and LCM • Operations with fractions and decimals
4	Percent Ratios and Proportion Rates	• Percent as related to fractions and Decimals • Ratio and Proportion • Rates
5	Integers	• Integers, Operations with integers • Venn Diagrams

Unit 2: Algebra (4 weeks/12 hrs)

The prospective teacher will be able to:

- Describe the connection between Arithmetic and Algebra
- Identify the repeating and/or increasing unit in a pattern and express that pattern as a rule
- Understand what variables are and when and how variables are used
- Express algebraic relationships using words, tables, graphs, and symbols
- Use order of operations to solve for unknowns in algebraic equations

Week #	Themes	Sub themes
1	Algebra as Generalized Arithmetic Patterns	•Repeating patterns and growing patterns •Generalizing a pattern and finding a rule
2	Algebraic terminology, the concept of x as a variable, coordinate graphs, multiple representations, the concept of identity	•Creating coordinate graphs •Continuous, discontinuous, and discrete Graphs •Equivalent expressions
3	Linear functions Order of Operations	•Interpreting tables, graphs and equations of linear functions •The concept of slope •Order of Operations
4	Square expressions and equations Symbol manipulation	•Interpreting tables, graphs and equations of quadratic functions •Solving for x, the unknown

Unit 3: Geometry and Geometric Measurement (5 weeks/15 hrs)

The prospective teacher will:

- Understand undefined terms in geometry
- Identify and construct different types of angles.
- Identify characteristics and measurable attributes of 2-dimensional figures and 3-dimensional objects
- Calculate area, perimeter, surface area, and volume
- Understand square numbers, square roots, and the relationships involved in the Pythagorean Theorem

Week #	Themes	Sub themes
1	Polygons	☐ Characteristics of Polygons with an emphasis on Triangles and Quadrilaterals,
2	Undefined terms in geometry Identification and construction of Angles	☐ Point, line, line segment, ray ☐ Models of angles ☐ Benchmark angles ☐ Classifying angles by measurement
3	Geometric Measurement: Area and Perimeter of polygons	☐ Perimeter and Area formulas
4	Geometric Measurement: Circumference and Area of Circles Surface Area of Cuboids and	☐ Circumference and Area formulas ☐ Surface Area formulas

	Cylinders	
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5	Volume of Cuboids and Cylinders Introduction to the Pythagorean Theorem	• Volume formulas • Squares, square numbers, square roots (surds) • The Pythagorean Theorem
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Unit 4: Information Handling (2 weeks/6 hrs)

The prospective teacher will:

- Recognize and construct various types graphs
- Determine which types of graphs best describe a given situation
- Analyze a graph and interpret its information
- Understand different measures of central tendency and determine which best describes a given situation

Week #	Themes	Sub themes
1	Graphic displays of information	• Collect & organize data via: tally marks, pictographs, line plot, bar graph, and line graphs (discrete and continuous) • Interpret the above graphic displays of Data
2	Measures of dispersion and central Tendency	• Range • Mean • Median • Mode

Course Grading Policy

A variety of assessments will be used to assign a final grade. It is recommended that course work be used to assign at least 50% of the final grade. Your instructor will tell you at the start of the course how your final grade will be determined and which pieces of course work will be assessed.

Suggested Resources:

These resources provide additional information about math education and the mathematical topics addressed during the course.

- NCTM *Illuminations*: <http://illuminations.nctm.org/>
- MathsCurriculum: <http://nzmaths.co.nz/>
- N-Rich Maths site: <http://nrich.maths.org/public/>
- *How Students Learn: History, Mathematics, and Science in the Classroom* www.nap.edu/catalog.php?record_id=10126#toc Published by National Academies Press.
- *What does Good Mathematics Instruction Look Like?:*
- [http://www.naesp.org/resources/2/Principal/2007/S-Op51 .pdf](http://www.naesp.org/resources/2/Principal/2007/S-Op51.pdf)
- *Mathematics for Elementary School Teachers*, by Tom Basserear, published by Brooks Cole.
- *Elementary and Middle School Mathematics: Teaching Developmentally*, by John A. Van de Walle, Karen Karp, and Jennifer Bay-Williams, published by Pearson Education.
- *Mathematics Explained for Primary Teachers*, by Derek Haylock, published by SAGE Publications.

Pakistan Studies (Compulsory) Semester 2

Syllabus: Pakistan Studies

YEAR/SEMESTER: Year 1/Semester 2

CREDIT VALUE: 02

PRE-REQUISITES: Successful completion of Pakistan Studies Course at F.A./F.Sc. level

COURSE DESCRIPTION

Pakistan Studies is the integrated, coordinated and systematic study drawing upon disciplines of social sciences such as history, geography, anthropology, economics, political science and sociology in relation to Pakistan.

The Pakistan Studies course provides a background of Pakistan Movement and political development after its inception. It will also particularly cover the salient features of Pakistan i.e. land, economy, human development and domestic and international current issues. The course will provide opportunities to the prospective teachers to enhance their content knowledge in disciplines that form the core of Pakistan studies; to critically examine the content; to broaden their vision and understanding of society, democratic citizenship, respect for cultural diversity and religious harmony; to develop their range of skills such as information gathering and processing, map reading, critical thinking, decision making, problem solving, communication and presentation skills; and to explore values and dispositions such as commitment to the common good and justice, to social responsibility, action and develop personal qualities like self-esteem, confidence and initiative and risk taking.

COURSE OBJECTIVES

- To create awareness among students about Pakistan as an enlightened nation , comparing it with the rationale and endeavors
- To educate students about key concept in the disciplines comprising Pakistan Studies (history, geography, economics and political science);
- To assist students to identify various perspectives on current, persistent and controversial issues in Pakistan; identify their own position and be able to support it;
- To inculcate in students the sense of patriotism, tolerance, active citizenship, and respect for cultural diversity and religious harmony.
- To encourage students to design and implement a project to promote active and responsible citizenship;

SEMESTER OUTLINE

The course content will be covered within one semester and consist of four units. A weekly breakdown of each unit is provided below:

UNIT 1: HISTORICAL PERSPECTIVES

Week	Session	Topics Subtopics
1	1	Introduction; The concept of civilization Introduction to the course Civilization Ancient civilizations of Indus valley: Mohenjo-Daro and Harrapa
	2	Skills development Inquiry skill Presentation skill Teaching history: facts versus opinions
2	3	Ideological rationale with reference to important personalities Two nation theory: Sir Syed Ahmad Khan, Allama Iqbal and Quaid-e-Azam Muhammad Ali Jinnah
	4	Factors leading to the birth of a nation Factors leading to the creation of Pakistan - Economic, Social and Political
3	5	Factors leading to the birth of a nation Factors leading to the creation of Pakistan - Economic, Social and Political
	6	Struggle for Pakistan British colonization and Muslim reform movement (1857 –1905) The struggle of independence (1905 –1940)
4	7	Struggle for Pakistan The Pakistan movement (1940 –1947) The teething years (1947 –1958)

Unit outcomes:

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

- ☐ Recognize how the past has been represented and interpreted;
- ☐ Distinguish between facts and opinions;
- ☐ Demonstrate inquiry and presentation skills;
- ☐ Evaluate role and contribution of key leaders in creation of Pakistan;
- ☐ Critically analyze the key events and factors that led to the creation of Pakistan;
- ☐ Identify and discuss various perspectives and develop their own historical understanding.

UNIT 2: LAND AND PEOPLE

Week	Session	Topic
4	8	Geography of Pakistan General overview to geography of Pakistan Introduction to project work
5	9	Map skills Globe and different types of map Skill development: map and globe reading and interpreting

	10	Physical features of Pakistan Physical features of Northern and Western Highlands and The Punjab Plains
6	11	Weather and climate; Factors affecting weather and climate Factors that influence weather and climate of Pakistan Major climatic zones of Pakistan and their characteristics
	12	Environmental problems in Pakistan Major Natural and Human Made Disasters in Pakistan Disaster Management / Preparedness
7	13	Movement and Human environment interactions Movement: people, goods and ideas; Humans adapt to the environment / Humans modify the environment / Humans depend on the environment.
	14	Population and its effects on economy Population density and distribution Population growth and its effects on economy of the country

Unit outcomes:

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

- Apply a range of geographical skills (ability to read and interpret maps, graphs and charts, photographs and statistics, etc.);
- Compare and contrast the five geographical regions of Pakistan;
- Describe the impact of climate on the people and land of Pakistan;
- Discuss the natural and man-made disasters that occur in Pakistan and ways that they can be prevented and/or how to respond
- Analyze factors influencing population change and its effect on economy;

UNIT 3: BASIC ECONOMICS

Week	Session	Topic
8	15	Basic Concepts of Economics Goods and services Utility Scarcity
	16	Economic systems Market Command Mixed
9	17	Sectors of the economy – Agriculture Role and importance of agri Agriculture production and productivity
	18	Sectors of the economy – Industry Contribution of industrial sector to national economy Prospects for industrialization
10	19	Sectors of the economy – Trade Major imports and exports of Pakistan
	20	Economic Development Economic development and growth Economic development of Pakistan

Unit outcomes:

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

- ☐ Explain key characteristics of three economic systems
- ☐ Differentiate between economic development and economic growth;
- ☐ Interpret and present data about the economy;
- ☐ Analyze the role and major benefits of agricultural, industrial sectors and trade in Pakistan's development.

UNIT 4: GOVERNMENT AND POLITICS IN PAKISTAN

Week	Session	Topic
11	21	The government of Pakistan Introduction Systems, levels functions and branches of government
	22	Objective Resolution The approval of the Objective Resolution by the Constituent Assembly Key features of the Objective Resolution Significance and impact of Objective Resolution in constitution making
12	23	The Political and Constitutional Phases Pakistan: The early years (1947 –1958) The Ayub Era (1958 –1969) The Yahya Regime (1969-1971)
	24	The Political and Constitutional Phases The Z. A. Bhutto Era (1971-1977) The Zia Regime (1977-1988) Civilian Rule (1988-1999) Musharraf Rule (1999-2008)
13	25	The 1973 Constitution
	26	Citizen participation The role of the citizen in a democracy; Civil society and the role of civil society Major Civil Society Organizations: Origin, Growth, Contribution and Impact
14	27	Citizen participation Role of major political parties in politics of Pakistan

Unit outcomes:

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

- ☐ Explain the basic components of the governance system in Pakistan;
- ☐ Describe and explain the significance and salient features of the Objectives Resolution;
- ☐ Identify political and constitutional political systems;
- ☐ Recognize the significance of the constitution of Pakistan;
- ☐ Give examples of the role civil society plays in Pakistan;
- ☐ Recognize political parties of Pakistan and their role.

UNIT 5: CONTEMPORARY PAKISTAN

Week	Session	Topic
14	28	Contemporary Pakistan Politics
15	29	Contemporary Issues Major Social, Cultural, Sectarian and Ethnic issues
	30	The future of Pakistan Economic Prospects

		Positional opportunities and threats
16	31	Consolidation of the course
	32	Conclusion of the course

Unit outcomes

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

- Synthesize information from a variety of sources to describe the political situation of Pakistan;
- Investigate and lead a discussion on a key contemporary issue;
- Describe and analyze the current situation of Pakistan from an economic perspective;
- Debate future plans for development of Pakistan.

LEARNING AND TEACHING APPROACHES

The teaching of Pakistan Studies will adopt methods that promote creativity, aesthetics, and critical perspectives, and enable learner to draw relationships between past and present, to understand changes taking place in society. This requires students and teachers to engage in active teaching and learning. In order to make the process of learning participatory there is a need to shift from mere imparting of information to debate and discussions. This approach to learning will keep both the learner and teacher alive to social realities.

It has often been observed that cultural, social and class differences generate their own biases, prejudices and attitudes in classroom contexts. The approach to teaching therefore needs to be open-ended. Teachers will discuss different dimensions of social reality in the class, and work towards creating increasing self-awareness amongst themselves and in the learners. Teaching will utilize a range of audio -visual materials, including photographs, charts and maps, and organize visits to museums and archeological sites if possible. Learning about Pakistan studies will also involve the local community –older community members can talk about local history, local experts such as water engineers and local craftsmen and women can talk about their work in relation to topics in the course. Experiential learning will be encouraged through project work. Thus, to achieve set course objectives a creativity, intellectual curiosity, tolerance and respect for others and to maintain a good civicsense, the course will use a combination of the different teaching and learning approaches. Students will be encouraged to engage in the following activities / strategies to stimulate their interest in the topics being studies and to develop a better understanding of the syllabus content:

- Effective lecturing
- Instructional strategies
- Cooperative learning structures
- Conducting inquiry
- Critical discussions / debates on the content materials
- Project work
- Drawing, reading and filling-in maps
- Making charts, graphs and tables
- Visit and write reports or make presentations on places visited

SUGGESTED COURSE GRADING POLICY

The course grading policy of the university and its affiliated college will be shared with students at the beginning of the course. It is recommended that 50% of the final grade is based on course work (on the basis of two assignments) and 50% of the grade from the final and mid-term exam. Universities and colleges will be adhering to their agreed grading policy.

Two graded assignments will have to be completed within a semester. They will be assessed according to grading the policy. university's First assignment task, conducting inquiry on a topic and making presentation after inquiry process, weighs 20 % of mark out of 50 % total. As a second assignment, students will be involved in a project work. Upon completion of the project, the students will be expected to submit a report on planning and implementation of the project. The report will be assessed and carries weight of 30 %. In addition, there are several non-graded assignments and tasks during the course. All graded and non-graded assignments should be carried out by the students in order to pass the course of Pakistan Studies. Description, tasks, criteria and indicators of the graded assignments will be shared with the students in a separate handout.

SUGGESTED RESOURCES

- Abid, S.Q. (2007). *A Muslim Struggle for Independence: Sir Syed to Muhammad Ali Jinnah*. Lahore: Sang-i-Meel.
- Ali, C. M. (1998). *The Emergence of Pakistan*. Lahore: Research Society of Pakistan.
- Ali, Mehrunnisa (2001). *Readings in Pakistan's*. Karachi: Oxford University Foreign Pol Press.
- Amin, Shahid.M (2004). *Pakistan's Foreign*. Karachi: Oxford Policy: University Press A. Reapp Anwar Syed (2007). *Issues and Realities of Pakistani Politics*. Lahore: Research Society of Pakistan,
- University of the Punjab.
- Burke, S.M, Qureshi, Salimul-Din (1995). *The British Raj in India*. Karachi: Oxford University
- Choudhary, G. W. (1969). *Constitutional Development in Pakistan*. London: Longman Group Ltd. Citizenship Rights and Responsibilities Pakistan
- (CRRP) Program (2007). *Youth in Elections: Voting for our future*. Islamabad: The Asia Foundation.
- Cohen, S. P. (2005). *The Idea of Pakistan*. Karachi: Oxford University Press.
- Dean, B.L., Joldoshalieva, R., Fazilat, A. (2006). *Creating a Better World: Education for Citizenship, Human Rights and Conflict Resolution*. Karachi: AKU-IED
- Kazimi, M. R (2007). *Pakistan Studies*. Karachi: Oxford University Press.
- Kazimi.M.R. (2009). *A Concise History of Pakistan*. Oxford University Press.
- Kennedy, C. (Ed.) (2006). *Pakistan 2005*.

Karachi: Oxford University Press. Khan, F. K. (1991). *A Geography of Pakistan: Environment, People and Economy*. Karachi: Oxford University Press.

- Khan, H. (2001). *Constitutional and Political History of Pakistan*. Karachi: Oxford University Press.
- Malik, H. & Gankovsky, Y. V. (Eds.) (2006). *The Encyclopedia of Pakistan*. Oxford University Press.
- Rabbani, M. I. (2003). (Revised Edition). *Introduction to Pakistan Studies*. Lahore: Caravan Book House.
- Rafique Afzal, *Political Parties in Pakistan*, Islamabad: National Institute of Historical and Cultural Research, 1999, (Vol. I, II and III) 1999.
- Shafqat, Saeed, *New Perspectives on Pakistan: Visions for the Future*, Karachi, Oxford University Press, 2007
- Smith, N. (2007). *Pakistan: History, Culture and Government*. Karachi: Oxford
- Yusuf, Hamid (1998) *A study of political Development 1947-99*. Lahore: The Academy.

Website Resources

Story of Pakistan: A multimedia journey
<http://www.storyofpakistan.com/>

Government of Pakistan
<http://www.pakistan.gov.pk/>

Pakistan Institute of Trade and Development www.pitad.org.pk

Pakistan Agricultural Research Council
<http://www.parc.gov.pk/>

Geographical Association: Furthering the learning and teaching of Geography <http://www.geography.org.uk/>

National Fund for Cultural Heritage
<http://www.heritage.gov.pk/>

Defense Journal:
<http://www.defencejournal.com>

Constitution of Pakistan
<http://www.mofa.gov.pk/Publications/constitution.pdf>

Declaration on Rights and Duties of States _
http://untreaty.un.org/ilc/texts/instruments/english/draft%20articles/2_1_1949.pdf

EDU-331 Methods of Teaching Islamic Studies

(Professional)

Semester 2

Year 1/Semester 2 duration :03credits, 48 class hours

Eligibility Criteria: Successful Completion Semester 1

Course Description

This three-credit course will nurture the student's personality towards the best moral and social conduct, healthy attitudes and self-discipline, in accordance with the guidance of the Qur'aan and Sunnah and to encourage them to develop as responsible citizens, who will contribute to the well-being of society and of humanity in general. 5. promote an enquiring, analytical and positive approach to the study of Islam, especially in its individual and collective expression in the contemporary world; 6. introduce students to the challenging and multi-faceted nature of Islam and to the ways in which this is reflected in experiences and practices; 7. help students to identify and explore questions about the meaning of life and to consider such questions in relation to the values and teachings of Islam; 8. encourage students to reflect on contemporary issues and act thereon in the light of the Qur'aan and Sunnah; and 9. enable students to recognize, appreciate and add to the contribution of Muslims to world civilization. The course teaches diversity and is committed to the betterment of family, community, environment and humanity. encourages independent thinking, critical thinking, problem solving and real-world connections from a foundation of strong basic skills.

Course Outcomes

After the completion of the course the student teachers will be able to:

- discuss the value and importance of Islamic studies.
- apply the suitable teaching methods in teaching of Islamic Studies.
- develop lesson plan in Islamic Studies.

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge. The techniques outlined below are not exclusive and therefore, other effective techniques and methods can be used:

- Lecture & Discussion, Inquiry Methods
- Case Observation and Study Methods

- Field visit, Observation Methods
- Library Assignments, Peer Assessment
- Project Work & Quizzes
- Pair, Group and Individual Assignments/Activities
- Self-Study Tasks
- School Survey/Community survey
- Individual and Panel presentations
- Course & Students Portfolios
- Mid-Term, Final-Term Exams

Grading: The final grade is based on the total points from Classroom Assessment i.e assignments, quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

Distribution of Course Grading:

- Internal Class assessments: 20%
- Mid-Term Exam: 30%
- Final Term Exam: 50%
- Total: 100%

Course Outlines

Unit 1: Objectives of Teaching Islamic Studies

- 1.0 Meaning, importance and objective of education in the light of Qur'an and Hadith.
- 1.1 Objectives of teaching Islamic Studies in the light of educational policies.
- 1.2 Classification of Objectives of teaching Islamic Studies.

Unit 2: Meaning and Importance of Education and Teaching

- 1.3 General principles of teaching, motivation and learning by doing.
- 1.4 The relation of education and teaching with practical life.
- 1.5 Maxims of teaching.
- 1.6 Effective teaching and its characteristics.
- 1.7 Identification of teaching affecting factors.

Unit 3: Method of Teaching

- 1.8 Method of teaching in the light of Qur'an and Uswa-e-Husna.
- 1.9 Different teaching methods:
 - 1.9.1 Discussion Method,
 - 1.9.2 Assignment Method,
 - 1.9.3 Story Method,
 - 1.9.4 Question & answer Method,

Unit 4: Lesson Planning for Teaching of Islamic studies

- 1.10 Meaning and Objectives of lesson planning.
- 1.11 Need and Importance of lesson planning.
- 1.12 Characteristics of lesson planning.
- 1.13 Basic steps of teaching.
- 1.14 Major and minor steps of presentation.

Unit 5: Teaching Technology

- 1.15 Meaning, historical background, need and importance of audio-visual aids.
- 1.16 Types and use of audio-visual aids.
- 1.17 Difficulties in using audio visual aids.

Unit 6: Teaching Techniques

- 1.18 Importance and Functions of questions.
- 1.19 Types and Characteristics of Questions.
- 1.20 Importance of asking questions.

Unit 7: Study of Islamic Studies Curriculum (6th-10th) under the following topics

- 1.21 Surah-e-Shams, Surah-e-Qadar, Surah-e-Takasur, Surah-e-Qarigha, Surah-e-Humazah, Surah-e-Quresh, Surah-e- Al-Ma'aun.
- 1.22 Translation and explanation of Ahadith.
- 1.23 Masael-e-Taharat (cleanliness) and Masael-e-Ghusal and Wazoo (ablution).
- 1.24 Tayammum.
- 1.25 Salaat (pray), Zakat (alms giving), and Hajj (Pilgrimage).

Unit 8: Evaluation of learning outcomes of Islamic Studies

- 1.26 Meaning and objectives of Evaluation.
- 1.27 Characteristics of a good testing program.
- 1.28 Evaluation Techniques for Islamic Studies.

Unit 9: Teacher of Islamic Studies

- 1.29 Status and value of teacher in Islam.
- 1.30 Personal qualities and training and educational background of teacher.
- 1.31 The role and duties of teacher in teaching.

Recommended Readings:

1. Ali Osatsdiddiqui, (1982)Islamiat or is ketadreesikhakey, Lahore press
2. Fazal Ahmed, (2001)Usool-e-taleem or tareeqa-e-tadrees. Majeed book depot
3. ShabbberKazmi,(2000) falsafa-e-tadveen-e-nissaab, Lahore Publishing House
4. Dr, Feroz Hayat, (1998)TadreesiMuawnaat, Majeed book dopot
5. DhanijaNeelam (1993), *Multimedia Approaches in Teaching Social Studies*, New Delhi: Harmen Publishing House.
6. Fenton, E.A. (1967), *The New Social Studies*, New York: Ho Rinehart, Winston, Inc.
7. Bining, A.C., &Bining , D.H. (1952), *Teaching the Social Studies in Secondary School*, N.Y: McGraw Hill Book Company.
8. Quillen, I.J., & Hanna, L. A. (1943), *Education for Social Competence, Curriculum & Instruction in Secondary School Social Study*. Chicago: Foreman & Co.
9. Islamic Studies text book (VI-X) Khyber Pakhtunkhwa Book Board.

Course Title: Teaching Literacy Skills (Compulsory)

Course Code: EDU-432

Year 2/Semester 3, Duration: 03Credits, 48 Class Hours

COURSE DESCRIPTION

The purpose of this course is to help prospective teachers understand the theory and practice of teaching early reading and writing. Reading and writing are seen as related, integrated meaning-making processes, which are reciprocal with the oral language processes, listening and speaking.

Like oral language, reading and writing development with print and the environment, with support and facilitation by the teacher. Adopting effective strategies that foster success and a love of reading is a key to supporting all children as they engage in the process of becoming readers and writers. The course will provide learners with grounding in what it means to be a reader and early reading development, which is the foundation for the continuation of literacy development. A major goal is to develop the learners under constructing meaning through the interaction of a reader in the text, and the context of the reading. Students will also understand the connection between reading and writing and the important role of writing in early literacy development.

Further, we will consider that most students will be learning to read and write in a language that is not his or her first language. Although the development of reading and writing in a second language follows the same trajectory as the development in a first language, there is by necessity a delay as students begin to learn the languages of the school. The numerous topics will be discussed, exemplified, conceptualized and developed within a three-unit span. These units are: 1) What is Reading? 2) Growing Up to Read and Write, and 3) Becoming Real Readers. Within these units the students will come to understand that reading develops at different rates and in different ways within each individual, but that there are enough commonalities to be able to group students for instruction that is specifically designed to meet their needs.

COURSE OUTCOMES

After completing this course, pre-service teachers/teachers will be able to:

5. describe reading as a holistic process comprising comprehension, fluency, and word recognition/solving.
6. Identify phases of second language development and the implications for reading and writing instruction
7. identify various phases in reading development.
8. explain the reciprocal nature of reading and writing and the effects of childr on their development as readers and writers
9. 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.
10. differentiate instruction through various classroom organizational structures and teaching strategies.
11. Identify supports for learning to read and write, including family and community.

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge.

The techniques outlined below are not exclusive and therefore, other effective techniques and method can be used:

- Lecture & Discussion, Inquiry Methods
- Case Observation and Study Methods
- Field visit, Observation Methods
- Library Assignments, Peer Assessment
- Project Work & Quizzes
- Pair, Group and Individual Assignments/Activities
- Self-Study Tasks
- School Survey/Community survey
- Individual and Panel presentations
- Course & Students Portfolios
- Mid-Term, Final-Term Exams

Grading: The final grade is based on the total points from Classroom Assessment i.e assignments, quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

Distribution of Course Grading:

- Internal Class assessments: 20%
- Mid-Term Exam: 30%
- Final Term Exam: 50%
- Total: 100%

Unit 1: Introduction to Reading and Writing

- (i) Introduction to the Course
- (ii) Skilled Reading and Skilled Writing
- (iii) Components of Reading
- (iv) Oral Language as the Foundation of Reading
- (v) The Sub-systems of Language
- (vi) Learning to Read and Write in a Multilingual Context
- (v) Phases and Models of Reading and Spelling Development
- (vi) Stages of Writing Development

Unit 2: Growing Up to Read and Write: Early Reading and Writing

- (i) Phonological Awareness
- (ii) Alphabetic Principle
- (iii) Instructional Strategies for Word Recognition
- (iv) Book Reading
- (v) Literacy-Rich Classroom Environment
- (vi) Types of print resources to use in the early-literacy classroom
- (vii) Differentiating instruction in a print-rich classroom.

Unit 3: Becoming Readers and Writers (Grades 1-3)

- (i) Instruction Strategies for Fluency
- (ii) Instructional Strategies for Vocabulary
- (iii) Instructional Strategies for Comprehension
- (iv) Matching Texts to Students
- (v) Guided Reading
- (vi) Writing as a Window into Reading
- (vii) Course Wrap-Up

SUGGESTED TEXTBOOKS AND REFERENCES

Books

- M.S.Burns, P. Griffin, and C.E. Snow (1999). *Starting Out Right: A Guide to Reading Success*. Washington, DC: National Research Council. Available on line: http://www.nap.edu/catalog.php?record_id=6014

Readings and On-line Resources

- http://www.nap.edu/catalog.php?record_id=6014 *Starting Out Right: A Guide to Promoting*
- *Children's Reading Success*
- <http://www.naeyc.org/files/naeyc/file/positions/PSREAD98.PDF> *Learning to Read and Write: Developmentally Appropriate Practices for Young Children*
- <http://www.naeyc.org/files/naeyc/file/positions/WWSSLearningToReadAndWriteEnglish.pdf>
- *Where we Stand: On Learning to Reading and Write*
http://www.cal.org/projects/archive/nlpreports/Executive_Summary.pdf *Executive Summary:*
- *Developing Literacy in Second-Language Learners: Report of the National Literacy Panel on Language-Minority*
- *Children and Youth*
- <http://www.aft.org/pdfs/teachers/rocketscience0304.pdf> *Teaching Reading IS Rocket Science: What Expert Teachers of Reading Should Know and Be Able to Do*
- <http://lincs.ed.gov/publications/pdf/PRFbrochure.pdf> *Put Reading First: Help Your Child Learn to Read*
- <http://lincs.ed.gov/publications/pdf/PRFbooklet.pdf> *Put Reading First: Kindergarten to Grade 3*
- <http://tapestry.usf.edu/nutta/data/content/docs1/NaturalApproachNarrative.pdf> *The Natural Approach: Stages of Second Language Development*

Web sites:

- <http://www.readinga-z.com>: Reading A to Z
- www.ttms.org/: Teaching That Makes Sense
- <http://www.readingrockets.org/>: Reading Rockets
- <http://www.colorincolorado.org/>: Color in Colorado
- <http://www.pbs.org/parents/readinglanguage/PBSParents> Reading and Language
- <http://www.fountasandpinnell.com> Fountas & Pinnell Leveled Books

Videos:

<http://www.learner.org/resources/series162.html> Teaching Reading K-2: A Library of Classroom Practices

<http://www.learner.org/workshops/writing35/index.html> Reading Like a Writer Videos

(Content)

Semester 3

Syllabus: Arts Crafts and Calligraphy

Year/Semester: Year 2 Semester 3

Credit Value: 3 credits

Prerequisites: Successful completion of Semester 1 and 2

COURSE DESCRIPTION:

Art, Crafts & Calligraphy course, is designed for teachers who will teach this subject at the elementary level. Content of the course is mainly drawn from the national Arts Curriculum designed for elementary schools. This will facilitate the teachers to enhance their understanding and skills for the subject which will be essential for them to have in order to become an effective elementary school teacher. Besides drawing content from elementary school curriculum, various topics have been included keeping in mind the advance knowledge and skills that a teacher needs to have to effectively implement the curriculum. This course will develop and broaden critical and creative thinking skills, understanding of and appreciation for the visual arts and culture and increase participant's visual techniques and proficiency processes. Participants will get an opportunity to explore various visual art forms and techniques in this course through the elements and principles of art and design.

COURSE OUTCOMES

By the end of the semester participants will be able to:

- ☐ Explain the importance of art education and its role in child development especially for nurturing creativity, enhancing aesthetic sense and stretching imagination.
- ☐ Use tools and materials in art more skillfully
- ☐ Use of an art journal on their own artistic ideas and thoughts for refining their teaching as an art teacher
- ☐ Recognize and appreciate artists, art styles, and artwork
- ☐ Reflect and participate in art critiques as a critic and as an artist
- ☐ Initiate independent projects that allow personal interpretation and self-expression
- ☐ Identify links between art and other school subjects

LEARNING AND TEACHING APPROACHES

Participants will engage in instructional activities using a greater variety of materials and/or combination of materials. It will provide opportunities for participants to explore their abilities to transmit forceful and meaningful ideas in a variety of media to a two-dimensional surface based on their previous experiences. Participants would be encouraged to use sketch books to note information and develop ideas, make use of a good variety of media to illustrate art history lessons, e.g. teacher can explore and experiment with different mediums to illustrate her ideas, she can develop a time line mural, explore low cost materials for making cave arts etc develop skills in note-making when viewing reproductions of the work of artists and designers; set regular assignments for homework which require personal research. Variety of teaching and learning approaches would be used e.g. the museum visit/ report and the research project, glossary, handouts.

EXAMPLE ASSIGNMENTS

These are examples of the types of assignments you might be given. Your instructor will tell you more about course assignments.

- ☐ Visit an art gallery or museum. Ask students to select three pieces of work. If possible, they should photograph the work and then write about why they like the piece.
- ☐ Work with a group of children in elementary grades to make simple puppets. Help them prepare and stage a short puppet show.
- ☐ Prepare a variety of objects for use in an elementary grade classroom using junk or recycle-able materials. Explain how they might be used.
- ☐ Plan an art activity for children in elementary grades. Try out the activity at school and ask one of your peers to observe and give feedback at the end of the lesson. Write a reflection about your experience teaching the lesson – including observations from your peers.
- ☐ As part of learning about a particular school.
- ☐ Interview a local artisan e.g. a weaver, a potter, a wood carver to find out more about their work. Prepare a video, a photo display or poster about their work, with a commentary.

COURSE GRADING POLICY

Multiple variety of assessment will be used in the course. By using multiple forms of assessment, the instructor will have many windows on the knowledge, skills and dispositions of prospective teachers. The total grade determined by examinations will not exceed 20% of the course grade. Prospective teachers are expected to be present in class, engage with activities and discussion and complete course assignments. The course instructor will tell you how the course will be graded and which assignments will be graded.

Unit 1: Introduction to Arts, Crafts & Calligraphy (2 Weeks)	
Week 1	☐ What are Arts, Crafts and Calligraphy? ☐ The role of the teacher in teaching art ☐ Influence of the arts in chill
Week 2	☐ Calligraphy- The emergence of Islamic calligraphy ☐ Ceramics and Sculpture ☐ Puppetry in Pakistan

Unit 2: History and Culture	
Week 3	☐ Indus Civilizations ☐ Exploration of history through a museum visit Art and Architecture (From Indus to Mughal)
Week 4	☐ Islamic Art and Calligraphy (Introduction of art and craft and calligraphy /origin from Persian artist and their calligraphy) ☐ Pakistani Calligraphers (Anwar Jalal Shimza, Rasheed Butt, HanifRamy, Zahoor-ul- Ikhlaq, Arshad, Sadqain, Shakir Ali, Gul gee, Aslam Kamal) ☐ Review of this unit

Unit 3: History and Culture	
Week 5	☐ Introduction to the Cubism Understand the Cubism ☐ Pakistani Artist's (worked in
Week 6	☐ Intro about Realism

	☐ Pakistani Artist's work in Real ☐ (Ali Imam, M. Husain, Hanjra, Khalid Iqbal, Ana Molka) Hands-on activities
Week 7	☐ Abstraction ☐ Origin and History of Abstract art ☐ Explore the work of Pakistani artists in abstract (Ahmed Pervaiz, LubnaLatif, Maqsood Ali, Anwar MaqssodHameed Ali) ☐ Hands-on activities
Week 8	☐ Indigenous art ☐ Pottery, ceramics, textile etc. Hands-on activities
Week 9	☐ Art Across the curriculum ☐ Ideas to integrate art with languages, science, social studies, mathematics etc. Teachers will be facilitated to learn how illustrations, drawings and craft work can be used to understand and express the concepts of science, maths, social studies and skills in languages ☐ Hands on activities and conclusion

Unit 4: Elements of Art & Principle of Design

Week 10	☐ Understanding elements of art (line, Shapes, color, texture, and space and volume) ☐ The importance of lines and its use in art work ☐ Kinds of lines ☐ Use of color (Color wheels, tints, tones and shade)
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	☐ Use of Space and value in 2D and 3D art Texture
Week 11	☐ Use of Space and value in 2D and 3D art Texture ☐ (Natural and man- made) ☐ Introduction of Principle of Design (unity, variety, balance, contrast, emphasis, and pattern and proportion)
Week 12	☐ Drawing/ technique of rendering ☐ Still life ☐ Painting
Week 13	☐ Printing ☐ Pattern making ☐ Shapes- organic and geometrical shapes
Week 14	☐ Sculpture Landscape ☐ Stick Drawing and conclusion and review of the unit
Week 15	☐ What is assessment in art curriculum? ☐ How and why we assess creativity? ☐ Review the recommendations proposed in the national curriculum grades
Week 16	☐ Design rubric/checklist for portfolio ☐ Set criteria for presentation/display/ peer and self-assessment etc. ☐ Conclusion and review of whole unit

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EDU-433

Teaching of Urdu (Professional) Semester 3

نصاب اردو SYLLABUS URDU

نصاب برائے تدریس اردو (فکشنل/عملی)

- کورس کا تعارف: (COURSE DESCRIPTION)
- حاصلاتِ تعلیم: (COURSE OUTCOMES)
- تعلیمی اور تدریسی رسائیاں: (LEARNING AND TEACHING APPROACHES)
- یونٹ (UNIT)

- ۱۔ نظریہ زبان
- ۲۔ عملی تدریسی طریقے (سننا، بولنا اور سمجھنا)
- ۳۔ عملی تدریسی طریقے (پڑھنا اور لکھنا)
- ۴۔ جائزہ و آزمائش

- حوالہ جات (REFERENCES)
- اسائنمنٹ (مختلف موضوعات) (ASSIGNMENTS)
- کورس سے متعلق لازمی معلومات
- اردو سے متعلق غلط فہمیوں کا ازالہ
- یونٹ نمبر سے متعلق سبقی اشارے
- تفصیلی سبقی خاکے
- دیگر یونٹس سے متعلق اہم سبقی اقدامات

نصاب برائے تدریس اردو⁸¹

(CURRICULUM FOR TEACHING OF URDU)

سال دوم/سمسٹر ۳

ایسوی ایٹ ڈگری آف ایجوکیشن/ADE

کریڈٹ: ۳

پیش لازمہ: (PREREQUISITES)

تدریس اردو کے اس کورس میں صرف وہ طلبہ داخلے کے اہل ہوں گے۔ جو سیمسٹر اول میں اردو کورس کا میانی سے مکمل کر چکے ہوں۔

کورس کا تعارف: COURSE INTRODUCTION

اس کورس میں زیر تربیت اساتذہ نظریہء آموزش زبان (The Theory of Learning of Language) اور زبان کے 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 ساف و غیر پیدا نش سے قبل ہی ہمارے دماغ میں موجود ہوتا ہے اور یہ پروگرام یونیورسل گرانٹر کہلاتا ہے۔ بچے اپنی معصوم عمر ہی میں ہم سے اچھے زبان کے محکم ہوتے ہیں۔ اس نظریے کے تحت اس کورس میں ابتدائی اور وسطانی جماعتوں کی درجہ بندی کی گئی ہے۔ لسانی مہارتوں کو جماعت بندی کے تحت عملی تدریسی طریقے (سننا، بولنا اور سمجھنا) اور عملی تدریسی طریقے (پڑھنا اور لکھنا) میں تقسیم کیا گیا ہے۔ علاوہ ازیں ان مہارتوں پر دسترس کے نقطہء نظر سے آڈیو، ٹیکسٹ اور وٹیل فزیکل جیسے عملی طریقوں سے استفادہ کیا گیا ہے۔

جائزہ و پیکش 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 میں ایشیائی اساتذہ جماعت اول تا ہشتم جدید سبھی اشارات تا صرف خود تیار کریں گے بلکہ ایشیائی مدارس میں ان کی عملی مشق بھی کریں گے۔ اس کورس کی جدت یہ ہے کہ سبھی اشارات کی تیاری اور عملی مشق کورس کا آخری پونٹ نہیں بلکہ دوران کورس جاری رہے گی۔

حاصلات کورس: COURSE OUTCOMES

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

- ۰۔ نظریہء آموزش زبان (The Theory of Teaching of Language) کے فطری تقاضوں کو سمجھ سکیں۔
- ۰۔ اردو زبان شناسی پر عبور حاصل کر سکیں۔
- ۰۔ سن کر لہجے، تلفظ کی ادائیگی اور الفاظ کے آہنگ کا لطف لے سکیں۔
- ۰۔ پڑھ کر جملہ سازی کی تحریری مشق کر سکیں۔
- ۰۔ پڑھ کر زندگی سے متعلق مختلف موضوعات پر عمدہ تحریریں پیش کر سکیں۔
- ۰۔ جائزہ و آزمائش کے جدید ترین انداز سبھی اشارات میں بتا سکیں۔
- ۰۔ طریقہ ہائے تدریس میں عملی کام مظاہرہ کر سکیں۔
- ۰۔ ابتدائی سے وسطانی سطح کے تدریسی کورس پر سمعی بصری معاونات و سبھی اشارات تیار کر سکیں۔

تعلیمی اور تدریسی رسائیاں: (LEARNING AND TEACHING APPROACHES)

نظریہ آموزش زبان کے ماہرین کا کہنا ہے کہ بچہ ماں کے پیٹ ہی سے سنا شروع کر دیتا ہے۔ کیوں کہ زبان بچے کے جہڑ میں پوشیدہ ہوتی ہے۔ جدید تکنیکی مہارتیں، تدابیر، فطری سانچے، آزمائشی سوالات اور سوالنامے تدریسی عمل کو جانچتے، پرکھتے اور معیار استدلال مقرر کرتے ہیں۔ اس کورس کی تدریسی تعلیمی رسائی زیر تربیت اساتذہ کا (جماعت اول تا ہشتم) کے طلبہ کے لیے فراوانی زبان کا ایک متنوع ماحول تیار کرنا اور آموزش قالب تیار کرنا ہے۔ جو معیار زبان کے اصولوں پر پرکھے جاسکیں۔ کورس سے منسلک ان سرگرمیوں کا مقصد زیر تربیت اساتذہ کو اپنی تعلیمی ذمہ داری بڑھانے کا موقع فراہم کرنا ہے۔

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 FEATURES OF A LANGUAGE-RICH ENVIRONMENT کو سمجھتے ہوئے آموزش زبان کے وسیلوں کے مطابق زبان کے فطری سانچوں پر تدریسی 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 مواد فراہم کرنا وغیرہ۔ اردو کی لسانی خوبیاں صوتی، قواعدی، ہنسی نوعیت کی حامل ہیں۔ ان خوبیوں سے استفادہ کرتے ہوئے زیر تربیت اساتذہ جماعت اول تا ہشتم کے تدریسی مسائل پر کیسے قابو پاتے ہوئے جدید سہتی ڈیزائن میں کارآمد تدریسی تدابیر اختیار کرتے ہیں۔ اس یونٹ کا کام عملی تدریسی معلومات 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، ہنسی)
- ۰۔ اردو سے متعلق غلط فہمیوں کا ازالہ
- ۰۔ اردو کی تدریسی تدابیر

تیسرا ہفتہ

- ۰۔ جدید سہتی ڈیزائن

- تدریسی تکنیک
- سمعی بصری معاونات

عملی مشق (TEACHING PRACTICE) شروع ہونے سے پیش تر اساتذہ موضوعاتی بحث کے ذریعے درج بالا نکات کے تحت راہنما استاد کی زیر نگرانی اپنی حکمت عملی طے کریں گے۔

یونٹ ۲

عملی تدریسی طریقے (سننا، بولنا اور سمجھنا)

ابتدائی تا وسطانی سطح کی جماعتیں

تعارف:

زبان کی تدریس میں صرف سننا ہی کافی نہیں، سن کر سمجھنا ہی اصل شے ہے۔ بچے کے ارد گرد مبہم آوازیں اس کے لیے جلد از جلد زبان اذہر کرنے میں مددگار بنتی ہیں۔ زبان سننا اس کے سیکھنے کا پہلا مرحلہ ہے۔ تدریس زبان میں بھی پہلی مہارت سننا سکھانا یا تدریس سماعت ہے۔ جماعت اول تا ہفتم عملی تدریسی طریقوں (سننا، بولنا اور سمجھنا) کے ذریعے حروف اور الفاظ کی کھوج زبان کا عملی پہلو ہے۔ قرآن ۵۶ آیات میں مطالعہ کائنات کا درس دیتا ہے۔ اس کائنات میں موجود ہر شے پر غور کرنے کی دعوت دیتا ہے۔ اس یونٹ میں دیکھ کر زبان سمجھنا یعنی مطالعہ ہذریعہ سماعت تدریس کیسے کی جائے۔ اوصاف خوش خوانی تدریس نظم و نثر میں کارگر ثابت ہوتے ہیں اس لیے زیر تربیت اساتذہ جدید طریقہ ہائے تدریس مثلاً (فنکشنل، آڈیو ٹیکسٹ اور ٹوٹل فزیکل) کو جدید سہتی اشارات میں دوران عملی تدریس استعمال کریں گے۔ زیر تربیت اساتذہ کی تدریس دوران کورس جاری رہے گی۔ اس لیے ایک ہفتہ سہتی اشارات کی تیاری کے لیے مختص کیا گیا ہے۔ جس میں زیر تربیت اساتذہ عملی تدریسی طریقے (سننا، بولنا اور سمجھنا) اور مطالعہ ہذریعہ سماعت تدریس کا گریکھ سکیں۔

چوتھا ہفتہ

- اوصاف خوش خوانی / کرداری مقاصد (تلفظ، روانی، تاکید، لب و لہجہ، تفصیل)
- بنیادی لسانی عادات / مہارتیں تعارف (بولنا، سننا، سمجھنا)
- بولنا اور سننا (فنکشنل، آڈیو ٹیکسٹ اور ٹوٹل فزیکل طریقوں سے مشق)

پانچواں ہفتہ

- ہذریعہ قصہ / کہانی (تمثیل، ڈراما، قصہ گوئی)
- ہذریعہ کھیل (مثلاً لفظ کی بناوٹ میں حروف کی کھوج)
- ہذریعہ مطالعہ (ٹی وی، ریڈیو، کمپیوٹر، مطالعہ کائنات)

چھٹا ہفتہ

- پرانری سطح پر تدریس نظم
- نڈل سطح پر تدریس نظم
- فی البدیہہ نظم گوئی

پونٹ ۴

جائزہ و آزمائش

تعارف:

تدریسی عمل کا جائزہ اور اس پر تنقید کرنا مدرس کے لیے بہت مفید ہے۔ اسباق کے جائزے میں مدرس کے اشارات، سبق کی خوبی اس کے موقف کی موثریت، اس کی تدابیر، توضیح کی کامیابی، اس کے عمل تدریس کی کیفیت اور بہ حیثیت مجموعی اس کے سبق کے اثر اور نتیجے پر خاص نگاہ تنقید ڈالنی چاہیے۔ زبان کی جانچ پڑتال کے ساتھ ساتھ اس کا لکھنا اور اس پونٹ کا کارآمد پہلو ہے۔ ایلمینٹری اساتذہ جماعت اول تا ہفتم ہر درجے میں شامل نصاب پر نئے پیمانے تیار کر سکیں گے۔

بارہواں ہفتہ

- ۰۔ جائزہ و آزمائش تعارف
- ۰۔ سوالات کی تکنیک، مشق
- ۰۔ کلور پیج، کثیر انتخابی
- ۰۔ آزمائش (TEST)

تیرہواں ہفتہ

- ۰۔ سوالنامے
- ۰۔ پرچہ جات
- ۰۔ اسائنمنٹ

چودھواں ہفتہ

- ۰۔ ابتدائی سطح کے سانچے (جماعت اول تا سوم)
- ۰۔ وسطانی سطح کے سانچے (جماعت چہارم تا ہفتم)
- ۰۔ مڈل/وسطانی سطح کے سانچے (جماعت ہفتم و ہشتم)

پندرہواں ہفتہ

- ۰۔ منظومات پر مبنی اسباق (جماعت چہارم تا ہفتم)
- ۰۔ نثر پر مبنی اسباق (جماعت ہفتم و ہشتم)
- ۰۔ منظومات پر مبنی اسباق (جماعت ہفتم و ہشتم)
- ۰۔ نثر پر مبنی اسباق (جماعت ہفتم و ہشتم)

حوالہ جات/مطالعائی مواد

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ماڈل اسائنمنٹ: (ASSIGNMENTS)

- ۱۔ مختلف موضوعات پر اخباری اشتہارات لکھیں اور ایک ہفتے میں جمع کروائیں۔ اشتہار رنگارنگ، ہامتی اور جدید ہوں۔
- ۲۔ رموز اوقاف پر اس انداز سے سبھی اشارہ تیار کیجیے کہ کہانی کی کہانی ہو اور رموز اوقاف پڑھا دیے جائیں۔ کم از کم تین دن میں سبھی خاکہ جمع کروائیں۔
- ۳۔ دو گروپوں میں سننے/بولنے اور پڑھنے/لکھنے کی مہارتیں تقسیم کی جائیں گی دونوں گروپ اسکرپٹ لکھ کر رول پلے/تمثیل تیار کریں گے۔ دونوں گروپ اپنے مکالمے (اسکرپٹ) تحریری صورت میں ایک ہفتے میں جمع کروائیں گے۔
- ۴۔ جماعت اول اور ہفتم سے دو اسباق پر سائنٹفک قالب تیار کریں اور ایک ہفتے میں جمع کروائیں۔

نصاب سے متعلق لازمی معلومات:

یہ ہمارا روزمرہ کا مشاہدہ ہے کہ پیدائش کے بعد بچہ اپنے ماحول میں بولی جانے والی زبان خود بہ خود ایک مختصر عرصے میں بولنا شروع کر دیتا ہے۔ اس عام مشاہدے کی غور طلب بات یہ ہے کہ ایک چھوٹا بچہ جس کی ذہنی صلاحیتیں ابھی نشوونما کے مراحل سے گزر رہی ہیں، زبان جیسی پیچیدہ

چیز خود بخود کیسے سیکھ لیتا ہے۔ نہ تو اُس نے اسکول کی شکل دیکھی ہے، نہ کسی ٹیوٹر نے اُسے بتایا ہے کہ بولا کیسے جاتا ہے اور نہ والدین نے اسے بولی جانے والی زبان کے اسرار و رموز سمجھانے کی کوشش کی۔ کسی بیرونی دباؤ یا درس و تدریس کے بغیر پیدائش کے دو سالوں کے اندر اندر بچے کا زبان سیکھ جانا صرف حیرت ناک عمل ہی نہیں ہے بلکہ تدریس زبان کے اساتذہ کے لیے اس میں ایک عظیم سبق پنہاں ہے۔

زبان سیکھنے کے اس قدرتی عمل سے یہ بات اخذ کرنا مشکل نہیں ہے کہ زبان سیکھنا ایک فطری عمل اور بچہ یہ خدا داد صلاحیت لے کر پیدا ہوتا ہے۔ بچہ کا ماحول اس خدا داد صلاحیت کو پروان چڑھانے میں اہم کردار ادا کرتا ہے۔ ایک ایسا ماحول جہاں بچے کے لیے محبت، عزت اور آزادی ہو بچے کو سیکھنے کے عمل میں مدد کرتا ہے۔ Noam Chomsky کے نظریے کے مطابق دنیا میں آنے والا ہر بچہ اپنے ساتھ دماغ میں ایک خاص عضو لے کر آتا ہے جسے Language Acquisition Device کہتے ہیں۔ زبان سیکھنے کے بنیادی اصول و اجزاء پیدائشی طور پر موجود ہوتے ہیں۔ پیدائش کے بعد جب بچہ اپنے ماحول میں بولی جانے والی زبان سنتا ہے تو اس کی زبان سیکھنے کی فطری صلاحیتیں متحرک ہو جاتی ہیں اور کچھ عرصے میں بچہ دماغ بولی جانے والی زبان کی پیچیدگی کو سمجھنے لگتا ہے اور بچہ زبان بولنا شروع کر دیتا ہے۔

سننا اور بولنا دو اہم لسانی مہارتیں ہیں۔ عام طور پر تدریس اُردو میں ان مہارتوں پر توجہ نہیں دی جاتی۔ آموزش زبان کی ابتدا سننے سے ہوتی ہے اور سننے کا رد عمل بولنے کی صورت میں سامنے آتا ہے۔ اگرچہ سننا اور بولنا فطری صلاحیتیں ہیں اور غیر رسمی طریقے سے خود بہ خود نشو و نما پاتی ہیں مگر انھیں بھی جلا دینے کی ضرورت ہے۔ سننا، سن کر سمجھنا، سمجھ کر مناسب رد عمل کا اظہار کرنا اور مناسب لب و لہجہ اختیار کرنا وغیرہ سننے اور بولنے کے مختلف مرحلے ہیں اور ان کے لیے مناسب تربیت بہت اہمیت رکھتی ہے۔ کیوں کہ

- سننے اور بولنے کی فطری صلاحیتوں کو جلا ملتی ہے۔
- غور سے سننے اور سننے کے عمل کو مؤثر بنانے کی صلاحیت پیدا ہوتی ہے۔
- درست زبان میں اپنے دل کی بات سادہ اور قابل فہم انداز سے بیان کرنے کی اہلیت پیدا ہوتی ہے۔
- بلا جھجک، اعتماد اور روانی کے ساتھ گفتگو کی صلاحیت پیدا ہوتی ہے۔

یہ ہم سب کا مشاہدہ ہے کہ ایک ایسا ماحول جہاں بچے کو زبان بولنے کی آزادی ہو، جہاں اُس کو گفتگو کرنے کے مواقع ملتے ہوں اور جہاں اس کی عزت نفس کا احترام ہوتا ہو اُس کو زبان سیکھنے میں بہت مدد دیتا ہے۔ اُردو زبان کے اس کورس میں جہاں ان مہارتوں کے خاص پہلوؤں کی پر توجہ دی گئی ہے۔ وہیں ان مہارتوں کو پروان چڑھانے کے لیے ادبی/نصابی کتب سے مربوط کیا گیا ہے۔ لسانی مہارتوں کو مربوط پروگرام کے تحت

زیر تربیت اساتذہ کے لیے دیے گئے۔ اس کورس کے تمام یونٹوں کی اس طرح منصوبہ بندی کی گئی ہے کہ چاروں لسانی مہارتیں یونٹ کا بنیادی مرکز رہیں۔ زیر تربیت اساتذہ تمام یونٹوں کی تدریس کے دوران اشارات سبق کی تیاری اور عملی مشق بھی سرانجام دیں گے۔ اور ایسی سرگرمیاں بچوں کے لیے تیار کریں گے جس سے بچے نہ صرف سرگرمی سے پڑھنے اور سمجھنے میں حصہ لیں بلکہ انھیں پڑھنے، لکھنے سننے اور بولنے کے مواقع بھی ملیں۔

ابتدائی سے وسطانی جماعتوں میں اُردو کی نصابی کتاب میں دیے گئے ہر سبق کا مقصد تدریس اُردو ادب کی مختلف اصناف سے واقف کروانا بھی ہے۔ دوران تدریس اگر اساتذہ کرام اس نقطے کو خاطر میں نہیں لائیں گے تو اُردو پڑھانے کا حق ادا نہیں ہوگا۔ مثلاً چچا چھکن کا سبق اس لیے دیا گیا ہے کہ طلبہ کی توجہ کردار نگاری کی طرف دلائی جاسکے دوران تدریس اگر اساتذہ بچوں کو یہ غور کرنے میں مدد نہیں کریں گے کہ امتیاز علی تاج نے چچا چھکن کا کردار یا ٹوٹ بٹوٹ کیسے تراشا ہے، کس طرح اس کردار کو پیش کیا ہے وغیرہ تو اس سبق کو پڑھانے کا مقصد پورا نہیں ہوگا۔ اسی طرح یہ بات شخصیت نگاری، منظر نگاری، آپ بیتی اور سفر ناموں والے اسباق پر لاگو ہوتی ہے۔ اس لیے اس کورس میں اصناف ادب کو درج بالا جماعتوں کے مطابق درجہ بندی اور لسانی مہارتوں کے تحت شامل نصاب کیا گیا ہے۔

ہر استاد اپنی شخصیت، ذہانت اور قابلیت کے مطابق تعلیم دیتا ہے۔ تاہم یہ اندازہ لگانا کہ کس طرح کامیاب تدریس کی جائے، بہت اہم ہے۔ بنیادی تدریسی تکنیک کے بغیر یہ ممکن نہیں کہ استاد اپنے مقصد میں کامیاب ہو جائے۔ اور یہ شعبہ ایسا ہے جس میں تبدیلی، چیلنج اور گنجائش ہر وقت موجود رہتی ہے اس لیے اس کورس میں جانچنے، پرکھنے اور معیار مقرر کرنے کے نئے پیمانے دوران تدریسی مشق تیار کرنے پر خاص توجہ دی گئی ہے۔ امید ہے فیکٹشل/عملی انداز تدریس کی جانب مثبت قدم ثابت ہوگا۔

اردو سے متعلق غلط فہمیوں کا ازالہ

استاد کا اردو رسم الخط میں مہارت رکھنا خصوصاً ابتدائی جماعتوں میں از حد ضروری ہے۔ اردو کو آسان مضمون سمجھنے کی وجہ سے اردو پڑھانے والے اکثر اردو زبان کے استاد نہیں ہوتے اور اگر موجود بھی ہوں تو شاید ادب کے طالب علم تو ہوں مگر زبان کے استاد نہیں۔ گفتگو میں پہلا مرحلہ لب و لہجہ کی درستی کا ہے۔ اس کے لیے صحیح تلفظ سکھانا ضروری ہے۔ تلفظ سے مراد یہ ہے کہ ہر حرف کی آواز اس کے صحیح مخرج کے ساتھ ادا کی جائے اور ہر لفظ نہ صرف درست طریقے پر بولا جائے بلکہ الفاظ کے درمیان مناسب ٹھہراؤ، فاصلے اور وقفوں کا تعین کیا جائے۔

حرکات و سکانات کا صحیح استعمال کیا جائے اور ادائیگی ٹھہر ٹھہر کر مناسب لہجے کے ساتھ کی جائے۔ تلفظ کی درستی کے لیے استاد کو اپنا نمونہ پیش کرنا چاہیے۔ نہ صرف یہ کہ وہ خود صحیح تلفظ ادا کرے بلکہ اس مقصد کے لیے صحیح زبان بولنے والوں کو سنے، ان کے ساتھ گفتگو کرے اور معیاری لغت استعمال کرے۔ موقع کی مناسبت سے صحیح تلفظ اور ادائیگی کے ساتھ الفاظ بولے۔ چھوٹی جماعتوں میں بول چال کے لیے اپنا نمونہ پیش کرے۔ لہجہ کا جو قد ان آج ہے شائد کبھی نہ تھا۔ اس طرح بچوں کو زبان سیکھنے کے درپیش مسائل کا حل بھی نکالا جاسکتا ہے۔

جدید تدریسی طریقوں سے واقفیت استاد کے پیشہ ورانہ اخلاق کا حصہ ہے اس عمل کو زبان آموزی کہتے ہیں۔ ثانوی زبانوں کی تدریس کے بہت سے طریقے رائج رہے ہیں۔ ان طریقوں کے نقص دور کر کے انہیں بہتر بنانے کی کوشش کی جائے۔ اس طرح کئی نئے طریقے بھی وجود میں آتے ہیں۔ ہر زبان کا اپنا ایک مزاج ہوتا ہے اور ہر زبان کے اپنے تدریسی مسائل ہوتے ہیں۔ تدریسی مسائل کو سمجھنے ہوئے عملی طریقوں کو برتنا استاد کی حاضر دماغی ہی نہیں بھر پوری ہے۔ ہمارے اساتذہ کو زبان کی آموزش کے فیکٹشل انداز اختیار کرنا ہوگا۔

سمعی بصری آلات یعنی ریڈیو، ٹیپ ریکارڈر اور ایسے صوتی آلات جو تدریسی اعانت کے طور پر استعمال ہوتے ہیں، مننا سکھانے میں بہترین اعانت ہیں۔ مختلف مضامین کے لیے ”رجسٹرائے اساتذہ“ بھی شائع ہوتے ہیں۔ اردو کے سلسلے میں ان کا مطالعہ استاد کے لیے ضروری ہے۔ ان میں سمعی و بصری معادلات کے کئی طریقے بتائے جاتے ہیں۔

اردو زبان کا اکثر دیگر زبانوں کے الفاظ کا اس میں شامل ہونا ہے۔ عربی، فارسی اور اب انگریزی کے الفاظ اسے اردو بنا رہے ہیں۔ اردو میں انگریزی الفاظ کا آنا درست مگر افعال کی تبدیلی زبان کے حسن کو ماند کر دیتی ہے اس کا بھی خصوصاً خیال رکھنا اساتذہ کی ذمہ داری ہے۔

میں اکیلا ہی چلا تھا چاہب منزل مگر
لوگ ساتھ آتے گئے اور قافلہ بنتا گیا

EDU-434 Teaching of General Science-II (Professional) Semester 3 Syllabus: Science II

SEMESTER: Year 2 / Semester 3

DURATION (Hours): 48 hours (16 weeks)

CREDIT VALUE: 03 credits

PREREQUISITES: Matriculation (with a science subject)

COURSE DESCRIPTION

This course will strengthen Student Teachers' subject-matter knowledge. It provides further opportunity to deepen the pedagogical science content knowledge required to effectively teach general science in elementary school. The course covers core concepts in physical science, life science, and earth science. It also covers teaching strategies and instructional approaches that best support the development of a conceptual understanding of science. In contrast to Science I, which dealt with simpler concepts, Science II establishes connections between core concepts, such as matter and energy, and entire systems, such as Earth's systems or systems within the human body.

After taking Science I and Science II, Student Teachers will be well prepared to implement the National Curriculum in elementary grades 1–5.

Science I and Science II integrate science content with science pedagogy and skill building. Both courses are designed to prepare prospective elementary teachers to teach inquiry science in grades 1–5. Their (pedagogical) content knowledge is chosen accordingly. It is recommended that prospective science teachers who want to teach science in lower secondary grades (6–8) deepen their science knowledge further by attending additional science classes offered in year 3 and year 4 of the B.Ed. (Hons) program

COURSE OUTCOMES

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

- Describe forms and interactions of energy and matter, including energy transfer and transformations, as they apply to chemical and physical processes with an emphasis on events/phenomena in everyday life.
- Begin to see that complex interactions among the atmosphere, the hydrosphere, and the lithosphere in Earth's systems undergo constant change. Understand the theory of plate tectonics as it relates to Pakistan's mountain formations and earthquakes. Provide examples of advances in technologies that have made it
- Possible to more accurately predict natural disasters and provide life-saving warnings (for floods, hurricanes, etc.). Explain how human activities influence air and water quality, ecosystems, and climate across the globe.
- Begin to understand the vastness and age of the universe and be able to discuss the characteristics and differences of objects within our solar system.
- Describe the flow of matter and energy in living systems and apply it to the human body to explain, for instance, the circulatory and digestive systems.

COURSE OUTLINE

UNIT # 1 SCIENCE AND ITS TEACHING

1.1 Nature of Science and its application for teaching

1.2 National Science Education Standards

1.3 Methods of Science Reaching

- Lecture Method
- Demonstration Method

- Laboratory Method
- Heuristic Method
- Observation Method
- Project Method
- Problem Solving Method

UNIT # 2: ENERGY TRANSFER, TRANSFORMATIONS, AND CONSERVATION

- 2.1 Types of Energy (Heat, Light, Sound, Kinetic, Potential, Gravitational, etc.)
- 2.2 Energy Transfer and Transformation - Concept of Conduction, Convection, and Radiation
- 2.3 Law of Conservation of Mass and Energy

Teaching “Energy transfer, transformation, and conservation” in elementary grades

UNIT # 3: INTERACTIONS OF ENERGY AND MATTER

- 3.1 Solutions and Solubility
- 3.2 Charged Particles in Matter
- 3.3 Formation of Bonds
- 3.4 The Role of Energy in Explaining Bonds

Teaching ‘interactions of energy and matter’ in elementary grades

UNIT # 4: EARTH’S SYSTEMS UNDERGOING CONSTANT CHANGE

- 4.1 Water, Carbon, and Rock Cycles
- 4.2 Theory of Plate Tectonics
- 4.3 Climate Change

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

UNIT #5: SOLAR SYSTEM AND THE UNIVERSE

- 5.1 Characteristics of our Solar System
- 5.2 Earth and Sun compared to other objects in the sky
- 5.3 Origin and evolution of Earth and the Solar System

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

UNIT # 6: HUMAN BODY SYSTEMS

- 6.1 Circulatory System
- 6.2 Digestive Systems
- 6.3 Respiratory System

Teaching ‘Human Body as a System’ in elementary grades

Suggested Books and Readings

- Inquiry and the National Science Education Standards: A Guide for Teaching and learning by Steve Olson and Susan Louks
- The Teaching of Science in Primary Schools by Wynne Harlen
- Inquiry: Thoughts, Views, and Strategies for the K–5 Classroom, National Science Foundation
- Ready, Set, Science! Putting Research to Work in K–8 Science Classrooms, National Research Council Taking Science to School: Learning and Teaching Science in Grades K–8, National Research Council 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.
- <http://cse.edc.org/products/historyscience/default.asp>.
- Target Science - Physics by Stephen Pople

- Target Science - Chemistry by Michael Clugston and Rosalind Fleming The Teaching of Science in Primary schools –Wynne Harlen
- Inquiry –Thoughts, Views, and Strategies for the K-5 Classroom –National Science Foundation Ready, Set, Science! Putting Research to Work in K-8 Science Classrooms –National Research Council
- Taking Science to School: Learning and Teaching Science in Grades K-8 – National Research Council

EDU-435 Information and Communication Technologies (ICTs) in Education (Professional) Semester 3

Syllabus: Information and Communication Technologies (ICTs) in Education

YEAR/SEMESTER: Year 2, Semester 3

DURATION: 2 credits (32 facilitated hours, 64 essential independent study and practice hours)

PREREQUISITES: Successful completion of Semester 1 and 2 courses including Computer Literacy in Semester 2

COURSE DESCRIPTION

Information and Communication Technologies (ICTs) in Education is a broad and constantly changing subject. This course will prepare teachers to understand, use and apply a range of technologies* and platforms in teaching and learning, in line with international standards.

With the changing face of technologies and related application, this course will primarily focus on using technologies for learning 'how to cope with to change learn'. It will provide opportunities to prospective teachers to collaborate with students, educators, peers, parents, and global community using digital tools and resources to support learning, success and innovation.

Course topics include supporting policies and guidelines for ICTs integration, computer-mediated learning, telecommunications and multimedia resources, online teaching and learning, problems of classroom integration, and computer support for professional development and administration.

Teachers-in-training will engage with the design and creation of exciting, intellectually challenging and authentic learning environments in which ICT changes not only what students learn but also how they learn, as we move forward in the 21st century. Trainees in this course will examine how ICT might be used to both enhance and transform learning.

The changing world demands changes in, and quickly learning competencies. The course is aimed at specifically developing the following competencies in prospective teachers:

- critical thinking and reflective approach,
- decision-making,
- handling of dynamic situations,
- multi-tasking
- working as a member of a team, and collaboratively
- communicating effectively, and
- general ICT competencies enabling professional and day-to-day work

*(computer/Internet, other audio/video equipment, digital camera, mobile phones, online and digital resources and tools) Societal issues arising in the educational use of ICT, and (c) the development and evaluation of educational

applications and resources of ICTs.

COURSE OUTCOMES

After completing this course, pre-service teachers/teachers will be able to:

1. develop a well-articulated perspective on information and communications technology in education informed by personal experience and critical examination of computer resources, curriculum, and educational practice.
2. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning
3. engage students in exploring real-world issues and solving authentic problems using digital tools and resources
4. participate in local and global learning communities to explore creative applications of technology to improve student learning
5. promote student reflection using collaborate understanding and thinking, planning and creative processes
6. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning
7. develop confidence, skill and an attitude to use a range of technologies (radio, video, computer, digital and online tools, digital accessories, etc.) for instruction and generating new knowledge for life-long learning.

Unit-1: Introduction to ICTs, Policy and Other Guidelines for Use of ICTs in Education

1.1 Introduction to the Course

- (i) ICTs in Education
- (ii) 21st Century Skills –the need of the day
- (iii) Highlights - National ICTs Strategy for Education in Pakistan, National Education Policy 2009

1.2. ICTs Integration, Standards and Competencies for Teachers

- (i) ICTs Integration, objectives, Misconceptions
- (ii) ICT competencies for Teachers
- (iii) Highlights - National Professional Standards (NTSTP) for ICTs in Education
- (iv) Introduction to electronic Portfolios –setting up for the Course

Unit 2: ICTs Integration into Curriculum and Instruction

2.1 Learning through custom-designed/ready-made applications (available on DVDs/CDs –Story of Pakistan, tutorials, multimedia encyclopedias, etc.)

- (i) Exploring the custom-ed multimedia resources
- (ii) Instruction using available applications for teaching of Pakistan Studies/History, Functional English, Methods of Teaching, etc.)
- (iii) Lesson planning and review

2.2 Audio, Radio Broadcast and Interactive Radio Instruction

- (i) Power of audio/radio in education
- (ii) Using audio/radio/IRI resources for teaching of different subjects (Functional English, Pakistan Studies/Islamic Studies, Early Childhood Education, etc.)

2.3 Video, animations, movies and television broadcast (Examples for different content/subject and pedagogy areas – Child Development, Early Childhood Education, Communication, Geography, Science, etc.)

- (i) Using recorded-classroom videos (Examples for different subject and pedagogy areas - Child Development, Early Childhood Education etc.)
- (ii) Using video prompts in classroom
- (iii) Lesson Planning using video resources
- (iv) Using movies in education
- (v) Using video commercials in education
- (vi) Using split-video technique in classroom
- (vii) Role of television broadcast in education
- (viii) Learning through Internet (applications, etc.)
- (ix) Concept of globalization, Global Teacher
- (x) Introduction to Digital Libraries, archives and eBooks

2.4 Learning through Internet /Videos in Education –Revisited

- (i) Interactive Online applications (Google Earth and Google Maps)
- (ii) Online video resources and video channels (Teacher Tube, YouTube, etc.)
- (iii) Sketch casting technique and animation in education (Case Study: The Khan Academy)

2.5 Using Digital Camera in Education (Examples for different content/subject and pedagogy areas - Methods of Teaching, Child Development, Classroom Management, Practicum, etc.)

- (i) Power of Pictures/photographs
- (ii) Developing local content using digital camera ‘Shoot -and Sharing experiences

2.6 Interactive Games and Puzzles

- (i) Exploring resources and applications, subject-wise (language, Science, Mathematics, etc.)
- (ii) Digital Applications - From Toys to Learning Tools
Trainees to design a storyboard of an educational game; Or design a puzzle online

2.7 Planning for ICTs Integration

- (i) Planning for ICTs Integration (SWOT analysis, building support networks, etc.)
- (ii) Developing a Technology Plan for Classroom and School
- (iii) Barriers for effective ICT use in schools and suggestions

Unit-3: ICTs for Life-long Learning and Teacher Professional Development

4.1 ICTs for life-long learning and teacher professional Development

- (i) life-long learning?
- (ii) Planning –an information resource (TL resources on WWW, Wikipedia, National curriculum, etc.) Learning content and methods
- (iii) ICT/Collaborative Tools for Teachers (Emails, discussion groups, chat, mailing lists, professional forum, etc.)
- (iv) Teaching-learning and assessment tools (templates, lesson

- plans, worksheets, online tests-IELTS, etc.)
- (v) Video/teleconferencing (Skype)
- (vi) E-Learning and Blended Learning (ICTs for life-long learning and teacher professional development)

Unit-4: Evaluating ICT Tools and Resources for Use

- (i) Assessing quality and usability of ICT resources with the help of rubrics
- (ii) Review

SUGGESTED TEXTBOOKS AND REFERENCES

• Journal of Research on Technology in Education (JRTE, International Society for Technology in Education (ISTE) –
<http://www.iste.org/learn/publications/journals/jrte-old.aspx>

• Journal of Technology and Teacher Education (JTATE) -
<http://aace.org/pubs/jtate/>

• Partnership for 21st Century Skills. 2010. Framework for 21st Century Learning.

http://www.21stcenturyskills.org/index.php?Itemid=120&id=254&option=com_content&task=view

RESOURCES

Geography

•Google Earth free download:

<http://www.google.com/earth/download/ge/agree.html>

•Google Earth tutorial: http://earth.google.com/outreach/tutorial_annotate.html

•Google Maps: <http://maps.google.com/>

•National Geographic Channel: <http://maps.google.com/>

•Videos –National Geographic:

<http://video.nationalgeographic.com/video/player/national-geographic-channel/> Science, History, News, etc. - Discovery Channel

•Videos –Discovery Channel <http://dsc.discovery.com> Mathematics, Physics, etc.

Videos –The Khan Academy <http://www.khanacademy.org/>

English:

English Grammar software free download

<http://freesoftwarepc.biz/educational-software/download-free-software-3d-grammar-english-portable/>

EDU-411 Developmental Practicum

Teaching Practice

Semester 3

SYLLABUS: The Developmental Practicum

YEAR/SEMESTER: Year 2/Semester 3

CREDIT VALUE: 3 credits*

PREREQUISITES: Successful completion of Semesters 1 and 2 of the ADE/B.Ed.(Hons)

*The Practicum is a 3 credit course. One credit requires three course hours.

Thus, the total number of hours required in the semester for this course is 3 credits x 3 hours x 16 weeks equals 144 hours. It is recommended that Student Teachers spend around 120 hours in the classroom and the rest of the hours will be spent in seminar meetings and working on assignments.

NOTE: Student Teachers are expected to make regular visits to schools throughout their program, starting in the first few weeks of Semester 1. The Semester 3 Developmental Practicum is an extension of these visits and should not be the first time students are at school.

COURSE DESCRIPTION

This course includes two important parts:

- a. **A school placement in an elementary school.**
- b. **A seminar that meets regularly.**

- A. **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.

- B. **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:

- ☐ Present an analysis of your own or a peer's teaching
- ☐ Conduct observations focused on specific classroom practices or an individual child
- ☐ 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:

- ☐ Reflect on and learn from connecting theory and their teaching practice.
- ☐ Collaborate with peers, Cooperating Teacher, other School Staff, and College/University Supervisor, establishing professional relationships.
- ☐ Invite, accept, and utilize formative feedback from the Cooperating Teaching peers, and the College/University Supervisor in a non-defensive manner.
- ☐ 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.
- ☐ Utilize appropriate instruments or techniques for informally and formally assessing student learning and learning needs.
- ☐ 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:

- 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;
- Complete Classroom Observations which will provide you with an opportunity to learn about:
 - o The classroom environment, placement of materials, arrangement of workspaces, traffic patterns;
 - o Classroom interactions, e.g. whole class teaching, teacher to student, student to student, student to teacher initiated interactions;
 - o Assist the Cooperating Teacher as requested with any tasks
 - o Small administrative tasks
 - o Helping individual children or small groups of children
 - o Meet with the Cooperating Teacher to discuss how he/she plans for instruction, expectations and the like
- ☐ Reflect on your learning this week.

Week 2: Becoming more involved in the classroom:

- Complete school based assignments which will provide you with tools to use to learn to know more about:
 - o Your Cooperating Teacher and his/her educational philosophy;
 - o A small group of children or an individual child.
- Complete classroom observations:
 - o Small group engagement;
 - o Individual child engagement.
- Assist the Cooperating Teacher as requested:
 - o Work with children who need extra help;
 - o Work with a small group of children to meet with the Cooperating Teacher to discuss plans for teaching.
- 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:

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

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

- Complete school based assignments:
 - o Learn to know more about the co-curricular activities available at your school, and specifically those that the children in your classroom do.
- Complete classroom observations:
 - o Use an additional observation tool to learn how your Cooperating Teacher manages the classroom through movement;
 - o Use an observation tool to learn how to keep track of student engagement by focusing on their on/off task behaviour.
- Assist the Cooperating Teacher as requested:
 - o Continue with all the previous tasks in the classroom;
 - o Co-teach a few lessons with your Cooperating Teacher.
 - o Work with children who need extra help
 - ☐ Meet with the Cooperating Teacher to discuss plans for teaching whole lessons next week.
- Reflect on your learning this week

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

- Complete school based assignments:
 - o Complete any school based assignments that might be outstanding;
 - o 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.
- Complete classroom observations:
 - o Use the additional observation tools to observe how involved children are in the classroom, in terms of their verbal engagement.
 - o Develop your own observation tool to collect data on how engaged children are.
- Assist the Cooperating Teacher as requested:
 - ☐ Plan and teach lesson in at least ONE subject area this week.
 - ☐ Continue activities above, taking over responsibility for planning, teaching and assessing for one subject area..
- 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.

- Complete school based assignments:
 - o Continue to make notes about how you are meeting the NPSTP on your Note Sheet.
- Complete classroom observations:
 - o 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.
- Assist the Cooperating Teacher as requested:
 - ☐ Plan and teach lesson in at least TWO subject areas this week.
 - o Continue activities above, taking over responsibility for planning, teaching and
- 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:

- ☐ Practical issues of teaching in learning in their field placements,
- ☐ Language learning,
- ☐ Different perspectives on how to organize and manage a classroom,
- ☐ Planning units of instruction,
- ☐ Content-specific instruction,
- ☐ Selecting and using assessments of learning,
- ☐ How to use standards for primary school teaching practice,
- ☐ Identifying the hidden curriculum in the classroom,
- ☐ Creating classroom environments that recognize physical, emotional, affective, social and intellectual needs of children,
- ☐ Non-instructional roles of the teacher,
- ☐ 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.

GRADING POLICY

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

GENERAL INFORMATION ABOUT THE COURSE

You will be provided with specific and detailed information about every part of your Developmental Practicum Experience. The following will give you a general idea of what to expect this semester.

ROLES AND EXPECTATIONS OF PRACTICUM TRIAD MEMBERS

Every Practicum experience is guided by three critical participants: 1) the Student Teacher, 2) the Cooperating Teacher and 3) the College/College/University Supervisor.

What happens in the classroom and how it is interpreted will depend on the views of each member of the triad. It is important for each member of the triad to negotiate common expectations for roles and responsibilities. If expectations are clear and understood by each member, the experience is likely to be more satisfactory to all.

The triad should meet together several times during the semester (Keep track of these meetings using the Triad Meeting sheet in your handbook):

1. At the beginning when roles and relationships are discussed,
2. At mid-point when performance is discussed;
3. At the conclusion of the experience as a final evaluation is made.

Depending on the challenges met during the practicum experience, the triad may feel that it is important to meet more frequently.

The Cooperating Teacher will guide the day -to-day work of the Student Teacher, providing feedback and initiating the Student Teacher into the life of the profession. This will include discussions of how planning, teaching and assessment are made.

The Cooperating Teacher will communicate regularly with the College/College/University Supervisor. The purpose of supervision is to support good communication between the Student Teacher and Cooperating Teacher. Communication and collegial relationships are important to the Student Teacher and other triad members in their professional development.

The supervisor will also provide feedback on including planning and teaching.

SUMMARY OF THE ROLE OF THE STUDENT TEACHER

The Student Teacher should have maximum opportunity to perform to the degree which his or her personal interests, abilities, and individuality allow.

There are three major aspects to the Student Teacher's role during the semester:

- 1) His or her activities in the classroom, school and community;
- 2) Participation in the weekly Practicum Seminar; and
- 3) Continued reflection and the creation of a developmental portfolio housing the documentation as evidence of professional growth .

The Student Teacher should become involved in the instructional program of the classroom as soon as possible. The experience will begin with observation. Time spent in observation will vary in length according to the situation, the Student Teacher will gradually assume more responsibility for planning and instruction through activities such as:

- ☐ Completing school-based assignments
- ☐ Completing school-based observations
- ☐ Assisting individual students
- ☐ Working with small groups
- ☐ Taking responsibility for co-planning and co-teaching
- ☐ Assisting the Cooperating Teacher with planning and teaching
- ☐ Teaching selected lessons under the Cooperating Teacher's supervision (not lessons planned off-site and that do not relate to what is appropriate in the classroom)
- ☐ Assuming over-all management for part of the day
- ☐ Assuming overall management of the classroom.
- ☐ Use the Cover Sheet for Formal Observation and prepare all the materials required for Prepare for 6 formal observations (2 by your Cooperating Teacher and 4 by your Supervisor)

The Student Teacher is expected to play an active role in deciding how he or she will take on new activities and in assessing her or his effectiveness.

The Student Teacher is expected to participate as a regular staff member of the school in terms of professional behaviour.

SUMMARY OF THE ROLE OF THE COOPERATING TEACHER

The Cooperating Teacher is expected to:

- ☐ Share school and classroom policies and procedures, the curriculum, the daily/semester schedule, and provide the Student Teacher with guides etc.
- ☐ Work with the Student Teacher and College/University Supervisor to set up a lesson plan format to be used by the Student Teacher. The student is required to provide the supervisor with comprehensive written plans prior to each formal observation. Cooperating Teachers may also want to require written plans in addition to those required by the supervisor, for example, for small group instruction.
- ☐ Formally and informally observe and provide verbal and written feedback to the Student Teacher on: lesson planning and teaching.
- ☐ Meet daily to discuss classroom events and make plans.
- ☐ Provide assessment to the College/University Supervisor and participate in triad meetings to discuss the Student Teacher's performance.

SUMMARY OF THE ROLE OF THE COLLEGE/UNIVERSITY SUPERVISOR

The College/University Supervisor is the official representative of the college/university. Therefore, the supervisor has responsibility for the supervision of Student Teachers, serves as

the liaison between the college/university personnel, and maintain positive relationships between the two institutions. Through classroom observations, conferences, and the weekly seminar the supervisor will:

- ☐ Provide feedback on at least 2 lesson plans
- ☐ Make at least three one-hour observation visits throughout the semester, with at least two of these visits followed by a three-way conference involving the student, Cooperating Teacher, and College/University Supervisor. The focus of these visits will depend on the needs of individual Student Teachers. (When possible, prior to making a supervisory visit, supervisors should meet with Student Teachers to discuss plans, questions, expectations and the like.)
- ☐ Guide entry into the profession through discussion of issues of professional practice, providing a guided seminar experience, and conferring with the Student Teacher before and after classroom observations and giving feedback on teaching to the Student Teacher.

EDU-404 Classroom Assessment (Foundation) Semester 4

Syllabus: Classroom Assessment

SEMESTER:	Year 2/Semester 4
DURATION:	48 Hours (16 weeks)
CREDITS	03
PREQUISITES:	Successful completion of Semester 3 courses

COURSE DESCRIPTION

Historically, the practices of testing and teaching have been conducted separately. A shift in schools throughout the world from the practice of testing to the practice of assessment is an effort, in part, to integrate assessment and instruction. Experienced teachers know that when a lesson ends, the teacher does not know exactly what each student learned. (The fact that the teacher taught does not necessarily mean that the students learned.) The only way to know what the students actually learned is to check in some way (written quiz, homework assignment or, perhaps, oral questions from the teacher that individual students answer when called upon.)

Fortunately, educational researchers, working in many countries throughout the world, have proven something that some teachers learned from experience. These researchers have shown time and again that students earn significantly higher scores on major tests when their teachers check for learning during and/or immediately after lessons than do similar students whose teachers do not check for learning while students are learning but wait until it is time for a major test. Checking for learning continuously rather than assuming it has occurred is the essence of several practices that educators call *Classroom Assessment*.

This course is based on the belief that wise decisions are a teacher's most important skill. Good assessments are at the core of wise decisions.

COURSE OUTCOMES

After the end of the course the prospective teachers will be able to:

- Understand the concept of testing, measurement and evaluation.
- Determine the qualities of a good test.
- Identify different types of test
- Plan and construct appropriate classroom test to evaluate students' performance
- Create educational objectives and assessment in the light of Blooms Taxonomy.
- Design different types of Test and its scoring.
- Prepare and select proper item for a test
- Plan and implement appropriate mode of assessment for early childhood education.
- Acquaint students with alternate assessment techniques

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge. The techniques outlined below are not exclusive and therefore, other effective techniques and methods can be used:

- Lecture & Discussion, Inquiry Methods
- Case Observation and Study Methods
- Field visit, Observation Methods
- Library Assignments, Peer Assessment
- Project Work & Quizzes
- Pair, Group and Individual Assignments/Activities
- Self-Study Tasks
- School Survey/Community survey
- Individual and Panel presentations
- Course & Students Portfolios
- Mid-Term, Final-Term Exams

Grading: The final grade is based on the total points from Classroom Assessment i.e assignments, quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

Distribution of Course Grading:

- Internal Class assessments: 20%
- Mid-Term Exam: 30%
- Final Term Exam: 50%
- Total: 100%

Course contents

UNIT 1: Test, Measurement, and evaluation

- 1.1 Test: Meaning, Characteristics and Types.
- 1.2 Measurement: Meaning, Characteristics and Types.
- 1.3 Evaluation and Assessment: Meaning, Characteristics and Types.
- 1.4 Relationship among Test, Measurement, Evaluation and Assessment

UNIT 2: Educational Testing

- 2.1 Steps of a psychological test
- 2.2 Classification of a test
- 2.3 Qualities of a good test
 - i. Reliability
 - ii. Validity
 - iii. Adequacy
 - iv. Objectivity
 - v. Differentiability

UNIT 3: Designing Learning Outcomes

- 3.1 Aims, Goals and Objectives
- 3.2 Revised Blooms Taxonomy
- 3.3 Cognitive domain
- 3.4 Affective domain

3.5 Psychomotor domain

UNIT 4: Types of Tests

4.1 Essay type test

- i. Definition, Purpose, and Types
- ii. Suggestions for construction and scoring
- iii. Merits and Demerits

4.2 Objective type test

- i. Definition, Purpose, and Types
- ii. Suggestions for construction and scoring
- iii. Merits and Demerits

UNIT 5: Test Construction

5.1 Table of Specification:

5.2 Definition, Purpose, Objectives and Making of Specification

5.3 Item Analysis

5.4 Definition, Purpose, objectives, and characteristics (Difficulty level, discrimination index, distracter power)

Unit 6: Alternate Assessments

6.1 Portfolio Assessment

6.2 Definition, Purpose, Types, and assessment

6.3 Performance Assessment

6.4 Definition, Purpose, Types, and assessment

6.5 Rubric

Unit 7: Early Childhood Assessment

7.1 Early childhood Assessment

7.2 Need for and Importance of early childhood assessment

7.3 Principles of Early childhood Assessment

7.4 Early childhood Assessment Methods

Suggested Books and Readings

- Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2010). *Assessment for learning: Putting it into practice*. Berkshire, UK: Open University Press.
- Clarke, S. (2008). *Active learning through formative assessment*. London, UK: Hodder Education
- McMillan, J. H. (2011). *Classroom assessment: Principles and practice for efective standards-based instruction (5th ed)*. Boston: Pearson.
- Miller, M.D., Linn, R.L., & Gronlund, N.E. (2009). *Measurement and assessment in teaching (10th ed)*. Upper Saddle River, NJ: Pearson.
- Stiggins, R., Arter, J., Chappuis, J., & Chappuis, S. (2006). *Classroom assessment for student learning: Do it right-Using it wel*. Boston: Pearson. This text has a DVD and CD.
- Wiliam, D. (2011). *Embedded formative assessment*. Bloomington, IN: Solution Tree Press.

EDU-436**Teaching of English
(Professional)****Semester 4****Syllabus: Teaching English****YEAR/SEMESTER:** Year 2/Semester 4**CREDITS:** 3 credits**PRE-REQUISITES:** successful completion of courses in semesters 1-3**COURSE DESCRIPTION**

This three-credit course has been designed to enable prospective teachers to teach English using an interactive communicative approach to students aged 6 to 13. It will be taught over 16 weeks with three face-to-face sessions per week, making a total of 48 sessions. The course aims to be comprehensive in its coverage and depth so that, on its completion, participants will have gained both a theoretical understanding of the basic principles of Second Language Acquisition and the practical knowledge of how to apply these principles effectively in the language classroom. The course focuses on ways of teaching young learners the four skills of listening, reading, speaking and writing to enable them to reach a basic level of communicative competence in both spoken and written English. In addition to learning how to teach and integrate the four skills in an interactive, learner-centered manner, participants will gain an understanding of how grammar awareness raising and vocabulary acquisition can be incorporated into a communicative teaching approach. Finally, student teachers will learn how to design and develop their own teaching materials and activities, and how to assess progress.

COURSE OUTCOMES

On completing the course, student teachers are expected to:

- have gained a basic understanding of how second/foreign languages are acquired and possess a working knowledge of the following methods/approaches to Second Language Acquisition: grammar-translation, audio-linguicism, the natural approach, communicative language teaching.
- be able to teach the four skills of listening, reading, speaking and

writing to young learners using an interactive communicative approach.

- be able to design suitable teaching materials which focus on helping learners acquire a basic level of communicative competence.
- be able to assess their students' -language designed assessment procedures.
- know how to help learners develop basic grammatical competence and vocabulary knowledge in English using a learner-centered communicative teaching approach.
- be aware of the differences between teaching and testing when they are designing their own classroom materials and activities.

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge. The techniques outlined below are not exclusive and therefore, other effective techniques and methods can be used:

- Lecture & Discussion, Inquiry Methods
- Case Observation and Study Methods
- Field visit, Observation Methods
- Library Assignments, Peer Assessment
- Project Work & Quizzes
- Pair, Group and Individual Assignments/Activities
- Self-Study Tasks
- School Survey/Community survey
- Individual and Panel presentations
- Course & Students Portfolios
- Mid-Term, Final-Term Exams
-

Grading: The final grade is based on the total points from Classroom Assessment i.e assignments,

quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

Distribution of Course Grading:

- Internal Class assessments: 20%
- Mid-Term Exam: 30%
- Final Term Exam: 50%
- Total: 100%

Course Outlines

Unit 1: Introduction to Second Language Acquisition:

- Introduction to *Teaching English*.
- What do people need to know to speak a second language well?
- Four influential ESL approaches:
 - a. The grammar-translation method and its limitations,
 - b. Behaviorism and the audio-lingual method,
 - c. The natural approach,
 - d. The interactionist approach.
- Factors affecting second-language learning.
- What is communicative language teaching?

Unit 2: Receptive Skills (Listening & Reading):

- What are listening skills?
- Types of listening:
 - a. Extensive and intensive listening,
 - b. Appreciative and Empathetic listening,
 - c. Comprehensive and Critical listening.
- Techniques and activities for teaching listening skills communicatively in the classroom (Stages in the listening tasks):
 - a. The pre-listening stages,
 - b. The while listening stage,
 - c. The post listening stag.

- Listening problems.
- What is reading?
- What is the purpose of reading inside and outside the classroom?
- The role of the teacher in extensive and intensive reading.
- Factors affecting learning to read in a second language
- Techniques for teaching reading communicatively:
 - a. Pre-reading, while-reading, and post-reading Techniques.

Unit3: Productive Skills - Speaking and Writing:

- What are speaking skills?
- The four elements of speaking skills (Vocabulary, Grammar, Pronunciation, Fluency).
- Why are speaking skills important to learn?
- How to develop English speaking skills with ESL students.
- Improving speaking skills with EAL students.
- Key concepts in teaching second-language writing:
 - a. controlled writing,
 - b. guided writing,
 - c. genre-based writing,
 - d. the product approach,
 - e. and the process approach.
- Types of writing tasks that have been used effectively in communicative language teaching.

Unit 4: Teaching Grammar Communicatively:

- What is a communicative approach to teaching grammar?
- Teaching techniques and activities to support communicative grammar learning.

Unit 5: Teaching Vocabulary Effectively:

- Three Tiers of Vocabulary:
 - a. Tier 1 - Basic Vocabulary,
 - b. Tier 2 - High Frequency/Multiple Meaning Vocabulary,
 - c. Tier 3 - Low-Frequency, Context-Specific Vocabulary.

Unit 6: Assessing Language Performance:

- Some basic principles and key concepts of assessment.

- Types of assessment.
- Basic principles for assessing children's language learning
- Why test learners?
- Conflicts between classroom learning and classroom testing and how to reduce these conflicts.
- Ways of marking language tests and giving feedback.

Recommended Readings:

- Cameron, L. (2001) *Teaching Languages to Young Learners*. Cambridge: CUP. Fanselow, J. (1987) *Breaking Rules*. New York: Longman.
- Goh, C.M. (2007) *Teaching Speaking in the Language Classroom*. Singapore: SEAMEO-RELC.
- Harmer, J. (2001) *The Practice of English Language Teaching*. Harlow: Pearson Educational. Hughes, A. (2003) *Testing for Language Teachers*. Cambridge: CUP.
- Hyland, K. (2003) *Second Language Writing*. Cambridge: CUP.
- Lightbown, P. and N. Spada (1999). *How Languages are Learned*. Oxford: OUP.
- Nation, P. (2002) *Managing Vocabulary Learning*. Singapore: SEAMEO-RELC.
- Phillips, S. (1993) *Young Learners*. Oxford: OUP.
- Richards, J.C. (2001) *Curriculum Development in Language Teaching*. Cambridge: CUP.
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EDU-437

Teaching of Mathematics (Professional) Semester 4

Syllabus: Teaching Mathematics

Year/Semester: Year 2/Semester 2

Credit value: 3 credit hours

Prerequisite: Successful completion of the General Mathematics course in Semester 2

Course Description

This course will equip prospective teachers with the knowledge and skills to teach math in grades 1 through 8. They will become familiar with expected student learning outcomes. Prospective teachers will learn to use a variety of instructional methods that promote active learning of math, including making and using teaching and learning materials. They will plan mathematics lessons and activities, and engage in practice teaching of math.

Learning Objectives:

Students will:

- ☐ Deepen their understanding of-8 Nationalkey Mathematics Curriculum.
- ☐ Identify and assess areas of youngster' their teaching practices.
- ☐ Acquire the pedagogical skills and competencies-8 required inNational Mathematics Curriculum.
- ☐ Describe the nature, history, and development of grade 1-8 mathematics education both in Pakistan and internationally.

Course Structure

Each three-session week will focus on three aspects of Math education: Mathematical Content, Learning the Math Content, and Teaching the Math Content. These will be combined to form an integrated instructional model that addresses the above learning outcomes.

4. **Mathematics Content:** The first session of the week will begin working on at least one math problem. Prospective teachers will engage in solving and discussing the problem and sharing approaches and solutions. The content will be developed so that prospective teachers will engage in mathematics *in depth* to help them connect concepts within and across the four units of the National Curriculum: Number & Operations, Algebra & Algebraic Thinking, Geometry & Geometric Measurement, and Information Handling.
5. **Learning & Pedagogy:** The week will continue with anand teachers' instructional practices. Cl order to experience approaches to teaching and learning that they can use when they teach. They will recognize that there are often multiple ways of approaching a problem (and in some instances more than one correct answer). The instructor will present questions that stimulate curiosity and encourage prospective teachers to investigate further: by themselves, with their classmates, or in local schools.

The course will examine how children learn and develop mathematical understanding and skills and how the way children think should influence the teaching of mathematics in the primary, elementary, and middle grades.

6. **Assignments:** Students are expected to continue learning about math and the teaching of math after class. There will be assi knowledge so that they learn more about teaching math. Assignments will take many forms including independently solving math problems and school-based tasks.

In summary, the Teaching Mathematics is a comprehensive effort so that pre-service teachers will:

1. Build and deepen their math content knowledge
2. Study ways in which young students learn mathematics
3. Learn about and use high-quality instructional practice

Semester Outline

Week #	Mathematics Content	Learning the Math Content	Teacher Decision Making: Teaching the Math Content
Unit 1			
1	☐ Prime & Composite Numbers ☐ Factors & Multiples	• Anticipated Student Misconceptions	• Setting Goals for: ◦ The Program ◦ Teaching ◦ Learning
2	☐ Division of Whole Numbers	• Emergent Mathematical Thinking	• Lesson Design Model ◦ Launch ◦ Explore ◦ Summarize
3	☐ Greatest Common Factor ☐ Least Common Multiple ☐ Prime Factorization	• The Value of Student Errors	• Using Questioning Techniques, Wait Time, Probes, and Prompts to Foster Student Thinking

Unit 2			
4	☐ Operations with Fractions (1)	• Learning Mathematics with Manipulatives & Visual Aids	• Using Application Problems to Develop Algorithms
5	☐ Operations with Fractions (2)	• Mathematical Problem Solving Strategies	• Physical Set-up of a Student-Centered Classroom
6	☐ Fractions-Decimals-Percents	• Mathematical Discourse: Learning by Talking	• Designing & Managing Cooperative Group Work
7	☐ Pie Charts	• Seeing Connections between Units of the National Curriculum	• Timing of Lessons, Pacing of Units

Unit 3			
8	☐ Geometric Ratios	• Cognitive Demand of Mathematical Tasks	• Selecting Worthwhile Mathematical Tasks

9	□ Rates & Linear Functions	• The Balance Between Concepts & Skills, The Role of Drill & Practice	• Bloom's Taxo Learning applied to Mathematics
10	□ Systems of Linear Equations	• Multiple Representations for a Single Mathematical Idea	• Comparing Models of Teaching ◦ Deductive-Analytic ◦ Inductive-Synthetic
11	□ Symmetry	• Mathematical Learning Styles and Modalities, Mathematics &	• Comparing Models of Teaching ◦ Heuristic

		Multiple Intelligence Theory	◦ Interactive ◦ Hands-on
12	□ Volume & Surface Area	• Learning Mathematics by Writing	• Comparing Models of Teaching ◦ Problem-based Learning ◦ Project-based Learning
13	□ Measurement & Precision	• Precision in Mathematical Vocabulary and Syntax	• Differentiating Assignments

Unit 4			
14	□ Data: Estimation & Large Numbers	• Learning Mathematics with Available Technology	• Differentiating Assessments
15	• Introduction and/or Review of Seminal Thinkers in Mathematics & Mathematics Education		
16	• Introduction and/or Review of Seminal Islamic Thinkers in Mathematics & Mathematics Education		

Suggested Resources:

These resources provide additional information about math education and the mathematical topics addressed during the course.

- NCTM *Illuminations*: <http://illuminations.nctm.org/>
- New Zealand's <http://nzmathsMathsCurriculum.co.nz/>
- UK's-RichNMaths site: <http://nrich.maths.org/public/>
- *How Students Learn: History, Mathematics, and Science in the Classroom* www.nap.edu/catalog.php?record_id=10126#toc Published by National Academies Press.
- *What does Good Mathematics Instruction Look Like?:*
- <http://www.naesp.org/resources/2/Principal/2007/S-Op51.pdf>
- *Mathematics for Elementary School Teachers*, by Tom Basserear, published by Brooks

Cole.

- *Elementary and Middle School Mathematics: Teaching Developmentally*, by John A. Van de Walle, Karen Karp, and Jennifer Bay-Williams, published by Pearson Education.
- *Mathematics Explained for Primary Teachers*, by Derek Haylock, published by SAGE Publications.

EDU-405 School, Community and Teacher (Foundation)

YEAR/SEMESTER:	Year 2, Semester 4
CREDIT VALUE:	3Credits Hours(2 credits + 1 laboratory credit)
PREREQUISITES:	Successful completion of Semesters 1-3

COURSE DESCRIPTION

The purpose of this course is to provide prospective teachers with a strong foundation for understanding the relationship between and among teachers, the school and the families and community that support the school. Basic conceptualizations of institutions that educate and the role of the teacher in relating to these institutions will be considered. Students will also explore how cultural, social, and historical forces have shaped understanding of the relationship teachers have with schools, communities and families in Pakistan. The course will explore the social context of schooling, examining how the work of teachers is nested within school and community. It will provide orientation to the process of socialization in schools and how social factors affect education. Students will have opportunity to build their ability to put this knowledge into practice in the accompanying 1 credit laboratory by study of a school and its community, so that as teachers, they can mobilize support for educational programs and contribute positively to their communities. Practical application of the course will be emphasized as students explore the teaching and learning within both school and community. They will identify strategies, practices, and relationships that have proven fruitful within the contexts with which they are familiar and learn how to identify and respond to challenges in school, community and teacher relationships. Students will identify how culture, gender, special needs, equity and equality and collaborative working conditions affect the school and community.

COURSE OUTCOMES

Prospective teachers will be able to:

- ☐ Analyze and describe relationships between teachers, the school and the families and community that support the school.
- ☐ Identify how the teacher's role is influence education in schools and their communities.
- ☐ Recognize and value diverse cultural, traditional and religious values and learning needs of their students in school as well as in their community.
- ☐ List the social factors affecting education and how it can support the development of education in the country in general and community in particular.
- ☐ Explain his/her role as a role model for their students in school and in the community in general.

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge. The techniques outlined below are not exclusive and therefore, other effective techniques and methods can be used:

- Lecture & Discussion, Inquiry Methods
- Case Observation and Study Methods
- Field visit, Observation Methods
- Library Assignments, Peer Assessment
- Project Work & Quizzes
- Pair, Group and Individual Assignments/Activities
- Self-Study Tasks
- School Survey/Community survey
- Individual and Panel presentations

- Course & Students Portfolios
- Mid-Term, Final-Term Exams

Grading: The final grade is based on the total points from Classroom Assessment i.e assignments, quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

Distribution of Course Grading:

- Internal Class assessments: 20%
- Mid-Term Exam: 30%
- Final Term Exam: 50%
- Total: 100%

Unit 1: Society, Community and Education

- 1.1 Introduction and overview of the course
- 1.2 Introduction of society, community and education
- 1.3 Structures and Functions of community and schools in Pakistan
- 1.4 Impact of education on Society
- 1.5 Role of education in strengthening Pakistani communities
- 1.6 Review of Unit 1

Unit 2: Understanding Social Interaction in Schools and Communities

- 2.1 Meaning of Social Interaction and socialization
- 2.2 Levels of social interaction
- 2.3 Elements of social interaction

- (i) Social contacts
- (ii) Communication
- (iii) Social attitudes and values

2.4 Types of social Interaction

- (i) Cooperation
- (ii) Competition
- (iii) Conflict
- (iv) Accommodation
- (v) Assimilation

2.5 Meaning/types of social Groups

- (i) Individual / group behavior
- (ii) Role of school and teacher in developing Social Interaction for peace, harmony and tolerance in Pakistani communities.
- (iii) Review of Unit 2

Unit 3: School and Culture

- 3.2 Main characteristics of culture
- 3.2 Elementary concepts of culture

- (i) Cultural trait
- (ii) Cultural complex
- (iii) Cultural pattern
- (iv) Cultural lag

3.3 Cultural diversity

3.4 Culture and cultural elements of Pakistani communities

3.5 Role of education and school in protection and transmission of culture

- 3.6 Impact of media on school and culture
- 3.7 Impact of technology on school and culture

Unit 4: Relationships between School and Community

- 4.1 School as a social, cultural and Community Institution
 - (i) Effects of school on communities
 - (ii) Effects of communities on school
 - (iii) School as a hub for community services
- 4.2 A critical analysis of effective role of school and teachers in Pakistani Communities
- 4.3 Review of Unit 4

Unit 5: Social Institutions

5.1 Definition and Types of social institutions

- (i) The family
- (ii) Educational Institutions
- (iii) Religious institutions
- (iv) Critical analysis of the role of Social Institutions in Pakistani school.
- (v) Review of Unit 5

Unit 6: Teacher's Role in School and Community

- 6.2 Teacher as an integral part of community
- 6.2 Teacher as a change agent

- (i) Community
- (ii) School

- 6.3 Teacher as role models through their participation in community activities
 - Effects of teachers and schools on individual and group behavior
 - Review of Unit 6

Unit 7: Working Context of Pakistani Teacher

- Teacher as a social activist
- Teacher's leadership roles
- Teacher's establishing role linkage among in stakeholders.
- Review of Unit 7

Unit 8: Practical Experience

The concluding unit will be a practical task in the community or other field experiences as assigned by the course instructor.

SUGGESTED TEXTBOOKS AND REFERENCES

There is no standard textbook for this course. The books listed below should be treated as 'suggested' readings that can provide support.

Chapters will be assigned chapters when deemed appropriate.

- Marshall, L & Rowland, F. (2006). *A guide to learning independently*, 4th ed, Pearson Longman, French Forest, NSW.
- Kotley, S.B, (2008). *The Basics of Sociology*, Greenwood Press: USA
- Bashiruddin, A.&Retallick, J, (eds), (2009). *Becoming Teacher Educators*, Aga Khan University-Institute of Educational Development: Karachi
- Hafeez, S, *Pakistani Society*,
- In addition to the above, the following is a list of suggested (recommended) readings that may be used to supplement class sessions where appropriate:

- Abdalla, M.J. & Qureshi, R. (2009). Teacher leadership for school-based professional development: A case study. In Qureshi, R. & Shamim, F. (eds) *Schools and schooling practices in Pakistan: Lessons for Policy and Practice*, Oxford University Press: Pakistan
- Qureshi, R. , Pirzado, P. & Nasim, S. (2007), Schooling in Rural Sindh, Pakistan, In Qureshi, R. & Rarieya, J. (eds), *Gender and Education in Pakistan*. Oxford University Press: Pakistan, pp.126-146.
- Qureshi, R. (accepted for publication). Education for Inclusion: what would it take to have an inclusive primary *Educational school Awakening*, *Journal the Pakistan?* Islamic University Malaysia.
- Qureshi, R. (2006). Colonial Legacy: Understanding the historical roots of female Illiteracy in Pakistan, *Muslim Education Quarterly*, vol. 23 (1 & 2): pp.20-37.
- Qureshi, R. (2008). Is Child-Friendly School on the agenda for school reforms? Conversations with Pakistani Conference school proceedings of heads, 'the International Conference on the Teacher Education: Transformative Society & Teacher Education Reform, September 19-20, 2008, Changchun, China: pp.1-10.
- Pakistan: Aga Khan University-Institute for Educational Development: pp.558-564.
- Qureshi, R. & Shamim, F. (Eds). (2009). *Schools and schooling practices in Pakistan: Lessons for Policy and Practice*, Oxford University Press: Pakistan.
- Qureshi, R. & Rarieya, J. (Eds) (2007). *Gender and Education in Pakistan*. Karachi, Pakistan: Oxford University Press: Pakistan.

Additional readings will be handed out in class.

EDU-438 Teaching of Social Studies (Professional)

Semester 4

Syllabus: Teaching Social Studies

Year/Semester:	Year 2, Semester 4
Credit value:	3 credits (48 Class Hours)
Pre-requisites:	Successful completion of semester 1-3

Course Description

This course enables prospective teachers to reflect on the purpose of teaching social studies and help shape their approach to teaching the subject. It prepares them to integrate knowledge with skills, values and attitudes, essential for democratic citizenship, in their teaching, and to encourage informed and responsible civic action.

The teachers of social studies have an added responsibility for helping students understand their world, facilitating the development of a wide range of skills and competencies to enable them to become critical consumers of knowledge, and encouraging them to participate as informed, caring and peace loving citizens to improve the society. The task of the social studies teacher becomes more challenging given the dynamic nature of society and subject matter, the nature and needs of the learners and wide varieties of learning contexts.

This course will prepare prospective teachers to provide for their student's activity-rich opportunities for inquiry, cooperative learning, discussion, role play, etc. It will equip prospective teachers with strategies to deal with controversial issues in their classrooms. Hence, this course combines content with different teaching strategies to make the teaching and learning of social studies a valuable and interesting educational experience for both teachers and students.

COURSE OUTCOMES

Students will be able to:

- ☐ Review/reflect on the nature, methods, key concepts and skills in the disciplines comprising the Social Studies (history, geography, political science, citizenship, anthropology, sociology, economics) and to deepen their understanding regarding their use to educate for informed, responsible and active citizenship
- ☐ Develop an understanding of current, persistent and controversial issues (global warming, cultural diversity, universality of human rights) and acquire the skills to teach controversial issues in their classrooms
- ☐ Recognize diversity and differences as assets and learn to evaluate different perspectives and biases
- ☐ Encourage and promote inquiry and critical approach in their teaching practice, thereby engage in critical reflection on their experiences (at the university and in real classrooms) to improve their practice
- ☐ Broaden their repertoire of content knowledge, pedagogical strategies, and instructional skills

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge. The techniques outlined below are not exclusive and therefore, other effective techniques and methods can be used:

- Lecture & Discussion, Inquiry Methods
- Case Observation and Study Methods
- Field visit, Observation Methods
- Library Assignments, Peer Assessment
- Project Work & Quizzes
- Pair, Group and Individual Assignments/Activities
- Self-Study Tasks
- School Survey/Community survey
- Individual and Panel presentations
- Course & Students Portfolios
- Mid-Term, Final-Term Exams

Grading: The final grade is based on the total points from Classroom Assessment i.e assignments, quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

Distribution of Course Grading:

- Internal Class assessments: 20%
- Mid-Term Exam: 30%
- Final Term Exam: 50%
- Total: 100%

Unit 1: Citizenship and Human Rights Education

1.1 Introduction to the course

1.2 Definitions, Rationale for teaching and learning of Citizenship

- (i) Key Concepts of Citizenship education
- (ii) Controversial Issues—What, Why and How to teach them

1.3 Towards creating a better world developing citizenship values, skills and dispositions through the teaching of controversial issues

- (i) Links with other subject areas
- (ii) Citizenship rights and responsibilities

1.4 The Evolution of the concept of Human Rights

- (i) Defining Human Rights
- (ii) Women's rights
- (iii) Children's right
- (iv) Civil, Political, Social, Economic and Cultural Rights
- (v) Human dignity, Justice, Equality, Freedom
- (vi) Universality, Indivisibility

Unit 2: History - People, Past Events and Societies

2.1 Definition, Rationale and Methods of History

- (i) Key concepts: Time and Chronology
- (ii) Change and Continuity

2.2 Cause and Effect

- (i) Multiple causation
- (ii) Multiple perspectives, Interpretation of history
- (iii) Reflection and Review

Unit 3: Geography - People, Place and Environment

3.1 Definition and Rationale for teaching and learning Geography

- (i) Key Concepts/Themes of Geography: Location, Place, Human-environmental Interactions, Movement, Regions
- (ii) Skills required for teaching and learning Geography

Unit 4 Culture and Diversity

4.1 Rationale for the study of Culture

- (i) The Dynamic Nature of Culture
- (ii) Groups and Institutions

4.2 Society, Socialization

- (i) Civilization
- (ii) Cultural Adaptation
- (iii) Assimilation, Acculturation
- (iv) Diffusion, Dissonance
- (v) Multiculturalism and its implications
- (vi) Reflection and Review

4.3 Interdependence

- (i) Peace and Sustainability
- (ii) Understanding Peace and Conflict

4.4 Peace Education

- (i) Positive attitudes and skills—empathy, cooperation, anger-management, and problem-solving
- (ii) Communication and Negotiation
- (iii) Reflection and Review

Unit 5: Power, Authority and Governance

5.1 Power, Government Systems and Regimes

- (i) Institutions of Government, political processes and participation Civil society—individuals, groups and institutions
- (iii) Reflection and Review

Unit 6 Production, Distribution and Consumption

6.1 Definition of and Rationale for teaching and learning of Economics

- (i) Conflict between wants and resources, Choice, Scarcity
- (ii) Opportunity cost

6.2 Economic systems

- (i) Production and distribution of Wealth
- (ii) Supply and demand Reflection and Review

Suggested Textbooks Websites and References

- www.proteacher.com
This website has teaching ideas and resources, lesson plans etc. for elementary school
- www.moneyinstructor.com
This website has worksheets, lessons and activities for teaching money, business and life skills. The ideas could be useful for teaching economics topics
- www.educationworld.com
Educational research blogs, templates, tutorials, worksheets, lesson plans are many other articles with very good ideas for teachers are available on this site
- www.pbs.org
A variety of videos, on culture and society, history topics, science and nature, etc are available on this site
- www.teachingideas.co.uk
Lesson ideas, plans, activities, resources which can be used by teachers in their classrooms are available on this site
- www.learner.org

This site offers Teachers' professional development the curriculum

- www.geography-site.co.uk
A comprehensive site exploring geography with online lessons, revision sheets and easy to read information about geography topics
- www.teachervision.fen.com/diversity/teacherresources/33631.html
Teachers could use the resources on this site to teach students to respect differences among people in their community and around the world
- www.salsa.net/peace/teach/teachers.html
Peace tools for teachers could be found on this site

REFERENCES

National Council for the Social Studies Task Force on Standards for Teaching and Learning in the Social Studies. (2008) A vision of powerful teaching and learning in the social studies: Building effective citizens. *Social Education*, 72(5), 277-280.

Books

- Anderson, L. H. (2010). *Chains*. New York: Atheneum Books for Young Readers.
- Brophy, J. and Alleman, J. (2006). *Powerful social studies for elementary students*. Belmont, CA: Thomson Wadsworth.
- Bailey, R. (ed) (2000) *Teaching Values and Citizenship Across the Curriculum*. London: Kogan Page.
- Birzea, C. (2000). *Education for democratic citizenship: a lifelong learning perspective*. Strasbourg: Council of Europe.
- Bridges, D. (1986). *Dealing with controversy in the curriculum: A philosophical perspective*. In J. Wellington (Ed.), *Controversial issues in the curriculum*. Oxford, UK: Basil Blackwell.
- CitizenshipFoundation (2004) 'Young People
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- Clarke, B. (1994) *Citizenship*: London and Colorado: Pluto Press.
- Clough, N & Holden, C. (2002) *Education for Citizenship: Ideas into Action*. London: Routledge/Falmer
- Crick, B. (1998) *Education for citizenship and the teaching of democracy in schools*. Final report of the Advisory Group on Citizenship.
- Crick, B.(2000) *Essays on Citizenship*. Continuum: London.
- David, W. & Cleaf, V. (1991). *Actions in elementary social studies*. Massachusetts: Allyn and Bacon.
- Davies, I. (2005). *100 Ideas for Teaching Citizenship*. London: Continuum.
- Dean, B. L. & Joldoshalieva, R. (2006). *Teaching Controversial Issues: Is it possible in Pakistan.??? (Ed)*. Unpublished book chapter.
- Delanty, G. (2000) *Citizenship in a global age: Society, Culture Politics*. Buckingham and Philadelphia: Open University Press.
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<http://www.citizenshipfoundation.org.uk/main/resource.php?s256>
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2006, from www.dfes.gov.uk/citizenship/section.cfm?sectionId=3&hierachy=1.3
- Engle, S. & Ochoa, A. (1988). *Education for democratic citizenship: Decision making in social studies*. New York: Teachers College Press.
- Frazer, E.(2003). *Citizenship Education: Anti-political Cultural and Political Education in Britain*,
- Lockyer, B. Crick & J. Annette (eds.) *Education for democratic citizenship: Issues of theory*

- and practice. England: Ashgate. pp. 64—77
- Galton, M., Simon, B., & Croll, P. (1980). *Inside the Primary Classroom*. London: Routledge & Kegan Paul.
 - Heater, D. (2004). *A Brief History of Citizenship*. Edinburgh: Edinburgh University Press.
 - http://www.citized.info/pdf/comm_articles/hilary_claire1.pdf. Retrieved December 12, 2006.
 - http://www.standards.dfes.gov.uk/ethnicminorities/raising_achievement/763611/# Retrieved May 12, 2006.
 - <http://www.quoteland.com>. Retrieved January 10, 2007.
 - Huddleston, T. and Kerr, D. eds. (2006), *Making sense of Citizenship: A CPD Handbook*. London:
 - Hodder Murray. Retrieved October 30, 2006 from
 - www.citizenshipfoundation.org.uk/main/resource.php?s215
 - Oulton, C., Day, V., Justin, D. and Grace, M. (2004). Controversial issues—teachers' attitudes and practices in the context of citizenship education. *Oxford Review of Education*, 30 (4), 489-507.
 - Wales, J. & Clarke, P. (2005). *Learning citizenship Practical teaching strategies for secondary schools*. London: Routledge Falmer.

EDU-412 The Teaching Practicum (Teaching Practice) Semester 4

Syllabus: The Teaching Practicum

YEAR/SEMESTER: Year 2/Semester 4

CREDIT VALUE: 3 credits

PREREQUISITES: Successful completion of Semesters 1 and 2 of the ADE/B.Ed.(Hons)

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:

- a. A school placement in an elementary school;
- b. A seminar that meets regularly.

a. 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 class

room management and a variety of evaluation techniques (including authentic assessment).

Collaboration with other Student Teachers and professionals in the school setting should be

encouraged in order to develop team building skills and utilization of all resources to enhance

children's learning.

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.

b. 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:

- ☐ Present an analysis; of own or a peer's
- ☐ Conduct an observation focused on specific classroom practices or an individual child;
- ☐ Try out a particular method and reflect on its success in achieving its purpose;
- ☐ 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:

- ☐ Reflect on and learn from teaching practice.
- ☐ Collaborate with peers, cooperating teacher and college/supervisor, establishing professional relationships.
- ☐ Invite, accept, and utilize feedback from the supervising teacher, peers, and the college/university supervisor in a non-defensive manner.
- ☐ 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.
- ☐ Utilize appropriate instruments or techniques for assessing student learning and learning needs.
- ☐ 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

a. 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.

- ☐ Complete the Student Teacher Checklist, provided in your handbook.
- ☐ Meeting with the cooperating teacher to discuss how he/she plans for instruction, expectations and the like
- ☐ 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 Interviewa 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

- ☐ Log of Daily Activities
- ☐ 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
- ☐ 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.

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

Working with small groups of children to

- ☐ Co-teaching lessons with the Cooperating Teacher
- ☐ 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

- ☐ Co-plan full lessons with the Cooperating Teacher
- ☐ Co-teach lessons for one subject matter each day
- ☐ Working with children who need extra help
- ☐ 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.
- ☐ Prepare for a formal observation by your Cooperating Teacher using the Formal Observation Cover sheet, pre-observation guide, and post observation reflection sheet.
- ☐ Prepare for a formal observation by your College/University Supervisor using the Formal Observation Cover sheet, pre-observation guide, and post observation reflection sheet.
- ☐ Prepare for a mid-way triad meeting.
- ☐ 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.

- ☐ Continue activities above, taking over responsibility for planning, teaching and assessing one subject full lesson) throughout the week
- ☐ Co-plan and co-teach all other subjects with the Cooperating Teacher
- ☐ 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

- ☐ 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
- ☐ Prepare for a formal observation by your Cooperating Teacher using the Formal Observation Cover sheet, pre-observation guide, and post observation reflection sheet.
- ☐ 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

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

b. 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:

- ☐ Practical issues of teaching in learning in their field placements,
- ☐ Language learning,
- ☐ Different perspectives on how to organize and manage a classroom,
- ☐ Planning units of instruction,
- ☐ Content-specific instruction,
- ☐ Selecting and using assessments of learning,
- ☐ How to use standards for primary school teaching practice,
- ☐ Identifying the hidden curriculum in the classroom,
- ☐ Creating classroom environments that recognize physical, emotional, affective, social and intellectual needs of children,
- ☐ Non-instructional roles of the teacher,
- ☐ 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.

GRADING POLICY

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

GENERAL INFORMATION ABOUT THE COURSE

You will be provided with specific and detailed information about every part of your Practicum Experience. The following will give you a general idea of what to expect this semester.

ROLES AND EXPECTATIONS OF PRACTICUM TRIAD MEMBERS

Every Practicum experience is guided by three critical participants: 1) the student teacher, 2) the Cooperating Teacher and 3) the College/University Supervisor.

What happens in the classroom and how it is interpreted will depend on the views of each member of the triad. It is important for each member of the triad to negotiate common expectations for roles and responsibilities. If expectations are clear and understood by each member, the experience is likely to be more satisfactory to all.

The triad should meet together several times during the semester:

4. At the beginning when roles and relationships are discussed,
5. At mid-point when performance is discussed;
6. At the conclusion of the experience as a final evaluation is made.

Depending on the challenges met during the practicum experience, the triad may feel that it is important to meet more frequently.

The Cooperating Teacher will guide the day -to-day work of the Student Teacher, providing feedback and initiating the Student Teacher into the life of the profession. This will include discussions of how planning, teaching and assessment are made.

The Cooperating Teacher will communicate regularly with the college/university supervisor. The purpose of supervision is to support good communication between the Student Teacher and Cooperating Teacher. Communication and collegial relationships are important to the Student Teacher and other triad members in their professional development.

The supervisor will also provide feedback on all aspects of the Student Teacher's development including planning and teaching.

SUMMARY OF THE ROLE OF THE STUDENT TEACHER

The Student Teacher should have maximum opportunity to perform to the degree which his or her personal interests, abilities, and individuality allow.

There are three major aspects to the Student Teacher's role during the semester:

- 1) His or her activities in the classroom, school and community;
- 2) Participation in the weekly Practicum seminar; and

3) Continued reflection and documentation of professional growth.

The Student Teacher should become involved in the instructional program of the classroom as soon as possible. The experience will begin with observation. Time spent in observation will vary in length according to the situation, the Student Teacher will gradually assume more responsibility for planning and instruction through activities such as:

- ☐ Assisting individual students
- ☐ Working with small groups
- ☐ Taking responsibility for planning and teaching sections of whole class lessons
- ☐ Assisting the Cooperating Teacher with planning and teaching whole lessons
- ☐ Assuming over-all management for part of the day
- ☐ Assuming overall management of the classroom.

During the semester, Student Teachers will engage in a variety of experiences in their classrooms. Attending meetings, teacher's parent meetings and the like are encouraged, where this is possible.

The Student Teacher is expected to play an active role in deciding how he or she will take on new activities and in assessing her or his effectiveness.

The Student Teacher is expected to participate as a regular staff member of the school in terms of professional behavior.

SUMMARY OF THE ROLE OF THE COOPERATING TEACHER

The cooperating teacher is expected to:

- ☐ Share school and classroom policies and procedures, the curriculum, the daily/semester schedule, and provide the Student Teacher with a class list, guides etc.
- ☐ Work with other members of the Practicum triad to set up a program for the Student Teacher's gradual assumption of all classroom responsibilities and building up to the student teacher taking on the planning, teaching, and assessing of at least three subjects. This plan should include provisions for Student Teacher involvement in all instructional tasks as well as non-instructional tasks such as home-school communication, parent conferences and staff development; and
- ☐ Work with the Student Teacher and university supervisor to set up a lesson plan format to be used by the Student Teacher. The student is required to provide the supervisor with comprehensive written plans prior to each formal observation. Cooperating teachers may also want to require written plans in addition to those required by the supervisor, for example, for sections of lesson.
- ☐ Formally and informally observe and provide feedback to the Student Teacher (use the forms provided in the handbook).
- ☐ Meet daily to discuss classroom events and make plans.
- ☐ Provide assessment to the college/university supervisor and participate in triad meetings to discuss the Student Teacher's performance.

SUMMARY OF THE ROLE OF THE UNIVERSITY SUPERVISOR

The college/university supervisor is the official representative of the college/university. Therefore, the supervisor has responsibility for the supervision of Student Teachers, serves as

the liaison between the college/university and maintain positive relationships between the two institutions. Through classroom observations, conferences, and the weekly seminar the supervisor will:

- ☐ Make at least four one-hour observation visits throughout the semester, with at least two of these visits followed by a three-way conference involving the student, cooperating teacher, and university supervisor. The focus of these visits will depend on the needs of individual Student Teachers.
- ☐ Guide entry into the profession through discussion of issues of professional practice, providing a guided seminar experience, and conferring with the Student Teacher before and after classroom observations and giving feedback on teaching to the Student Teacher.

Course Title: English- III (Technical Writing and Presentation Skills)**Course Code: EDU-539**

Year 3/Semester 5, **Duration:** 03Credits, 48 Class Hours

Course Description

This three-credit course has been designed to enable prospective teachers to develop the essential academic, Technical and Presentation Skills and to be able to enhance their language skills by understanding and practicing through practical activities during the course. It will be taught over 16 weeks with three face-to-face sessions per week, making a total of 48 sessions. The course aims to be comprehensive in its coverage and depth so that, on its completion, participants will have gained both a theoretical understanding of the basic principles of technical writing and the practical knowledge of how to apply these principles effectively in the academic writing. The course focuses on developing prospective teachers' critical thinking by utilising appropriately the technical writing skills in developing any academic write-up. Furthermore, the participants will gain an understanding of how the academic paragraph will be developed by ensuring all of the required qualities of a good paragraph as well as learn how to provide concrete support in presenting their ideas through an academic writing. Finally, student teachers will learn how to design and develop their own teaching materials and activities, and how to assess their progress.

Course Outcomes

After the completion of the course the student teachers will be able to:

- gain basic understanding of process of technical writing, qualities of a good paragraph, concrete support for presenting authentic writing.
- enhance language skills and develop critical thinking.
- be able to design suitable teaching materials which focus on helping learners acquire a basic level of communicative competence.
- be able to develop their students 'academic writing skills.
- use different presentation skills.
- write an academic write-up/research proposal.

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge. The techniques outlined below are not exclusive and therefore, other effective techniques and methods can be used:

- Lecture & Discussion, Inquiry Methods
- Case Observation and Study Methods
- Field visit, Observation Methods
- Library Assignments, Peer Assessment
- Project Work & Quizzes
- Pair, Group and Individual Assignments/Activities
- Self-Study Tasks
- School Survey/Community survey
- Individual and Panel presentations
- Course & Students Portfolios
- Mid-Term, Final-Term Exams

Grading: The final grade is based on the total points from Classroom Assessment i.e assignments, quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

Distribution of Course Grading:

- Internal Class assessments: 20%
- Mid-Term Exam: 30%
- Final Term Exam: 50%
- Total: 100%

Course Outlines**Unit 1. Academic Writing, Writing a Paragraph**

- 1.1 Introduction to Academic and Technical Writing.
- 1.2 The Process of Academic Writing
 - e. Stage#1: Pre-Writing
 - Step 1: Choosing and Narrowing a Topic
 - Step 2: Brain Storming
 - f. Stage#2: Planning/Outlining
 - Step 1: Making Sub-lists
 - Step 2: Writing the Topic Sentence
 - Step 3: Outlining
 - g. Stage 3# Writing and Revising the Draft
 - Step 1: Writing the First Rough Draft
 - Step 2: Revising Content and Organization
 - Step 3: Proofreading the Second Draft
 - Step 4: Writing the Final Draft
- 1.3 Review

Unit 2. What is an Academic Paragraph (An Overview):

- 2.1 Introduction
- 2.2 Paragraph Structure: The Three Parts of a Paragraph
 - i: The Topic Sentence
 - ii: The Supporting Sentences
 - iii: The Concluding Sentence
- 2.3 The Finished Assignment
- 2.4 Writing on Computer
- 2.5 Review

Unit3. Qualities of a Good Paragraph:

- 3.1 Introduction
- 3.2 Unity
- 3.3 Outlining
 - a. The Parallel Form Rule of Outlining
 - b. The Equivalent Value Rule(Outlines with Details)
- 3.4 Coherence
 - a. Repetition of Key Nouns
 - b. Use of Consistent Pronouns
 - c. Transition Signals
 - d. Types of Transition Signals
- 3.5 Logical Order
 - a. Kinds of Logical Order
 - i. Chronological Order

- ii. Logical Division of Ideas
- iii. Compare and Contrast Order

3.6 Review

Unit 4. Concrete Support in Academic Writing:

4.1 Introduction

4.2 Fact and Opinions

4.3 Concrete Support I

- i. Examples and Extended Examples
- ii. Statistics

4.4 Concrete Support II

- i. Quotations, Paraphrasing, Summaries
- ii. Documenting Sources of Information (In-Text Citations and List of Work Cited/ Reference List)

4.5 Review

Unit 5. Writing an Essay:

5.1 Introduction

5.2 Types of Essay

- a. Descriptive b. Narrative c. Discursive d. Argumentative

5.3 The Structure of an Essay

- i. Introductory Paragraph
- ii. The Essay Body
- iii. The Concluding Paragraph

5.4 The Writing Process of an Essay

5.5 Patterns of an essay organization

5.6 Review

Unit 6. Writing an Academic Technical Write-Up:

6.1 How to write a proposal for research paper/term paper

6.2 How to write a research paper/term paper (emphasis on style, content, language, form, clarity, consistency)

Note: Extensive reading is required for vocabulary building

Recommended Readings:

- Writing. Advanced by Ron White. Oxford Supplementary Skills. Third Impression 1992. ISBN 0 19 435407 3 (particularly suitable for discursive, descriptive, argumentative and report writing).
- College Writing Skills by John Langan. Mc=Graw-Hill Higher Education. 2004.159
- Patterns of College Writing (4th edition) by Laurie G.
- The Mercury Reader. A Custom Publication. Compiled by norther Illinois University. General Editors: Janice Neulib; Kathleen Shine Cain; Stephen Ruffus and Maurice Scharton. (Note: A reader which will give students exposure to the best of twentieth century literature, without taxing the taste of engineering students).
- William Germano, From Dissertation to Book, The University of Chicago Press, 2005.
- Lloni Lekki, Academic writing; Explaining Process and Strategies, Cambridge University Press USA, 1998.
- Joan Bolker, Writing your Dissertation in Fifteen Minutes a Day, A Guide to Starting, Revising and Finishing your Doctoral Thesis, Henry Holt & Company, 1998.

- Derek Soles, *The Essentials of Academic Writing*, ELM Street Publishing Services, 2008.
- Stephen Bialy, *Academic Writing; A Practical Guide for Students*, Amazon Publishing Press.
- Janet Giltrow, *Academic Reading and Writing*, National Library of Canada, Cataloging in Publication Data, 2002.
- Helen Sword, *Smart Academic Writing*, Jill Breitbarth Publications, 2012.
- Anthony Haynes, *Writing Successful Academic Books*, Cambridge University Press.

EDU-506 Foundation of Education (Foundation) Semester 5

Year, Semester

Year 3, Semester 5

Credit Value: 3 credits (48 contact hours)

Prerequisite:

Successful completion of semesters 1-4

Course Description

The purpose of this course is to help Student Teachers recognize the worth of the foundations of education and examine their role and significance in the whole process of education in Pakistan. Student Teachers will develop a comprehensive understanding of the term's *foundations and education* considering the various ideo-logical, philosophical, psychological, sociological, and historical perspectives that have influenced education. Foundations are essentially basic ways of thinking about schooling and the formal processes of education. The course will inform them about the influence of social forces, such as politics, social structure, culture, history, and economics, on the selection of content, the methods of teaching, and the aims of education. Student Teachers will examine the classical and contemporary philosophical perspectives on education, the significance of societal culture and its social structure in education, and how education in return strengthens both, as well as the significance of psychology in the teaching-learning process.

Learning Outcomes

At the end of this course, Student Teachers will understand the following:

- the concepts of *foundations and education*
- the influence of the disciplines that constitute the foundations of education on educational thought and practice
- the interaction of the social, political, and economic structures of Pakistani society
- how social structure and culture cause individual action
- how these structures and cultures interact with the disciplines of the *foundations* and bear on instruction.

Student Teachers will be able to:

- differentiate between the various schools of thought that have influenced education overall and education in Pakistan in particular.
- explain the idea of education and the social and philosophical influences on it
- evaluate the social structure of Pakistani society and the role of education in strengthening it.

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge. The techniques outlined below are not exclusive and therefore, other effective techniques and methods can be used:

- Lecture & Discussion, Inquiry Methods
- Case Observation and Study Methods
- Field visit, Observation Methods

- Library Assignments, Peer Assessment
- Project Work & Quizzes
- Pair, Group and Individual Assignments/Activities
- Self-Study Tasks
- School Survey/Community survey
- Individual and Panel presentations
- Course & Students Portfolios
- Mid-Term, Final-Term Exams

Grading: The final grade is based on the total points from Classroom Assessment i.e assignments, quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

Distribution of Course Grading:

- Internal Class assessments: 20%
- Mid-Term Exam: 30%
- Final Term Exam: 50%
- Total: 100%

Course Outlines

Unit: 1 The Ideological (or Islamic) Foundations of Education (3 weeks/ 9 hours)

- 1.1 The Islamic Foundations (Quran, Hadith, Fiqqah, Qiyas, & Ijma)
- 1.2 The Islamic concept of peace
- 1.3 The interaction of other religions with Islam in an Islamic State
- 1.4 The roles and expectations of the teacher

Unit 2: The Philosophical Foundations of Education (4 weeks /9 hours)

- 2.1 Meaning and definition of education
- 2.2 Meaning and definition of philosophy
- 2.3 Functions and scope of philosophy of education
- 2.4 The role of educational Philosophy
- 2.5 Main Philosophical thoughts
 - 2.5.1 Idealism in education
 - 2.5.2 Realism in Education
 - 2.5.3 Naturalism in Education
 - 2.5.4 Pragmatism in Education
 - 2.5.5 Reconstructionism in Education
 - 2.5.6 Existentialism in Education

Unit: 3 The Sociological Foundations of Education (3 weeks / 9 hours)

- 3.1 The functionalist perspective on education
- 3.2 The conflict theory perspective on education
- 3.3 The interactionist perspective on education

Unit: 4 The Psychological foundation of education (3 weeks/ 9 hours)

- 4.1 The behaviourist perspective on education
- 4.2 The constructivist perspective on education

4.3 The social cognitivist perspective on education

4.4 The humanist perspective on education

4.5 Instruction, learning process, and assessment strategies in the light of psychological perspective

Unit:5 Historical Development of Education of Pakistan (3 weeks/ 9 hours)

5.1 The Education System before British Invasion

5.2 The Education System after the British Invasion

5.3 Darul Uloom Deoband

5.4 Nadwat-ul-Ulma

5.5 Mohammeden Anglo Oriental College

5.5 Pakistan's education system (in the light of education policies)

5.5.1 The State of Elementary Education

5.5.2 The State of Secondary Education

5.5.3 The State of Tertiary Education and the role of the HEC

5.5.4 The Influence of the 18th amendment on education and thereafter

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- Brameld, T.B. (1995). *Philosophies of Education in cultural perspective*, New York, Dryden Press Additional Reading.
- Bowyer. C.H. (1970). *Philosophical perspectives for education*. Scott. Foreman.
- Canestrari, A. & Marlowe, B. A. (eds.) (2009). *Foundation of education: An anthology. Of critical readings*. New York: Sage Publications.
- Holt, L.C. & Kysilka, M. (2005). *Instructional patterns: Strategies for maximizing student learning*. New York: Sage Publication.
- Jason. C. Robinson. (2015). *Foundation of Education: A Social, Political, and Philosophical Approach*
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- Muhammad al-Faisal al-Saud. (1979). *The Glorious Quran is the Foundation of Islamic Education, in Aims and Objectives of Islamic Education*, Jeddah King Abdul Aziz University.
- Muhammad Hammeed-Ullah Khan. (1991). *The Schools of Islamic Jurisprudence*, New Delhi, Kitab Bhavan.
- Semel, S.F. (2010). *Foundation of Education: The essential text*. New York: Routledge
- Sharma, A. (1999). *Modern educational technology*. New Delhi: Commonwealth Publishers.
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EDU- 507 Curriculum Development (Foundation)

Semester 5

Year, Semester

Year 3, Semester 5

Credit Value: 3 credits (48 contact hours)

Prerequisite:

Successful completion of semesters 1-4

Course Description

This course is designed to assist Student Teachers in understanding the various philosophies and key concepts related to curriculum, the challenges of curriculum design, factors influencing decision-making, and the roles played by various stakeholders in curriculum. Student Teachers will also review various assessment strategies, the implementation of different evaluation procedures, and the effective reporting of results as this relates to curriculum design. Student Teachers will be involved in examining existing curriculum and curriculum policy documents as well.

During this course, the key features of a curriculum will be discussed. Various curriculum development processes, how a curriculum differs from a syllabus, evaluation strategies, and factors influencing the curriculum development process will be considered. Change is an important aspect of human society. To cope with changes occurring in society, curriculum must be revised. This course discusses the implications related to the change process and appreciates the factors and stakeholders involved in this process.

This course is designed for Pakistani Student Teachers. Therefore, the process of curriculum development with reference to Pakistan and the agencies responsible for curriculum development at the national and provincial levels will be covered. Student Teachers will have an opportunity to apply their learning through identification of a unit developed for another course and analysing it in light of their new curriculum knowledge.

Learning Outcomes

At the end of this course, Student Teachers will be able to do the following:

- describe the key concepts of curriculum
- explain various types of curriculum and design models
- identify philosophical, sociological, psychological, and economic underpinnings of various models
- identify internal and external factors that influence the curriculum development, implementation, and change process.
- review the models, purposes, and problems of curriculum assessment and evaluation.
- understand the process of curriculum development with reference to Pakistan and the agencies responsible for curriculum development at the national and provincial level.
- apply curriculum knowledge to analysis of a unit plan developed for another course in the program.

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge. The techniques outlined below are not exclusive and therefore, other effective techniques and methods can be used:

- Lecture & Discussion, Inquiry Methods
- Case Observation and Study Methods
- Field visit, Observation Methods
- Library Assignments, Peer Assessment
- Project Work & Quizzes
- Pair, Group and Individual Assignments/Activities
- Self-Study Tasks
- School Survey/Community survey
- Individual and Panel presentations
- Course & Students Portfolios
- Mid-Term, Final-Term Exams

Grading: The final grade is based on the total points from Classroom Assessment i.e assignments, quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

Distribution of Course Grading:

- Internal Class assessments: 20%
- Mid-Term Exam: 30%
- Final Term Exam: 50%
- Total: 100%

Course Outline

The course will cover selected topics from those listed in each unit, as time permits. Each unit will provide Student Teachers with an overview of the fundamental concepts of curriculum and their philosophical underpinnings. Student Teachers will be introduced to the purposes and goals of different types of curriculums and the key elements of curriculum.

UNIT 1: Course Introduction (Fundamentals of Curriculum) (3 weeks/ 9 hours)

1.1 Overview of curriculum development

- i. Introduction and differentiation of terms (curriculum, syllabus, course outline, course guide, and scheme of studies)
- ii. Relationship between curriculum, standards, instruction, and assessment

1.2 Curriculum development/ Elements of Curriculum (continued)

1.2.1 Types of Curriculums

1.2.2 Elements of curriculum/Curriculum Development Processes

- i. Analysis of Situation
- ii. Formulation of Aims and Objectives
- iii. Selection of Learning Experiences
- iv. Selection of Content
- v. Organization of Experiences and Content
- vi. Selection of Teaching-learning strategies
- vii. Evaluation

1.3 Internal Factors Influencing the Curriculum Development Process

- i. Teacher

- ii. Pupil
- iii. School environment and others

1.4 External Factors Influencing the Curriculum Development Process

- i. Technology
- ii. Knowledge Ideology
- iii. Economics

UNIT 2: Foundations of Curriculum (3 weeks/ 9 hours)

2.1 Philosophical foundation

- i. Philosophy
- ii. Modes of philosophy (speculative, prescriptive, and analytic)
- iii. Branches of philosophy (ontology, epistemology, and axiology)
- iv. Different philosophies on curriculum

2.2 Psychological foundation

- i. Nature of the learner (developmental stages)
- ii. How learning takes place (readiness, need, interest, attitude, motivation, association, retention, self-regulation, laws of learning, logical sequence, and horizontal and vertical sequence)

2.3 Sociological foundation

- i. Society
- ii. Culture
- iii. Elements of culture (universals, specialties, and alternatives)
- iv. Economic and social development
- v. Life skills

UNIT 3: Instructional Objectives & Taxonomies of Educational Objectives (2 weeks/ 6 hours)

3.1 Curriculum aims, goals, and objectives.

- i. Distinction among aims, goals, and objectives
- ii. Relationship among aims, goals, and objectives
- iii. Sources of aims, goals, and objectives.
- iv. Functions of objectives
- v. Types of objectives

3.2 Taxonomies of educational objectives

- i. Cognitive domain
- ii. Affective domain
- iii. Psychomotor domain
- iv. Solo taxonomy of educational objectives

UNIT 4: Models of Curriculum (3weeks/ 9 hours)

4.1 Rational models

- i. Tyler model
- ii. Hilda Taba model

4.2 Cyclic models

- i. Wheeler

- ii. Nicholls and Nicholls

4.3 Dynamic model

- i. Walker model
- ii. Skilbeck model

UNIT 5: Curriculum Designing (2 weeks/ 6 hours)

5.1 Subject-based curriculum design

- i. The role of and interactions between teachers and students
- ii. The classroom environment
- iii. Assessment

5.2 Activity-based curriculum design

- i. The role of and interactions between teachers and students
- ii. The classroom environment
- iii. Assessment
- iv. Analysis of previously developed unit based on understanding of curriculum design

UNIT 6: Curriculum Development Process in Pakistan (3 weeks/ 9 hours)

6.1 Curriculum development (early childhood education to Higher Secondary School Certificate (HSSC))

- i. Curriculum wing
- ii. Directorate of Curriculum and Teacher Education (DTCE) and Provincial Bureau of Curriculum Textbook boards

6.2 Curriculum development (higher education)

- i. HEC
- ii. NCRC

6.3 Curriculum development Issues

- i. The role of teachers in curriculum development
- ii. The process of curriculum change
- iii. Presenting reports on analysis of curriculum units
- iv. Various issues in curriculum change

References

The following resources may be helpful for choosing appropriate readings. You may include your chosen list of readings on the syllabus or distribute it in class. However, readings should include only those resources that you expect students to use throughout the course. Other readings should be distributed as they are needed. Identify specific chapters from recommended books.

Bilbao, P. P., Lucido, P. I., Iringan, T. C., & Javier, R. B. (2008). *Curriculum development*. Manila: Lorimar Publishing Inc.

Murray, P. (1993). *Curriculum development & design* (5th ed). Sydney: Allen and Unwin.

Sharma, R. C. (2002). *Modern methods of curriculum organization*. New Delhi: Manohar Book Service.

Wiles, J. W. & Bondi, J. C. (2011). *Curriculum development: A guide to practice* (8th ed.). Boston: Allyn & Bacon.

Websites

http://www.sagepub.com/upm-data/6919_squires_ch_1.pdf

‘Philosophy of education’ (from Wikipedia)

http://www.mashpedia.com/Philosophy_of_education

Philosophy of education, part 1: Introduction

<http://www.youtube.com/watch?v=ml95d6kJ4kc&list=LP2-FVzmzCos&index=1&feature=plcp>

Curriculum development

<http://www.youtube.com/watch?v=AAkKSgSChJA>

Introduction to curriculum

<http://www.youtube.com/watch?v=dN8oeQoz9NQ&feature=related>

Importance of the syllabus in teaching—Part 1

<http://www.youtube.com/watch?v=T7xLD4XfqAw&feature=related>

Syllabus basics 1: Course guidelines

<http://www.youtube.com/watch?v=f727o5t0Xow&feature=related>

EDU- 508 Educational Psychology (Foundation) Semester 5

Year, Semester

Year 3, Semester 5

Credit Value: 3 credits (48 contact hours)

Prerequisite: Successful completion of semesters 1-4

COURSE DESCRIPTION

This course is an introduction to educational psychology that covers the basic concepts, theories, and principles

of human development, learning, motivation, individual differences, intelligence, and assessment. Additionally, it

relates how these concepts are applied to classroom teaching. In an educational setting, it is essential for teachers

to know about human development and how students learn. Students learn according to their own pace and ability,

so concepts about individual differences and different types of learners are also covered.

COURSE OUTCOMES

At the end of this course, Student Teachers will be able to:

- describe different schools of thought and differentiate between psychology and educational psychology
- define learning and explain different theories of learning and their application in the classroom
- Categorize individual differences and explain theories of intelligence/multiple intelligences.
- analyse the concept and theories of motivation
- analyse the impact of educational psychology on the processes of teaching and learning.
- use tests of intelligence and personality in educational setting
-

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge. The

techniques outlined below are not exclusive and therefore, other effective techniques and methods can be used:

- Lecture & Discussion, Inquiry Methods
- Case Observation and Study Methods
- Field visit, Observation Methods
- Library Assignments, Peer Assessment
- Project Work & Quizzes
- Pair, Group and Individual Assignments/Activities

- Self-Study Tasks
- School Survey/Community survey
- Individual and Panel presentations
- Course & Students Portfolios
- Mid-Term, Final-Term Exams

Grading: The final grade is based on the total points from Classroom Assessment i.e assignments, quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

Distribution of Course Grading:

Internal Class assessments:	20%
Mid-Term Exam:	30%
Final Term Exam:	50%
Total:	100%

Course Outlines

UNIT 1: Basics of educational psychology.

- The nature of educational psychology
- The scope of educational psychology
- Conceptual approaches to psychology
- Structuralism and functionalism
- Cognitivist
- Behaviorist theory
- Humanistic theory
- Constructivist theory
- Gestalt psychology
- Psychoanalysis

UNIT 2: Cognitive, Language and Psychosocial development in Early Childhood

- Piaget theory
- Vygotsky Theory
- Erickson life span theory
- Bronfenbrenner Ecological Theory

UNIT 3: Learning process

- The definition of learning
- Factors affecting learning
- Theories of Learning
 - Classical Conditioning
 - Operant Conditioning
 - Insight Theory
 - Social Learning Theory

UNIT 4: Intelligence

- Definition
- The concept of IQ
- Theories of Intelligence
- Gardner Multiple Intelligence
- Measurement of Intelligence

UNIT 5: Motivation. Weeks 14–15 Content

Types Of Motivation

- Techniques of Classroom motivation
- Theories of Motivation
- Maslow's need theory
- Psychoanalytic theory
- Kohn's motivational theory

UNIT 6: Personality

- The definition and determinants of Personality
- Theories Of Personality
 - Psychoanalytic Theory
 - Carl Roger
 - Alferd Adler

Assessment of Personality

- Objective Methods
- Subjective Methods
- Projective Methods

Suggested Books and Readings

- 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.
- Ormrod, J. E. (2003). *Educational Psychology: developing learners* (4th ed.). New Jersey: Merrill Prentice Hall.
- Baron, R. A. (2001). *Psychology* (5th ed.). New York: Allyn & Bacon.
- Child, D. (2004). *Psychology and the teacher* (7th ed.). New York: Continuum.
- Feldman, R. S. (2003). *Essentials of Understanding Psychology* (5th ed.). New York: McGraw Hill Companies, Inc.
- Gibb, S. (2002). *Learning and Development*. New York: Palgrave Macmillan.
- Woolfolk, A. E. (1998). *Educational Psychology* (7th ed.). New York: Allyn & Bacon.
- Mangal, S. K. (2005). *Advanced educational psychology* (2nd ed.). New Delhi: Prentice Hall of India Private Ltd.
- Santrock, J. W. (2000). *Psychology: Brief edition*. New York: McGraw-Hill.
- Atkinson, R. L., Atkinson, R. G., Smith, E. E., Bem, D. J., & Hoeksema, S. N. (2000). *Hilgard's introduction to Psychology* (13th ed.). New York: Harcourt College Publishers.

- Available at <http://www.mhhe.com/socscience/education/elliott/book/ today.htm>
- Felder, R. M., & Brent, R. (2005). Understanding Student Differences. *Journal of Engineering Education*, 9, 57–72.
- 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. http://peoplelearn.homestead.com/BEduc/Chapter_7.pdf
- 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. <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. 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. <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. <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. <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. http://www.ibe.unesco.org/fileadmin/user_upload/archive/publications/EducationalPracticesSeriesPdf/prac10e.pdf

Course Title: Contemporary Issues and Trends in Education (Professional)**Course Code: EDU-521 Semester: 6****Year, Semester**

Year 3, Semester VI

Credit Value: 3 credits (48 contact hours)**Prerequisite:** Successful completion of semesters 1-5**COURSE DESCRIPTION**

This course aims to help Student Teachers understand current trends and issues in education. It encourages

a practical approach to exploring the effects of technology, gender issues, and national development. It also aims

to enable them to teach the values necessary for peace in a multicultural society, such as tolerance.

Student Teachers will identify the challenges of today's classrooms, learn to devise different strategies, and

apply them to classroom practice.

COURSE OUTCOMES

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

- explain the role of modern technological developments in education and develop ways to use technology in the classroom for teaching and learning
- analyze gender issues in education and devise strategies to reduce gender disparity.
- identify indicators that affect the quality of education and recommend strategies to promote quality education throughout the country
- think critically about and suggest solutions for contemporary issues like peace education, environmental, Drug and Population education.
- identify and implement learning styles in early childhood education.
- explain how teachers and peers can jointly contribute to children's learning by utilizing social constructivists approaches.

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge. The

techniques outlined below are not exclusive and therefore, other effective techniques and methods can be used:

- Lecture & Discussion, Inquiry Methods
- Case Observation and Study Methods
- Field visit, Observation Methods
- Library Assignments, Peer Assessment
- Project Work & Quizzes

- Pair, Group and Individual Assignments/Activities
- Self-Study Tasks
- School Survey/Community survey
- Individual and Panel presentations
- Course & Students Portfolios
- Mid-Term, Final-Term Exams

Grading: The final grade is based on the total points from Classroom Assessment i.e., assignments, quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

Distribution of Course Grading:

Internal Class assessments:	20%
Mid-Term Exam:	30%
Final Term Exam:	50%
Total:	100%

Course Outline

Unit 1: Technology and Education

- 1.1 What is the importance of technology in the curriculum?
- 1.2 How can technology be used in classroom teaching?
- 1.3 How can new avenues of technology be effectively used for teaching and learning?
- 1.4 The use of Information and Communication Technologies (ICTs) in the classroom
- 1.5 Standardized and uniform curriculum

Unit 2: Learning Styles in Early Childhood Education

- 2.1 Learning Styles
- 2.2 Understanding Basis of Learning Styles
- 2.3 Incorporating Learning Styles into Early Childhood Classroom

Unit 3: Contemporary Issues in Education

- 3.1 Peace Education
- 3.2 Drug Education
- 3.3 Environmental Education
- 3.4 Population Education

Unit 4: Gender Inequality in education

- 4.1 Views on gender development
- 4.2 Gender stereotyping, similarities, and Differences
- 4.3 Transgender Rights Declaration and Challenges
- 4.4 Gender Role Classification
- 4.5 Gender Disparity
- 4.6 Gender Disparity in Schools and test books
- 4.7 Eliminating Gender bias in Schools

UNIT 5: Social Constructivist Approaches

5.1 Teacher and students as Joint contributors to students' Learning

- i. Scaffolding
- ii. Cognitive apprenticeship
- iii. Tutoring
- iv. Cooperative Learning

5.2 Social Constructivists Programs

- i. Fostering Community of Learners
- ii. School for Thought
- iii. A collaborative School

UNIT 6: The Quality of Education

6.1 What is quality education?

6.2 Aspects of Quality Education

- i. Quality Outcomes
- ii. Quality Learner
- iii. Quality Process
- iv. Quality Teacher

6.3 Multicultural Education

6.4 Culturally Relevant Teaching

6.5 Improving Relation among students from different ethnic group

6.6 Learner-centered Principles and Instructional strategies

6.7 Diversified curriculum

Suggested Books and Readings

- Khan, S. I. (2011, 16 Nov.). Gender discrimination in Pakistan. *Pakistan Today*. Retrieved from
- <http://www.pakistantoday.com.pk/2011/11/16/comment/editors-mail/gender-discrimination-in-pakistan/>
- Blunch, N., & Das, M. B. (2007). *Changing norms about gender inequality in education: Evidence from Bangladesh*. Retrieved from
- <http://elibrary.worldbank.org/content/workingpaper/10.1596/1813-9450-4404>
- Abbasi, M. N., Malik, A., Chaudhry, I. S., & Imdadullah, M. (2011). A study on student satisfaction in Pakistani universities: The case of Bahauddin Zakariya University.
- *Pakistan: Asian Social Science*, 7(7).
- Ali, T. (2011). Understanding how practices of teacher education in Pakistan compare with the popular theories and narrative of reforms of teacher education in international context. *International Journal of Humanities and Social Science*, 1(8), 208–222.
- Dahar, M., & Faize, F. (2011). Effect of the availability and the use of instructional material on academic performance of students in Punjab (Pakistan). *Middle Eastern Finance and Economics*, 11.
- Dilshad, M. & Iqbal, M. (2010). Quality indicators in teacher education programmes. *Pakistan Journal of Social Sciences*, 30(2), 401–411.
- Finch, C., & Wirtanen, L. (2000). *Children and conflict: An opportunity for learning in the early childhood classroom*. Retrieved from:
- <http://www.naeyc.org/store/node/166>

- Gulzar, M. A., & Qadir, S. (2010). Issues of language(s) choice and use: A Pakistani perspective. *Pakistan Journal of Social Sciences*, 30(2), 413–424.
- Nayyar, A. H., & Salim, A. (2002). The subtle subversion: The state of curricula and textbooks in Pakistan. Islamabad: Sustainable Development Policy Institute.
- Rasheed, M. I., Aslam, H. D., & Sarwar, S. (2010). Motivational issues for teachers in higher education: A critical case of IUB. *Journal of Management Research*, 2(2).
- Sarwar, M., & Hussain, S. (2010). Teacher training in Pakistan: Problems and solutions for student teaching preparatory programs. *European Journal of Scientific Research*, 46(2), 179–185.

EDU-522 Comparative Education (Professional)

Year/Semester

Year 3, Semester 6

Credit value

3 credits

Prerequisites

Successful completion of semesters 1–5

Course Description:

The course of comparative education is designed to provide information about the modern education systems of different countries to prospective teachers. So they can follow the best practices in teaching. This course of comparative education comprehends the propositions about the relationship between education and society and between teaching practices and learning outcomes. Course of comparative education will be helpful to the prospective teachers to understand the similarities and differences among education systems of different countries in the light of their social, political, cultural and national ideologies. This course serves the purpose of evaluating international education systems and own education system specifically. In short, the course of comparative education would help the students to understand their education system better and that of others with the intention of improving and solving problem in their own education system.

Course Objectives:

The students will be able to:

- Comprehend the history of comparative education around the world – main periods from the ancient to present day, distinguished comparatists and their most important writings, main trends
- Understand the main approaches, methods, and models of comparison
- Get awareness about different education systems in eastern and western countries on the following aspects: aims, management, finance, structure
- Explain the current education system of Pakistan
- Compare the education system of Pakistan to other countries and to show the common features, similarities and differences in the aims, management and structures.

Course Outcomes:

The students will be able:

- To develop the theoretical and methodological foundations of comparative education

- To understand the historical and contemporary contexts, processes, strategies and trends in the development of education around the world.
- To comprehend the structure and parameters of different education systems
- To highlight the current national and international concerns with education and development and the attempts to address these concerns
- To apply the gained knowledge in continued academic work or for more practical purposes.

Guidelines for Assessments:

Mid term Exams: 30%

Course Evaluation: 20%

End term Exams: 50%

Procedure of the course:

- Lecture and discussions
- Library and text book readings for every class
- Group and pair discussions
- Students' presentations
- Individual assignments

Rules for Assignments:

1. You are advised to write your complete name, topic of assignment, title of course , course code , course instructor and date of submission on title page.
2. Assignment must be submitted on or before due date announced by course instructor
3. you should ensure that your assignment is not plagiarized and is your own creative work

Teaching Methodology:

- Lecture and discussion
- Presentations
- individual assignments
- pair and group activities

Evaluation of Students' Performance:

In class activities, Assignments, Presentation, portfolio and final comprehensive examination

Eligibility for End Term Exam:

Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

COURSE OUTLINE

Unit:1 Introduction to Comparative Education

1.1 Definition and Concept

- 1.2 Aims and Objectives of comparative education
- 1.3 Scope of comparative education
- ~~1.4~~ Need of comparative education in 21st century
- ~~1.5~~ Need of comparative education for Perspective teachers
- 1.6 History of comparative education

Unit: 2 Approaches to study Comparative Education

- 2.1 Historical approach
- 2.2 Analytical approach
- 2.3 Descriptive approach

Unit: 3 Determinants of National Education System

- 3.1 Language Factor
- 3.2 Cultural Factor
- 3.3 Geographical Factor
- 3.4 Political Factor
- 3.5 Religion Factor

Unit:4 Education System of Developing Countries (Pakistan, India, Bangladesh)

- 4.1 Levels of education
- 4.2 Criteria for all levels
- 4.3 Subjects to be taught at all levels
- 4.3 Comparison with Pakistani education system

Unit :5 Education System of Asian Developed Countries (China, Japan)

- 5.1 Levels of education
- 5.2 Criteria for all levels
- 5.3 Subjects to be taught at all levels
- 5.4 Comparison with Pakistani education system

Unit: 6 Education Systems of United Kingdom, U.S.A, and Finland

- 6.1 Levels of education
- 6.2 Criteria for all levels
- 6.3 Review of Article
- 6.4 Subjects to be taught at all levels
- 6.5 Comparison with Pakistani education system

Recommended Readings:

- Bray, M.; Adamson, B.; Mason, M. (Eds.) *Comparative Education Research. Approaches and Methods.*

Hong Kong: Springer, 2007.

- Carney, S. 2010. “Reading the Global: Comparative Education at the End of an Era.” In *New Thinking in Comparative Education: Honoring Robert Cowen*, edited by M. Larsen, 125–142. Rotterdam: Sense Publishers.
- Cowen, R. 2009. “Then and Now: Unit Ideas and Comparative Education.” In *International Handbook of Comparative Education*, edited by R. Cowen and A. Kazamias, 1277–1294. Dordrecht: Springer
- Dale, R.; Robertson, S. (Eds.) *Globalisation and Europeisation in Education*. Symposium Books: Cambridge University Press, 2009.
- David G. Hebert. *Wind Bands and Cultural Identity in Japanese Schools* (Springer, 2012).
- Higher Education Policy: An International Comparative Perspective. Edited by Leo Goedegebuure, et al. New York: Pergamon Press, 1994.
- Hörner, W.; Döbert, H.; Kopp, B.von; Mitter, W(2007). *The Education Systems of Europe*. Dordrecht: Springer,.
- Larsen, M., and J. Beech. 2014. “Spatial Theorizing in Comparative and International Education Research.” *Comparative Education Review* 58 (2): 191–214. doi: 10.1086/675499
- Silova, I., Z. Millei, and N. Piattoeva. 2017. “Interrupting the Coloniality of Knowledge Production in Comparative Education: Post socialist and Postcolonial Dialogues after the Cold War.” *Comparative Education Review*
- Siddiqui . S (2016) *Education Policies in Pakistan: Politics, Projections, and Practices* Publisher Oxford Press

Websites for online reading:

- https://hec.gov.pk/english/services/universities/RevisedCurricula/Documents/2011-2012/Education/CompEdu_Sept13.pdf
- <http://camponotes.blogspot.com/2013/01/methodological-approaches-in.html>
- <https://www.internations.org/china-expats/guide/29461-family-children-education/the-chinese-education-system-17856>
- <https://brightside.me/wonder-places/10-distinctive-features-of-the-japanese-education-system-that-made-this-nation-the-envy-of-the-world-214655/>
- <https://www.expatica.com/fr/education/children-education/a-guide-to-french-education-101147/>
- <https://peda.net/yritykset/finnomenon/fssiv>
- <https://transferwise.com/gb/blog/singaporean-education-overview>

EDU-509 Introduction to Guidance and Counseling (Professional)

Year 4, Semester 7

Credit value

3 credits (contact hours: 3 hours per week)

Prerequisites

Successful completion of the Child Development and Educational Psychology courses

Course Description

This is a compulsory course in the B.Ed. (Hons) program. It is designed to give teachers and other stakeholders an in-depth understanding of the ideas of guidance and counselling. It also covers trends and issues, including an Islamic perspective, a global perspective, and challenges of the 21st century. The major focus is on how these concepts are applied to students to maximize their learning by resolving their issues and to develop them as balanced personalities. The course covers an introduction to guidance and counselling, the major areas in which guidance is provided to school children, and different theories, types, and techniques of counselling. Student Teachers will be equipped with the skills and qualities of a counsellor, so that they can effectively perform this function in schools in particular and more generally in society. Finally, the action plan is included to prepare Student Teachers to perform counselling functions in real-life situations.

Course Learning Outcomes

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

- define different concepts associated with the field of guidance and counselling, as well as different trends in and perspectives on guidance and counselling in relation to the present scenario
- identify different guidance and counselling needs and provide appropriate services in the educational, vocational, and social life of students
- develop and demonstrate the attributes and qualities of a good counsellor
- utilize appropriate techniques in the light of counselling theories in an educational setting
- develop mechanisms for establishing guidance and counselling services in their institutions
- implement the action plan in collaboration with internal and external stakeholders of their institutions.

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge.

The techniques outlined below are not exclusive and therefore, other effective techniques and methods can be used:

- Lecture & Discussion, Inquiry Methods
- Case Observation and Study Methods
- Field visit, Observation Methods
- Library Assignments, Peer Assessment
- Project Work & Quizzes
- Pair, Group and Individual Assignments/Activities
- Self-Study Tasks
- School Survey/Community survey
- Individual and Panel presentations
- Course & Students Portfolios
- Mid-Term, Final-Term Exams

Grading: The final grade is based on the total points from Classroom Assessment i.e assignments, quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam

whose attendance does not fall below 75%

Distribution of Course Grading:

Internal Class assessments:	20%
Mid-Term Exam:	30%
Final Term Exam:	50%
Total:	100%

Course Outline

Unit: 1 Introduction to Guidance and

counselling (3 weeks/ 9 hours)

- 1.5 Introduction to Guidance and Counselling
- 1.6 The Difference between Guidance and Counselling
- 1.7 The Need and Functions of Guidance and Counselling
- 1.8 Principles of Guidance and Counselling
- 1.9 Islamic and Global perspective on Guidance and Counselling
- 1.10 Challenges in Guidance and Counselling

Unit 2: Areas and Services in Guidance (3 weeks/ 9 hours)

2.1 Major Areas in Guidance

- 2.5.1 Educational
- 2.5.2 Career
- 2.5.3 Social
- 2.5.4 Health
- 2.5.5 Moral
- 2.5.6 Personal

2.6 Services Provided in Guidance

- 2.6.1 Pre- and admission Services
- 2.6.2 Orientation Services
- 2.6.3 Information Services
- 2.6.4 Counselling Services
- 2.6.5 Placement Services
- 2.6.6 Remedial Services
- 2.6.7 Follow-up Services

Unit: 3 Theories and Techniques in Guidance and Counselling (4 week/ 12 hours)

3.1 Theories

- i. Carol Roger
- ii. Alfred Adler
- iii. B.F. Skinner
- iv. Erik Erikson

3.2 Types of Guidance and Counselling

- i. Individual
- ii. Group

3.3 Techniques of Counselling

- i. Directive
- ii. Non-Directive
- iii. Eclectic Counselling

Unit: 4 Skills and Qualities of a Counsellor (3 weeks/ 9 hours)

4.1 Personnel Involved in Guidance and Counselling

4.2 The Role and Qualities of a School Counsellor

4.3 Skills for the Counselling process

4.4 Ethical Issues

Unit:5 Implementation Strategies and Action Plan (3 weeks/ 9 hours)

5.1 Data Gathering Tools

- i. Test
- ii. Observation
- iii. Questionnaire and Anecdotal Record
- iv. Interview
- v. Checklist
- vi. Rating Scale
- vii. Projective Technique

5.2 Developing an action plan for a school-wide guidance and counselling program

5.3 Planning orientation seminar: Administrative and teaching staff

5.4 Planning orientation seminar: Parents and other external stakeholders

5.5 Dossier

References

Barki, B. G., & Mukhopadhyay, B. (2008). *Guidance and counselling: A manual* (10th reprint). New Delhi: Sterling.

Corey, G. (2008). *Theory and practice of group counseling* (7th ed.). Stanford: Cengage Learning.

Cormier, S., Nurius, P. S., & Osborn, C. J. (2013). *Interviewing and change strategies for helpers* (7th ed.).

Belmont: Brooks/Cole.

Dimmitt, C., Carey, J. C., & Hatch, T. (2007). *Evidence-based school counseling: Making a difference with data-driven practices*. Thousand Oaks, CA: Corwin.

Geldard, K., & Geldard, D. (2008). *An integrative approach: Personal counseling skills*. Springfield: Charles C. Thomas

Gibson, R. L., & Mitchell, M. H. (2007). *Introduction to counseling and guidance* (7th ed.). Upper Saddle River, NJ: Prentice Hall.

Henderson, D. A., & Thompson, C. L. (2011). *Counseling children* (8th ed.). Belmont: Brooks/Cole.

Kinra, A. K. (2008). *Guidance and counselling*. New Delhi: Dorling Kindersley.

Kocher, S. K. (2008). *Educational and vocational guidance in secondary schools*. New Delhi: Sterling.

Kottler, J. A., & Sheppard, D. S. (2008). *Introduction to counseling: Voices from the field* (6th ed.). Belmont: Thomson.

Sharif, R. S. (2011). *Theories of psychotherapy and counseling: Concepts and cases* (5th ed.). Stamford: Cengage Learning.

Ivey, A. E., Ivey, M. B., & Zalaquett, G. P. (2010). *International interviewing and counseling:*

Facilitating client development in a multicultural society (7th ed.). Belmont: Brook/Cole, Cengage Learning

Sutton, J., & Stewart, W. (2004). *Learning to counsel: Develop the skills you need to counsel others*. Oxford: How To Books.

EDU-613 Pedagogy-I (Methods of Teaching Related to Specialization-I)

Semester 7

Year and Semester

Year 4, Semester 7

Credit value

3 credit hours

Prerequisites

Mathematics 1, Mathematics 2

Course Description

Mathematics is the mother of all subjects. It appears in all walks of life; even a mason has to calculate the area of the building when claiming his wages. But teachers' existing beliefs about and perceptions of teaching mathematics in our context are not promising. We are more focused on the transmission of knowledge by engaging students in memorizing mathematical rules and formulae, rather than on engaging them in constructing mathematical knowledge and understanding mathematical concepts. Mathematics learning can inculcate problem-solving, logical-thinking, and reasoning skills in students only when they are taught in such a way that they learn conceptually instead of by drill and practice. In previous semesters, we have focused on mathematics content, but this course intends to extend Student Teachers' understanding of pedagogy as well as build their understanding of the nature of mathematics, teacher beliefs and perceptions, and mathematics teaching and learning. This will enable Student Teachers to develop students' problem-solving, logical-thinking, and reasoning skills. This course will help in creating awareness of the history of mathematics as well as its scope and significance. Also Student Teachers will be able to design plans for integrating Information and Communications Technology (ICT) to develop students' mathematical learning. The importance of designing effective assessment items to facilitate students' learning is also considered.

The following main ideas are discussed in this course:

- The nature and scope of mathematics
- The attitude of teachers towards mathematics learning and their perception of it
- Research in mathematical processes
- Planning for assessment and teaching

Course Outcomes

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

- attain a better understanding of mathematical ideas
- revisit beliefs, ideas, and perceptions about teaching and learning mathematics
- acquire the skills and competencies required for teaching mathematics at elementary level
- effectively apply the various methods, techniques, and strategies of teaching mathematics
- appreciate mathematical processes and discover the power of mathematical thinking
- appreciate learning by doing rather than instrumental learning
- develop a positive attitude towards teaching and learning mathematics
- design a unit plan for teaching and managing a classroom effectively
- design assessments for/of/as learning to facilitate students' learning
- use ICT in teaching and learning mathematics.

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge. The techniques outlined below are not exclusive and therefore, other effective techniques and methods can be used:

- Lecture & Discussion, Inquiry Methods
- Case Observation and Study Methods
- Field visit, Observation Methods
- Library Assignments, Peer Assessment
- Project Work & Quizzes
- Pair, Group and Individual Assignments/Activities
- Self-Study Tasks
- School Survey/Community survey
- Individual and Panel presentations
- Course & Students Portfolios
- Mid-Term, Final-Term Exams

Grading: The final grade is based on the total points from Classroom Assessment i.e assignments, quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

Distribution of Course Grading:

- Internal Class assessments: 20%
- Mid-Term Exam: 30%
- Final Term Exam: 50%
- Total: 100%

Unit 1: The Nature, Nurture, and Scope of Mathematics

- (i) Introduction to the course
- (ii) Transmission versus construction of mathematical knowledge
- (iii) Instrumental versus relational understanding
- (iv) Discussion on the National Curriculum of Mathematics

Unit 2: Teacher Beliefs, Perceptions, and Attitudes Towards Mathematics and its Teaching and Learning

- (i) Teachers' beliefs and perceptions about the nature of mathematics
- (ii) Teachers' beliefs and perceptions about mathematics teaching and learning
- (iii) Challenging teachers' beliefs and perceptions
- (iv) Conceptual learning
- (v) Contextual learning

Unit 3: Exploring Mathematical Processes Through a Review of Classroom-Based Research

- (i) Review of classroom-based research studies conducted in the Western as well as the local context to identify best practices
- (ii) Analysis of the research studies to explore how to teach mathematical content to students, using a variety of teaching techniques and methods
- (iii) Implications for Student Teachers

Unit 4: Planning for teaching

- (i) Assessment for learning and assessment of learning
- (ii) Designing mathematical tasks and an assessment of mathematical content to facilitate students' learning
- (iii) Unit planning, with detailed lesson planning
- (iv) Classroom management (behaviour, time, and resources) and ways to handle students' responses
- (v) Integration of ICTs

References

Textbooks, journal articles, and web resources are included in this section.

- Amirali, M. (2010). Students' conceptions of the nature of mathematics and attitudes towards mathematics learning. *Journal of Research and Reflections in Education*, 4(1), 27–41.
- Anthony, G., &Walshaw, M. (2009). *Effective pedagogy in mathematics*. International Bureau of Education: UNESCO. Retrieved from:
http://www.ibe.unesco.org/fileadmin/user_upload/.../EdPractices_19.pdf
- Berwick, K. (2005). Pre-service teachers' understandings of relational and instrumental understanding. In H. L. Chick & J. L. Vincent (Eds.), *Proceedings of the 29th Conference of the International Group for the Psychology of Mathematics Education*, 2, 161–168.
- Dossey, J. A. (1992). The nature of mathematics: Its role and its influence. In D. A. Grouws (Ed.), *Handbook of research on mathematics teaching and learning* (pp. 39–48). New York: Macmillan.
- Ernest, P. (1994). *Constructing mathematical knowledge: Epistemology and mathematical education*. London: Taylor and Francis.
- Kinach, B. M. (2002). A cognitive strategy for developing pedagogical content knowledge in the secondary Mathematics Methods course: Toward a model of effective practice. *Teaching and Teacher Education*, 18, 51–71.
- Skemp, R. R. (1976). Relational understanding and instrumental understanding. *Mathematics Teaching*, 77, 20–26.
- Thwaites, A. (2008). *100 ideas of teaching primary mathematics*. London: Continuum International Publishing.
- Mathematical activities and lesson plans:
<http://illuminations.nctm.org/>
- Additional activities and lesson plans:

EDU-614 Pedagogy-II (Methods of Related to Specialization-II)

Semester 7

Year/Semester

Year 4/Semester 7

Number of weeks

16

Credit value

3 credits

4 Prerequisites

Science I (Semester 1) and Science II (Semester 3)

Course Description

Science education needs reform in the philosophical, instructional, and pedagogical dimensions of current practice. Particularly, instructional settings and strategies used by teachers can create an environment that fosters a constructive and active view of the learning process. Learning does not occur by passive absorption of scientific facts; rather, it involves learners in constructing their own meaning and assimilating new information to develop new understandings. In Science III, the overall thrust of the course is on the development of scientific knowledge, skills, and attitudes in Student Teachers in the areas of life science, physical science, and Earth and space science. Therefore, this course emphasizes developing inquiry, problem-solving, and decision-making abilities in Student Teachers so they may maintain a sense of wonder and curiosity about the world around them.

We believe that to make learners scientifically literate citizens requires diverse learning experiences that provide opportunities to explore, analyze, evaluate, synthesize, appreciate, and understand the interrelationships among science, technology, society, and the environment. This experiential learning will affect learners' personal lives, careers, and their roles as global citizens. Hence, the aim of developing this course is to address all of these facets of curriculum and instruction.

Course Outcomes

By the completion of the course, Student Teachers will be able to:

- 1 Discuss the concepts related to life science, physical science, and Earth and space science
- 1 Apply these understandings to interpret, integrate, and extend their knowledge
- 1 Discuss important features differentiating the traditional science classroom and the interactive science classroom.
- 1 Describe and discuss the nature of science and technology
- 1 Explain the relationships between science and technology and between the social and environmental contexts of science and technology
- 1 Develop and use the related skills and conceptual knowledge necessary for making connections between scientific, technological, social, and environmental issues
- 1 Apply the aspects of environmental education in their personal and social lives.
- 1 Exhibit the skills required for scientific and technological inquiry
- 1 Use these skills for solving problems as well as communicating scientific ideas and results

- 1 Work collaboratively
- 1 Make informed decisions in their personal and social lives
- 1 Use a variety of teaching skills while planning and conducting science lessons.
- 1 Use their understanding to support the responsible acquisition and application of scientific and technological knowledge to the mutual benefit of self, society, and the environment
- 1 Develop an interest in and motivation toward science education and related careers.

Teaching and Learning Approaches

Student Teachers would be introduced to science concepts through the inquiry approach, constructivism, and learning by doing. They would be encouraged to engage in independent learning, group projects, assignments, and presentations guided by the Instructor. Literature suggests that students learn more through experience, which makes learning more interactive and interesting. Therefore, the Instructor's role would be that of a facilitator who will bridge theoretical concepts with daily life experiences. This will provide Student Teachers an opportunity to learn science through the application approach.

Guidelines for Assessments:

Mid term Exams:	30%
Course Evaluation:	20%
End term Exams:	50%

Rules for Assignments:

1. You are advised to write your complete name, topic of assignment, title of course , course code , course instructor and date of submission on title page.
4. Assignment must be submitted on or before due date announced by course instructor
5. you should ensure that your assignment is not plagiarized and is your own creative work

Evaluation of Students' Performance:

In class activities, Assignments, Presentation, portfolio and final comprehensive examination

Eligibility for End Term Exam:

Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

COURSE OUTLINE

Unit#1 The Constructivist Approach to Teaching the Concept of Heredity

- 1.1 Social constructivism and its implication for teaching science
- 1.2 Cell components
- 1.3 Cell division
- 1.4 Basis of heredity (chromosomes, DNA, and genes in plant and animal cells)

Unit#2 Biotechnology

- 2.1 General applications of biotechnology (agriculture, environment, health, food production and preservation)
- 2.2 Ethical issues involved in biotechnology

Unit#3 Laboratory work in the science classroom

- 3.1 Physical quantities (length, volume, mass, time)
- 3.2 System International (SI) units (meter, liter, kilogram, second)
- 3.3 Instruments for measurement (meter rule, measuring cylinder, flasks, pipettes)
Accuracy and precision in measurements
- 3.4 Laboratory work: Planning, precautions, and safety measures

Unit 4: Teaching Heat and Light Through the Inquiry Approach

- 4.1 Thermal expansion and contraction (solids, liquids, and gases)
- 4.2 Effects of heat (explanation at macro and micro levels)
- 4.3 Factors affecting the contraction and expansion process
- 4.4 Nature of light
- 4.5 Reflection and refraction
- 4.6 Types and uses of lenses

5

Unit 5: The Concept of Electric Current

- 5.1 Static vs. moving charges:
- 5.2 Production of electricity
- 5.3 Circuits
- 5.4 Conductors and Insulators
- 5.5 Power sources

Unit 6: Science, Technology, Society, and Environment (STSE): A new approach to teaching science

- 6.1 Science, Technology, Society, and Environment (STSE)
- 6.2 Benefits and challenges related to STSE based teaching of science
- 6.3 Effects of human activity on the environment
- 6.4 Saving the Earth (project)
- 6.5 Healthy life: Growth and development
- 6.6 Factors affecting growth and development
Balanced diet

Recommended Readings:

- National Curriculum for General Science Grades IV–VIII (2006). Government of Pakistan, Ministry of Education, Islamabad.

Additional Resources

- Chiappetta, E. L., & Koballa, T. R. (2010). Science instruction in the middle and secondary schools: Developing fundamental knowledge and skills (7th ed.) Boston: Allyn & Bacon.
 - Driver, R., Rushworth, P., Squires, A., & Wood-Robinson, V. (1994). Making sense of secondary science: Research into children's ideas. London: Routledge.
 - Fensham, P. J., Gunstone, R. F., & White, R. T. (1994). The content of science: A constructivist approach to its teaching and learning. Bristol, PA: Falmer Press.
- Suggested Articles for Reading
- Gupta, A. (2013). Learning science through activities and toys. (Also many relevant materials.) Retrieved from
 - <http://arvindguptatoys.com>
 - Halai, N. (2010). Teaching teachers and students about the nature of science. Journal of Educational Research, 13(1), 171–179.
 - Moscovici, H., & Nelson, T. H. (1998). Shifting from activitymania to inquiry. Science & Children, 14–18. Retrieved from
 - http://thecenter.spps.org/uploads/shifting_from_activitymania.pdf
 - Steinert, Y., & Snell, L. S. (1999). Interactive lecturing: Strategies for increasing participation in large group presentations. Medical Teacher, 21(1), 37–42.

Course Assignments

Suggested assignments are included in the unit guides of the course. Some are short-term assignments and others take several weeks to complete. Individual and group assignments are also provided.

These assignments are designed to deepen Student Teachers' learning and allow them to research and apply their knowledge to topics of personal interest. All the assignments count toward the final grade.

Examples of assignments include:

- 8 Conduct an investigation on a science topic and present your findings and conclusions.
- 9 Develop hands-on activities around a core science concept for an elementary grade.
- 10 Plan and conduct a science activity with a group of children using the inquiry approach.

EDU-691 Research Methods in Education (Professional)

Semester 7

Year, semester

Year 4, year 7

Credit value

3 credits

Prerequisite

Successful completion of semesters 1–6

Course Description

This course aims to help Student Teachers develop a basic understanding of educational research. Its purview will be on improving teaching and learning practices in primary classrooms. This course

will cover features of educational research in general, while the main focus will be on developing Student Teachers' understanding of action research and preparing them to conduct it in a school setting.

Course Outcomes

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

- define what research is and identify different types of research
- describe the importance of action research for improvement in classroom practices
- review literature for research purposes
- identify data collection tools
- explain data analysis procedures
- Prepare a research proposal.

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge. The techniques outlined below are not exclusive and therefore, other effective techniques and methods can be used:

- Lecture & Discussion, Inquiry Methods
- Case Observation and Study Methods
- Field visit, Observation Methods
- Library Assignments, Peer Assessment
- Project Work & Quizzes
- Pair, Group and Individual Assignments/Activities

- Self-Study Tasks
- School Survey/Community survey
- Individual and Panel presentations
- Course & Students Portfolios
- Mid-Term, Final-Term Exams

Grading: The final grade is based on the total points from Classroom Assessment i.e assignments, quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

Distribution of Course Grading:

- Internal Class assessments: 20%
- Mid-Term Exam: 30%
- Final Term Exam: 50%
- Total: 100%

Course Outline

Unit 1: Introduction

- 1.1 Introduction to research and educational research
- 1.2 Characteristics of research
- 1.3 The importance of and need for research
- 1.4 Research process
- 1.4 Types of research methods

Unit 2: Different Designs of Research

- 2.1 Quantitative Design
- 2.2 Qualitative Design
- 2.3 Mixed-Methods Design

Unit 3: Types of Educational Research

- 3.1 Descriptive Research
- 3.2 Experimental Research
- 3.3 Historical Research
- 3.4 Action Research

Unit 4: Selection of research problem

- 4.1 Sources of Research Problem
- 4.2 Evaluating the Research Problem
- 4.3 Refining the Research Problem
- 4.4 Research Objectives
- 4.5 Research Questions
- 4.6 Research Hypothesis/Hypotheses

Unit 5: Literature Review

- 5.1 Concept and meaning of literature review
- 5.2 Information Sources

- Primary sources
- Secondary sources

Unit 6: Research methodology

- 6.1 Population and sampling
- 6.2 Data collection tools
 - Questionnaire
 - Interview
 - observation

6.3 Data collection procedure

Unit 7: Report Writing and References

7.1 Proposal Writing

7.2 Report Writing

7.3 Different References Styles

Recommended books

1. Best & James (2003) *Research in Education*
2. Creswell, J. W. (2009). *Research Design*, London: Sage Publications.
3. Fraenkel, J. & Norman, E. (2005) *How to Design and Evaluation Research* (8th edition)
4. L.R. Gay. (2001) *Educational Research*
5. Obaid Ullah (2013), *Manual of Social Sciences and Educational Research Methodologies*, Ijaz Publication, 1st Edition
6. Ary, D., Jacobs, L.C., and Sorensen, C.K. (2010) *Introduction to Research in Education* (Eighth Edition), Wadsworth CA: Cengage Learning
7. Babbie, E. (2008) *The Basics of Social Research* (Fourth Edition), Belmont, CA: Thomson Wadsworth
8. Cohen, L., Manion, L., and Morrison, K. (2007) *Research Methods in Education* (Sixth Edition), New York: Routledge Falmer
9. Newman, W.L. (2006) *Social Research Methods ...*, Delhi: Pearson.
10. Schreiber, J.B., Asner-Self, K. (2011) *Educational Research: Interrelationship of Questions, Sampling, Design, and Analysis*, Chennai, India: John Wiley & Sons, Inc.

EDU- 615The Teaching Practicum
Teaching Practice
(Short Term)
Semester 7

as in Semester 3 & 4.

EDU-624**School Management
(Professional)
Semester 8**

Year and semester

Year 4, Semester 8

Credit value

3 credits

Course Description

The progress of any school system largely depends on the efficiency of school management. This course will empower Student Teachers with knowledge, attitudes, professional skills, and competencies

to take up managerial roles to establish efficient school management within their local school contexts.

This course focuses on the conceptual understanding and implications of school management at the elementary level, enabling Student Teachers to develop their managerial and leadership skills and attitudes. The course material will allow them to develop the requisite skills and attitudes to contribute to creating learning communities within the learning organizations where they will work.

Learning Outcomes

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

- perform managerial functions to effectively manage primary schools
- explore and analyze relationship patterns at the school level
- utilize effective techniques in developing and maintaining positive relationships within their schools
- conceptualize their leadership role in building a learning organization
- take an active role in transforming their school into a learning organization.

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge. The techniques outlined below are not exclusive and therefore, other effective techniques and methods can be used:

- Lecture & Discussion, Inquiry Methods
- Case Observation and Study Methods
- Field visit, Observation Methods
- Library Assignments, Peer Assessment
- Project Work & Quizzes
- Pair, Group and Individual Assignments/Activities
- Self-Study Tasks
- School Survey/Community survey
- Individual and Panel presentations
- Course & Students Portfolios
- Mid-Term, Final-Term Exams

Grading: The final grade is based on the total points from Classroom Assessment i.e assignments, quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

Distribution of Course Grading:

- Internal Class assessments: 20%
- Mid-Term Exam: 30%
- Final Term Exam: 50%
- Total: 100%

Unit 1: Introduction to School Management

- (i) **Introduction to the course**
- (ii) Conceptualizing school management and its principles and dynamics
- (iii) The structure of school management
- (iv) Management skills and their implications at different levels of the management hierarchy

Unit 2: The Operations of School Management

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

2.2 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

2.3 The head teacher's role in managing day-to-day activities

- (i) Arranging classes
- (ii) Staffing arrangement
- (iii) Material provision

2.4 The operations of school management

2.4.1 Leadership qualities

- (i) Challenges in school management processes faced by contemporary educational leaders in Pakistan

2.4.2 The process of controlling

- (i) Avoiding overspending and under spending human, physical, and financial resources
- (ii) Evaluation and feedback

2.4.3 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 3: School and Human Relationships

3.1 Introduction: Stakeholders and relationship

- (i) Inter- and intra-school relationships
- (ii) Principles and dynamics of school relationships
- (iii) The head teacher and teachers
- (iv) The head teacher and students
- (v) The head teacher and support staff Teachers and students
- (vi) Teachers and teachers, teachers and support staff, Students and support staff
- (vii) Students and students
- (viii) Cooperation between the school and parents

Unit 4: Leadership in a Learning Organization

4.1 Building a learning organization

- (i) Empowering leaders: Becoming a learning organization
- (ii) leadership styles

4.2 Organizational leadership

- (i) Leading a learning organization
- (ii) Charismatic and transformational leadership

4.3 Team leadership

- (i) The leader as a teacher: Shaping the shared vision of a learning Organization
- (ii) Communication, coaching, and conflict management skills
- (iii) Team leadership and self-managed teams

References

Textbooks

- Badley. G. (2006). The teacher as change agent. British Journal of In-Service Education, 12(3), 151–158. doi:10.1080/0305763860120305
- Bush, T., & Bell, L. (Eds.) (2002). *The principles and practice of educational management*. London: Paul Chapman Publishing.
- Copland, M. A., & Knapp, M. S. (2006). *Connecting leadership with learning: A framework for reflection, planning, and action*. Virginia: Association for Supervision and Curriculum Development.
- Daft, R. L., & Marcic, D. (2006). *Understanding management* (5th ed.). Mason, OH: Thomson.
- Donaldson, G. A. (2006). *Cultivating leadership in schools: Connecting people, purpose, and practice* (2nd ed.). New York: Teachers College Press.
- Government of Punjab, Punjab Middle School Project. (2000). *Changing school cultures: Follow up—case studies of Punjab*. Lahore: Lahore School Education Department.
- Lussier, R. N., & Achua, C. F. (2007). *Leadership: Theory, application, skill development*. Stamford, CT: Cengage Learning.
- Lunenburg, F. C., & Ornstein, A. C. (2007). *Educational administration: Concepts and practices*. Belmont, CA: Wadsworth Publishing Company.
- Razik, T. A., & Swanson, A. D. (2010). *Fundamental concepts of educational leadership and management*. Upper Saddle River, NJ: Pearson.
- Reeves, D. B. (2008). *Reframing teacher leadership: To improve your school*. Virginia: Association for Supervision and Curriculum Development.

- Sidhu, K. S. (2005). *School organization and administration*. New Delhi: Sterling Publishers

Web-based sources

- Brandt, R. (2003). *Is this school a learning organization: 10 ways to tell*. Journal for Staff Development, 24(1), 10–16. Retrieved from
- <http://www.scsk12.org/SCS/departments/Professional-Development/pdfs/Is-This-School-Lrn-Org.pdf>
- Brewster, C., & Railsback, J. (2003). *Building trusting relationships for school improvement: Implications for principals and teachers*. Retrieved from
- http://educationnorthwest.org/webfm_send/463

EDU-625 Test Development and Evaluation (Professional) Semester 8

Year, semester

Year 4, semester 8

Credit value

3 credits

Prerequisite

Successful completion of the Classroom Assessment course

Course Description

Awareness of test development, measurement, and evaluation principles and procedures is essential for teachers to monitor students' academic progress. This course is designed for Student Teachers to enhance their level of knowledge, understanding, and practical skills in testing and evaluation. It mainly deals with test development, standard setting, evaluation strategies, grading, and reporting. This course also aims to integrate and implement theory and practice to strengthen the fundamentals of measurement and assessment learned in the Classroom Assessment course. After completing this course, Student Teachers will be in a position to apply the methodology of test development and evaluation in the classroom.

Course Outcomes

By the end of the course, Student Teachers will be able to:

- 1) understand the key concepts, methods, and paradigms of test development and evaluation
- 2) apply the key concepts, methods and paradigms of test development and evaluation
- 3) develop, assemble, administer, score, and analyse appropriate tests to interpret and provide feedback on students' progress
- 4) provide balanced assessment aligned with standards and outcomes to improve the teaching-learning process
- 5) apply peer evaluation and self-evaluation tools and techniques (e.g. portfolio assessment, expert evaluation) for feedback purposes
- 6) identify emerging trends in test development and evaluation for future implementation.

Learning and Teaching Approaches

Teaching Approaches

- 4) Lecture and discussion
- 5) Brainstorming
- 6) Self-directed learning and self-study
- 7) Group-based learning (e.g. cooperative learning)
- 8) Literature reviews

Learning Tools

- 4) Homework assignments and projects
- 5) Field work, including data collection and analysis
- 6) Maintaining a log or journal

Unit 1: Test Development (3 Weeks)

A key goal of test development is to create a valid measure of standard-referenced student performance. For this purpose, Student Teachers must know the theoretical principles, issues, and required decisions to develop tests for different purposes. This unit is comprised of three parts: introducing key terms such as *testing* and *measurement*, skills and tools required for test development, and assessment of testtools' credibility.

This unit elaborates on the steps involved in test development. It includes performance assessment, which measures what students can do rather than how much they know, as well as related tasks, which are based on what is most essential in the curriculum and what is interesting to students.

Finally, this unit covers the development of tools and determining the right way to collect data. For example, when designing evaluation tools and selecting evaluation methods, Student Teachers should consider the cultural contexts of the communities in which programs operate. Overall, this unit aims to impart on Student Teachers the fundamental information, skills, and disposition that will allow them to manage assessment and evaluation programs at the desired level.

Unit Outcomes

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

- define *test*, *measurement*, and *evaluation/assessment*,
- understand the purpose, principles, and scope of test and evaluation
- describe the concept and process of test development
- comprehend the theory and practice of norm- and criterion-referenced tests
- recognize the role of performance assessment in enhancing the quality of the teaching-learning process
- understand the importance of measuring students' interest, attitude, and creative thinking abilities
- demonstrate a high level of competence in developing and administering different, context-specific evaluation tools

- reduce unnecessary complexity in test items
- overcome language barriers that can threaten the validity of content-based assessment.

Unit content

- Overview of the meaning of *test*, *testing*, *measurement*, *assessment* and *evaluation*
- Test development process
- Common issues in test development (e.g. language of test, readability, feedback)
- Performance assessment of students
- Developing assessment tools (e.g. rubrics, rating scale, checklist)
- Test administration
- Item analysis

Unit 2: Psychometric Properties of Formative and Summative Assessment (2 Weeks)

This unit discusses emerging trends in formative and summative assessment. The first section of this unit examines formative and summative assessment as assessments *of* learning and assessments *for* learning.

The second section looks at essential psychometric techniques that provide useful information for the improvement of student learning and assessment procedures. This unit also focuses on improving Student Teachers' competence in classroom assessment in order to yield accurate information about student achievement. It also aims to develop Student Teachers' ability to use the classroom assessment process and its results to enhance learning. Finally, Student Teachers will be provided opportunities to engage in hands-on activities.

Unit Outcomes

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

- describe the different purposes of formative and summative assessments
- explain formative assessment as a process
- explain summative assessment as a product of learning
- describe the concepts of validity and reliability
- understand evidence of validity and reliability
- explain the threats to the validity of formative and summative assessment
- explain the threats to the reliability of formative and summative assessment.

Unit Content

- 1) Relationship between formative and summative assessment
- 2) Test validity
- 3) Test reliability
- 4) Types of reliability

Unit 3: Grading and Reporting (3 Weeks)

Statistics play a vital role in our daily educational lives. From time to time, a teacher has to collect, organize, and

analyze data in order to make decisions about the teaching-learning process. This unit will provide information about basic descriptive statistics (measures of central tendency and measures of variability) so that the Student Teachers can analyze measurements and present conclusions. It aims to help Student Teachers understand the functions of grading and different types of grading procedures. This unit will enable Student Teachers to assign grades to students by using

the most effective grading practices, criteria, and standards to provide accurate, specific, and timely feedback that can help improve student performance. Additionally, this unit will offer hands-on experience in interpreting test scores and reporting student performance.

Unit outcomes

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

- recognize the basic symbols of elementary statistics
- compute measures of central tendency and variability
- analyze the results of measurements
- comprehend the function, types, and uses of grades
- apply principles and strategies and establish criteria to make grading efficient, consistent, and fair
- communicate learning expectations to students by establishing grading standards
- interpret test results with necessary caution and describe problems in grading.

Unit content

- Elementary statistics
- Effective grading in the classroom
- Establishing criteria and standards for grading
- Interpreting test scores
- Reporting assessment results to students, teachers, parents, and school administration
- Problems in grading and reporting

Unit 4: Curriculum and Test Development (3 Weeks)

This unit is focused on the relationship between curriculum and test development. In this unit, Student Teachers will

develop an understanding of how learning outcomes are used to create achievement tests. It also provides an overview

of the National Professional Standards for Teachers of Pakistan with special reference to Standard-05, which is based

on assessment and curriculum. This unit will examine the role of curriculum in test development and assessment, and

discuss the role of teacher's expectations of students' performance. It will also throw light on how a teacher can give

feedback directly related to student performance that supports, rather than hinders, student potential.

Unit Outcomes

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

- understand the relationship between curriculum and the process of test development
- analyse the best strategies for sharing and communicating assessment results
- communicate positive expectations to their students effectively.

Unit Content

- Norm-referenced and criterion-referenced tests
- Linking curriculum with test development
- Communicating and sharing standards (National Professional Standards for Teachers and National Curriculum 2006)
- Effect of teacher expectations on student achievement

Unit 5: Outcomes of Assessment Results (3 Weeks)

This unit aims to enable Student Teachers to assess student progress by improving teaching and learning. There

are a number of formats, tools, and methods available to assess student progress, but in Pakistan, teachers are

bound to follow the format provided by the provincial Directorate of Education. This unit will provide a taste

of other formats to which adaptations can be made to better suit the local educational context. Assessment results

are not only important for students and teachers but also for school effectiveness, improvement, and development.

The overall focus of the unit is to train Student Teachers to assess students' progress, develop students' portfolios,

make decisions in terms of instructional purposes, and use assessment results for school effectiveness and improvement.

Unit Outcomes

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

- understand the concept of student progress
- develop student portfolios and evaluate them
- make instructional decisions by assessing student progress
- apply instructional decisions for effectiveness and school improvement.

Unit Content

9. Student progress

10. Decision-making for instructional purposes

11. School effectiveness and classroom improvement

Unit 6: Emerging Trends (2 Weeks)

This unit covers emerging assessment techniques, models, and approaches that will enhance Student Teachers' understanding of assessment in the current educational climate. Self-assessment and peer assessment are new trends

in educational assessment. International assessments, including the Trends in International Mathematics and Science

Study (TIMSS) and the Program for International Student Assessment (PISA), and national assessments, such as

the National Education Assessment System (NEAS) and the Annual Status of Education Report (ASER), are different

from classroom tests and school examinations. The information is aimed to equip Student Teachers with the knowledge, understanding, and skills to adapt some emerging trends in assessment for their future primary

school classes.

Unit Outcomes

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

- predict their position relative to their past learning
- predict their relative position with respect to their peers
- differentiate between self-assessment and peer assessment
- compare and contrast assessments by international and national assessment agencies.

Unit Content

- Measuring student growth
- Self-assessment, peer assessment, and reducing the burden on teachers
- International and national assessment agencies – NEAS, AKU-EB, and Federal Board of Intermediate and Secondary Education (FBISE)

Course Assignments

Suggested course assignments involve the development and administration of test items with subsequent item analysis and report preparation. Student Teachers will also be asked to develop a portfolio.

Grading Policy

The grading policy depends upon the individual university. For example, the University of the Punjab, Lahore, follows the following pattern for its four-year undergraduate programs:

Mode of assessment	Percentage
Assignments	25%
Midterm exam	35%
Final exam	40%

Recommended Books

- Alastair, I. (2007). *Enhancing learning through* London: *formative asses* Routledge.
- Banks, R. S. (2005). *Classroom assessment: Upper Saddle River, Issues NJ: and practice* Pearson Education.
- Black, P., Harrison, C., Marshall, B., & Wiliam, D. (2003). *Assessment for learning: Putting it into practice* Milton Keynes, UK: Open University Press.
- Ebel, R. L., & Frisbie, D.A. (1991). *Essentials of educational measurement* New Delhi: Prentice Hall of India.

Course Title: Statistics in Education

Course Code: EDU-714

Year 4/Semester 8 **Duration:** 03 credits, 48 class hours

Course Description

This course covers the fundamental concepts of statistics especially in the context of Education field. Introduction to descriptive and inferential statistics in educational research is major part of this course. Topics covered include basic statistics, graphs, the normal distribution, statistical inference, confidence intervals, hypothesis testing, z-tests, t-tests, analysis of variance, chi-square tests, simple regression, and correlation. Additionally, the course will instruct students in appropriate use of the SPSS program for these techniques. Emphasis is placed on the application of theory and concepts, and the interpretation of results.

Course Outcomes

After successfully completing this course, students will be able to effectively use techniques in descriptive and inferential statistics. After having internalized the concepts underlying each statistical technique, students should be able to precisely apply the appropriate statistical tests and technique to solve problems. On successful completion of this course, students will be able to:

- Apply correctly a variety of statistical techniques, both descriptive and inferential.
- Analysis data sets using various statistical tests including mean comparisons, correlation, regression and ratio tests.
- Interpret, in plain language, the application and outcomes of statistical techniques.
- Demonstrate the use of SPSS and excel for data analysis.
- Interpret computer output and use it to solve problems.
- Recognize the appropriate statistics test in the field Education.

Instructional & Assessment Procedures

The teacher of this course can apply techniques and methods based on his/her experience and knowledge. The techniques outlined below are not exclusive and therefore, other effective techniques and methods can be used:

- Lecture & Discussion, Inquiry Methods
- Case Observation and Study Methods
- Library Assignments, Peer Assessment
- Project Work & Quizzes
- Pair, Group and Individual Assignments/Activities
- Self-Study Tasks
- Individual and Panel presentations
- Course & Students Portfolios
- Mid-Tem, Final-Term Exams

Grading: The final grade is based on the total points from Classroom Assessment i.e assignments, quizzes, exams, class participations, individual and Group activities attendance and the course project. Following is the distribution of points.

Attendance: Attendance is mandatory in this course. Only those students shall be allowed to sit in exam whose attendance does not fall below 75%

Distribution of Course Grading:

- Internal Class assessments: 20%
- Mid-Term Exam: 30%
- Final Term Exam: 50%
- Total: 100%

Course Outlines

Unit 1. Introduction to Statistics

- 1.1 Introduction and Braches of Statistics
- 1.2 Frequency distribution and Scales of measurement
- 1.3 Data, types of Data and
- 1.4 Graphical representation of Data

Unit 2.Measure of Central Tendency

- 2.1 Mean
- 2.2 Median
- 2.3 Mode
- 2.4 A comparison of mean, median, mode

Unit 3.Masure of Dispersion

- 3.1 Variance
- 3.2 Standard deviation
- 3.3 Range

Unit 4.Basic concept of inferential statistics

- 4.1 Basic Idea about Inferential Statistics
- 4.2 Sampling and Population
- 4.3 Hypothesis and its Types
- 4.4 Standard Error, Type 1 and type-2 Errors

Unit 5 .Correlation

- 5.1 Purpose of correlation
- 5.2 Correlation calculation
- 5.3 Negative and positive correlation
- 5.4 Scatter plot
- 5.5 The spearman Rho
- 5.6 The Pearson r

Unit 6 .Hypothesis testing/ Tests of Significance

- 6.1 The t-test for independent and dependent sample
- 6.2 One-way analysis of variance (ANOVA)
- 6.3 Regression
- 6.4 Chi-square test

Recommended Readings:

- Best, J. W. and Kahn, J. V. (2006). *Research in Education* (10th Ed.) New York: Allyn and Bacon

- Brian, C. and Cronk., B. (2008). *How to use SPSS: A step by step Guide to Analysis and Interpretation*: Pyrczak pub.
- David. S. and Moore (2000). *The basic practice of statistics* (2nd Ed). New York: W.H. Freeman and Co.
- Garrett, H. E. (2000). *Statistics in Psychology and Education*. Islamabad: National Book Foundation (6th print).
- Gay, L. R. (2000). *Educational Research: competencies for Analysis and Application* (5th Ed). Islamabad: National Book Foundation.
- Johnson, B. and Christensen, L. (2008). *Educational Research; Quantitative, Qualitative and Mixed Approaches*. Los Angeles: SAGE Publication.
- Minium, E. W. Clarke, R. B. Coladarci, T. and Cobb, C.D. (2010). *Statistics in Education*. John Wiley and sons Inc.
- Nanda, G. C. and Khatai, P. K. (2005). *Fundamentals of educational Research and Statistics*. Ludhiana (India): Kalyani Publishers
- Sinha, B. L. (2006) *Statistics in Psychology and Education*. New Delhi: Anmol Publications.
- Agresti, A. & Franklin, C. (2014). *Statistics. The Art & Science of Learning from Data*. Essex: Pearson Education Limited.
- Clarke G. & Cooke D. (1998). *A basic Course in Statistics*, Arnold Publisher, London, 4th Edition.
- Field, A. (2013). *Discovering Statistics with IBM SPSS* Newbury Park, CA: Sage.
- Field, A. P. *Discovering statistics using SPSS* (updated ed.). Thousand Oaks, CA: Sage Publications.
- Gravetter, F. J., & Wallnau, L. B. (2017). *Statistics for the behavioral sciences (10th ed.) + MindTap access* . Nelson Education Ltd. ISBN: 1337600032
- Haden, P. (2019). Inferential Statistics. In S. Fincher & A. Robins (Eds.), *The Cambridge Handbook of Computing Education Research* (Cambridge Handbooks in Psychology, pp. 133-172). Cambridge: Cambridge University Press. doi:10.1017/9781108654555.007
- Levin, J. and Fox, J.A. (2006). *Elementary Statistics in Social Research*, 10th edition, Pearson Education.
- Morgan, G. A., Leech, N. L., Gloeckner, G. W., & Barrett, K. C. (2012). *IBM SPSS for introductory statistics*. (5th ed.). New Jersey: Lawrence Erlbaum. (ISBN: 1848729820)
- Sprinthall, R. C. (2011). *Basic Statistical Analysis*. 9th Edition, publisher: Allyn and Bacon

EDU-616

Teaching Practice (Long Term) Semester 8

Objectives:

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

1. prepare lesson plan on prescribed format.
2. design instructional activities effectively.
3. prepare and use Audio-Visual aids appropriately.
4. create conducive environment for learning.

Same as Semester 1, 2 & 3

Teaching Practice	Lesson	Marks	Examiner
Short Term (Marks merge with the respective subject's internal assessment marks)	I	10	Supervisor-I
	II	10	Supervisor-II
Final Lesson	I	10	Internal Examiner (Principal of School)
	II	10	
	I	20	External Examiner (Expert Appointed by University)
	II	20	
	I	20	

EDU-699

Research Project (Professional) Semester 8

RESEARCH PROJECT

In this section you will find syllabi that have been written by faculty. Using the HEC Scheme of Studies for the course, they considered the balance between the demands of the subject itself, active learning pedagogies, their students, and the particular university milieu in which they work. The syllabi all reflect the same key concepts and broad goals, but they vary in sequence and emphasis.

SYLLABUS 1

By

AsimaIdress, DrFazalurRahman, Dr M. AjmalChaudhary,
andSafiaWazir

Year, semester

Year 4, semester 8

Credit value

3 credits

Prerequisite

Successful completion of semesters 1–7

Course Description

The Research Projects in Education course is a practical course in which Student Teachers will be involved in the action research process. The course will enable them to plan, act, observe, and reflect during action research. As the action

research process entails an ongoing analysis of data, Student Teachers will be engaged in the same process for their

individual projects and will receive guidance from their supervisors. Student Teachers will disseminate their findings in the form of reports.

Course Outcomes

At the end of this course, Student Teachers will be able to do the following:

- conduct action research
- review related literature
- use appropriate research methodologies
- construct a research tool and analyze the data
- prepare a project report.

Teaching-Learning Methodology

An orientation will be provided for Student Teachers. Instructors will supervise Student Teachers using

individualized and activity-based methods. A schedule will be provided that outlines meetings with their supervisor. There will be 10 meetings. Each Student Teacher will present a progress report, and the supervisor will give comments, assign further tasks, and provide overall guidance and supervision throughout the action research process.

Meetings Timeline

First meeting (week 1)

Each Student Teacher will be assigned a supervisor. During this first meeting, Student Teachers will do the following:

- present their project proposals
- review their project proposals
- receive feedback and suggestions from their supervisor
- be asked to collect relevant literature and develop a research instrument.

Second and third meetings (weeks 2–4)

During these meetings, Student Teachers will do the following:

- present a written progress report to their supervisors for feedback
- present reconnaissance (school, class climate, student profile, and teaching/learning process)
- discuss intervention strategies (e.g. small group work, reading, and activities)
- discuss and finalize the research instrument (e.g. observation sheets, anecdotal records, checklists, interviews, and diaries).

Student Teachers will start their first cycle of action research.

Fourth and fifth meetings (weeks 5–7)

During these meetings, Student Teachers will do the following:

- present collected data that has been coded for analysis
- identify themes, findings, and conclusions
- revise their strategy for the second cycle based on the findings and conclusions drawn.

Student Teachers will start their second cycle of action research.

Sixth and seventh meetings (weeks 8–10)

During these meetings, Student Teachers will do the following:

- share their collected data
- analyze data to draw further findings and conclusions
- revise their strategy for the third cycle (and for implementation in the classroom) based on the findings and conclusions drawn.

Student Teachers will start their third cycle of action research.

Eighth meeting (weeks 11–12)

During this meeting, Student Teachers will do the following:

- 1 discuss on overall collected data and data analysis patterns

- 1 begin data analysis (which will continue for two weeks).

Ninth meeting (weeks 12–13)

During this meeting, Student Teachers will do the following:

- discuss a written project report (dissertation)
- discuss writing their final research report.

Tenth meeting (week 14)

During this meeting, Student Teachers will finalize preparations for the presentation of their action research report in the seminar.

Seminar (weeks 15–16)

During this meeting, Student Teachers will do the following:

- 1 present their project report in a departmental seminar
- 1 submit their final action research report for evaluation

SYLLABUS 2

By

Dr Muhammad Ilyas Khan, DrAsafNiwaz, Dr Allah Noor, Dr Hafiz Inamullah, and DrArshad Ali

Year, semester

Year 4, semester 8

Credit value

3 credits (16 weeks)

Prerequisite

Successful completion of semesters 1–7

Course Description

The Research Projects in Education course is a compulsory part of the four-year B.Ed. (Hons) Elementary

program. The course will involve Student Teachers conducting action research and will be supervised by a tutor. The research will be conducted by each Student Teacher individually, under supervision. The project will culminate with a final report that will be assessed on the basis of 100 marks.

Course Objectives

- To sensitize Student Teachers to the issues and problems faced by students in the classroom
- To help Student Teachers critically examine educational issues
- To analyse and review relevant literature
- To use data collection tools and analytical skills
- To act as self-reflective professionals and independent learners
- To develop and perform independent action research projects

Teaching-Learning Methodology

This is not taught as a traditional course. Rather, Student Teachers and supervisors will be involved in the following activities during the course of the project:

- 1 one-to-one meetings between Student Teachers and supervisors
- 1 seminars
- 1 group discussions and peer review
- 1 presentations

Supervisory Process and Timeline

There are eight meetings between Student Teachers and their respective supervisors. As there are 16 weeks in the course, meetings will be scheduled with supervisors on certain weeks.

First meeting

Orientation

Second meeting

Discussion, refinement, and finalization of research proposal

Third meeting

Seminar about development and critical analysis of literature review

Fourth meeting

- Seminar/group discussion on the significance of the research problem
- Discussion on the significance of selected research topics
- Discussion about data collection tools such as interviews, observations, and questionnaires

Fifth meeting

Discussion on fieldwork and the data collection process

Sixth and seventh meetings

- 8 Discussion about data analysis
- 9 Seminar

Eighth meeting

- 1 Final discussion on report writing
- 1 Submit project

Suggested Readings

- Arnot, M., McIntyre, D., Pedder, D., & Reay, D. (2004). *Consultation in the classroom: Developing dialogue about teaching and learning*. Cambridge, UK: Pearson Publishing.
- Cochran-Smith, M. (1994). The power of teacher research in teacher education. In S. Hollingsworth & H. Sockett (Eds.), *Teacher research and educational reform* (pp. 22–51). Chicago: University of Chicago Press.
- Denzin, K., & Lincoln, Y. S. (Eds.). (1994). *Handbook of qualitative research*. London: Sage Publications.

- Feldman, A. (2007). Validity and quality in action research. *Educational Action Research*, 15, 5–21.
- Lunenberg, M., Ponte, P., & van der Ven, P. H. (2007). Why shouldn't teachers and teacher educators conduct research in their own practices? *European Educational Research Journal*, 6: 13–24.
- Martin, M. (2005). Reflection in teacher education: How can it be supported?
- *Educational Action Research*, 13, 525–43.
- McNiff, J., Lomax, P., & Whitehead, J. (1996). *You and your action research project*. New York: Routledge.
- Ponte, P., (2002). How teachers become action researchers and how teacher educators become their facilitators. *Educational Action Research*, 10, 399–423.
- Ponte, P., Ax, J., & en Beijaard, D. (2004). Don't wait till the cows come home: Action research and initial teacher education in three different countries. *Teachers and Teaching: Theory and Practice*, 20, 591–621.

SYLLABUS 3

By

Dr Mussaret Anwar Sheikh, Tarique Bhatti, and Intizar Hussain

Year, semester

Year 4, semester 8

Credit value

3 credits

Prerequisite

Successful completion of semesters 1–7

Course Description

The research project is based on the research proposal prepared in the Research Methods in Education course in semester 7 of the B.Ed. Hons Elementary program. In the Research Projects in Education course, the proposal will be put into action and research conducted. Because it is not a traditionally taught course, the course will be in the form of face-to-face meetings with the supervisor, field visits linked with action research, and group discussions. Collaborative meetings for five milestones will be held with the supervisors to address common issues that arise during the action research process.

Learning Outcomes

After completion of this course, Student Teachers will be able to do the following:

- identify areas for action research
- develop research questions and research tools
- conduct action research
- identify different styles of referencing, citing, and presenting research work

- choose a relevant and appropriate methodology for research work.

Course Outline

The following table can be used for meetings/milestones between Student Teachers and supervisors to keep a record of their work.

Date of meeting (milestone)	Discussion Points	Actions to be taken	Possible Feedback	Signature of supervisee/supervisor

Milestone 1 (weeks 1–2)

This meeting will be an initial orientation and introduction to the project. Student Teachers and supervisors will aim to accomplish the following:

- prepare a timeline of the project
- identify the supervisor's role and the supervisee's responsibilities
- plan the meeting schedule

- discuss the schedule of conducting of research
- discuss the meeting form as a record of research process.

Milestone 2 (weeks 3–5)

This meeting will involve a discussion on the steps to take before Student Teachers begin conducting research. Student Teachers and supervisors will aim to accomplish the following:

- discuss getting consent and completing entry negotiations with concerned authorities
- discuss data collection tools
- consider the required data on variables such as the school, school schedule, school facilities, information on the class, the students, the teachers, and family background.

Milestone 3 (weeks 6–9)

In this meeting, Student Teachers and supervisors will aim to accomplish the following:

- discuss points arising from the first research cycle and needed changes in data collection
- follow up on feedback of the first cycle
- discuss ongoing data analysis.

Milestone 4 (weeks 10–13)

This meeting will involve reviewing the changes that have been made after the previous discussion on the first cycle. Student Teachers and supervisors will aim to accomplish the following:

- b) plan for the second cycle
- c) review up-to-date written documents on the research process prepared by the Student Teachers.

Milestone 5 (weeks 14–16)

This meeting will involve discussing continued improvements and refinements as well as the ongoing

cyclic process. Student Teachers and supervisors will aim to accomplish the following:

- discuss data analysis and the writing process
- present the action research project.

Role of Supervisor

The supervisor should provide guidance to Student Teachers completing their research projects by doing the following:

- 1 facilitating project planning
- 1 setting the meeting schedule
- 1 conducting seminars on issues arising out of the research project
- 1 specifying the nature of the seminar so Student Teachers may share their success stories
- 1 monitoring timelines to ensure that the research project is completed in a timely manner
- 1 sharing rubrics for evaluation of the project
- 1 providing guidelines for project presentations
- 1 offering guidelines for publishing and dissemination.

Suggested Literature

- Creswell, J. W. (2008). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications.
- Flower, F. J. (2008). *Survey research methods: Applied social research methods*. Thousand Oaks, CA: Sage Publications.
- Marshall, J. C. (2010). *Classroom test construction*. Boston: Addison-Wesley.
- McNiff, J., Lomax, P., & Whitehead, J. (1996). *You and your action research project*. New York: Routledge.
- Salkind, N. J. (2006). *Exploring research*. New Jersey: Pearson Prentice-Hall.
- Wiersma, W. (2000). *Research methods in education*. Boston: Allyn and Bacon.

TEACHING NOTES

By Asima Idriss, Dr Fazalur Rahman, Dr M. Ajmal Chaudhary, and Safia Wazir

Detailed weekly plan

Week 1: Orientation meeting

Objective

To orient Student Teachers to the research project

In the first week, the Instructor will hold an orientation session with Student Teachers. In this meeting, the Instructor will familiarize Student Teachers with the process of the research project and prepare them for the steps to be completed during the semester.

Weeks 2–3: Reviewing and refining the research proposal

Objectives

- 2 To give feedback on Student Teachers' research proposals
- 3 To assign supervisors to the Student Teachers
- 4 To guide Student Teachers through the next step of their research

In weeks 2 and 3, Student Teachers will work on different sections of their proposals. They will then present their proposals, and their Instructor will offer feedback and suggestions. Instructors will also offer guidance in collecting relevant literature.

Based on the area of study and nature of the research project, Student Teachers will be assigned a project supervisor.

4–5: Constructing and finalising the research instrument

Objectives

- 1 To discuss intervention strategies with supervisors
- 1 To construct a research instrument

In weeks 4 and 5, Student Teachers will develop a research instrument, the reliability and validity of which will be examined. Student Teachers will submit their written work to their supervisor for feedback. Supervisors will discuss intervention strategies (such as small group work, reading, and activities) and reconnaissance (school, class climate, student profile, and teaching and learning process) with Student Teachers. Supervisors will also provide feedback and suggestions on an appropriate instrument to collect authentic data (e.g. an observation sheet, anecdotal records, checklists, and interview). The instrument will be finalised during this session.

Weeks 6–7: Conducting action research and applying interventions and research instruments

Objectives

- 14 To discuss using the research instrument to collect the data
- 15 To start the cyclic process of action research

Student Teachers will start the first cycle of their action research in the field. They will work according to the plan they devised with their supervisor.

Weeks 8-9: Analyzing collected data

Objectives

- To present collected data to supervisors
- To code items for data analysis

Student Teachers will present their collected data to their supervisors, who will provide feedback. Supervisors will also guide Student Teachers on coding items for data analysis and checking the reliability and

validity of data obtained from a given item. Student Teachers will analyze the collected data per instructions from their supervisor.

Weeks 10–11: Revising strategies and drawing conclusions

Objectives

- To draw a conclusion
- To revise strategy
- To share findings with supervisors

After identifying themes, Student Teachers will draw the conclusion and elucidate findings accordingly. On the basis of findings, they will revise their implementation plan and strategy for the second cycle.

Weeks 12–13: Implementing the revised strategy

Objective

To implement the revised strategy in the second cycle.

Engage Student Teachers in the second cycle of action research.

Weeks 14–15: Writing the research report

Objective

To discuss writing the project report.

Supervisors and Student Teachers will discuss writing the research report (dissertation). Student Teachers will then have two weeks to write the report per the supervisor's instruction.

Week 16: Seminar presentation

Objective

To disseminate the action research project.

Student Teachers will present their action research projects in a departmental seminar.

Roles and duties of supervisors and supervisees

Supervisor's role

The supervisor will play the role of a facilitator, which will involve the following:

- helping plan activities
- giving orientation to Student Teachers
- monitoring Student Teachers' work
- providing motivation and giving feedback
- offering guidance to Student Teachers on:
 - ii finalizing the research proposal
 - ii locating resources for a literature review
 - ii developing an instrument for data collection
 - ii organizing and analyzing collected data
 - ii discussing findings and drawing a conclusion
 - ii writing the report

- ii presenting the action research project.

Supervisee's role

As supervisees, Student Teachers will be expected to do the following:

- take initiative and responsibility
- discuss meeting schedules with their supervisor
- complete assigned tasks for each meeting
- take timely feedback from the supervisor and incorporate it as needed
- identify areas that need guidance from their Supervisor
- conduct the project in an ethically appropriate manner
- follow institutional rules and regulations
- submit their research report in a timely manner.

Rubrics for action research project (dissertation)

Level 1: Major changes needed	Level 2: Minor changes Needed	Level 3: Conditionally Approved	Level 4: Approved
Ambiguous, unclear proposal	Clear statement, but unclear objectives Methodology	Clear statement and objective, but methodology needs more clarity	Clearly stated and detailed proposal
Introduction, research objectives, and research questions			
Missing and ambiguous Parts	Clear background information but needs more justification	Clear background but needs more detail	Proper background Clear and definite objectives, methodology, and significance of research
Literature review			
Irrelevant literature Review Possible plagiarism Not well organized	Relevant literature review, but lacks Sequence Literature not up-to-date	Relevant but insufficient literature review	Relevant, well-organized, and up-to-date literature review with sufficient references
Research tools for data collection			
Improper sequencing of questions and formatting Inappropriate research tools for research	Objectives not addressed by the tools Tools irrelevant to and insufficient for the Project	Addressed objectives completely Appropriate but improperly designed research tools for	Appropriate number of questions, addressed objectives, and proper sequence and formatting Properly designed

question(s)		answering research questions	research tools that answer research questions
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Level 1: Major changes needed	Level 2: Minor changes Needed	Level 3: Conditionally approved	Level 4: Approved
Data analysis and reflection			
Poor data analysis Missing reflection and next steps	Results of the intervention somewhat addressed by reflection	Results of the intervention and next steps somewhat addressed by reflection	Appropriate data analysis Results of the intervention and next steps clearly and thoughtfully addressed by reflection
Recommendations/discussion			
Recommendations not based on findings Missing discussion	Some recommendations not linked with findings Missing discussion	Recommendations based on findings More elaboration needed on discussion	Recommendations based on findings Conclusion included in discussion
Format and structure			
References seldom cited to support statements	References occasionally provided, but many statements seem Unsubstantiated Sources of information Unclear	References generally cited to support claims Sources of information clear and fairly represented	Compelling references from reputable sources to support claims Sources of information clear and fairly represented
Many errors that obscure meaning and potentially confuse Readers	Many errors that potentially distract Readers	Occasional errors, but they do not distract readers	Error-free (or nearly error-free) writing

SYLLABUS AND TEACHING NOTES

By Dr Muhammad Ilyas Khan, DrAsafNiwaz, Dr Allah Noor Khan, Dr Hafiz Inamullah, and DrArshad Ali

Research Project Procedure

The Research Projects in Education course is a compulsory part of the four-year B.Ed. (Hons.) Elementary program.

Student Teachers will individually complete the project by conducting action research, which will be supervised by a

tutor. The project will culminate in the form of a final report that will carry 100 marks.

Course Objectives

- ☐ To sensitize Student Teachers to the issues and problems faced by students in the classroom
- ☐ To help Student Teachers critically examine educational issues
- ☐ To analyse and review relevant literature
- ☐ To use data collection tools and analytical skills
- ☐ To act as self-reflective professionals and independent learners
- ☐ To develop and perform independent action research projects

Teaching-Learning Methodology

This is not taught as a traditional course. Rather, Student Teachers and supervisors will be involved in the following activities during the course of the project:

12. One-to-one meetings between Student Teachers and supervisors
13. Seminars
14. Group discussions and peer review
15. Presentations

Timeline and Supervisory Process

First (orientation) meeting (week 1)

Supervisors will introduce themselves as well as their academic and research backgrounds to Student Teachers.

Similarly, Student Teachers will highlight their own academic and research interests in this initial meeting. Student Teachers will also be given an opportunity to discuss their action research plan, the proposal developed by in the Research Methods in Education course. After learning more about Student Teachers' proposed projects, supervisors may provide initial guidance by suggesting books and other materials for further study.

Second meeting (week 2)

In the second meeting, the supervisor will provide literature review assistance, particularly with regard to directing S

tudent Teachers to relevant materials. The supervisor should also discuss different search methods, such as Google

Scholar and other search engines, and potential resources, including free online journals, e-books, and e-theses.

Student Teachers will be assigned the task of consulting relevant literature and developing a critical review.

With

this in mind, supervisors should work with Student Teachers to help them refine and finalize their research plans.

A useful way for Student Teachers to begin their literature review is through an online search for issues or questions

related to their topic. Other sources may be found in libraries. Likewise, newspapers and archives could also be useful sources.

While completing their literature reviews, Student Teachers should focus on their research question or topic.

This is essential to keep the process under control and to avoid engaging in tangential research that is irrelevant and a potential waste of time and resources.

Third meeting (week 3)

Supervisors should discuss different types of research tools and data collection processes with Student Teachers

in this session. Specifically, the supervisor should provide guidance on developing a useful research tool and the pitfalls of the data collection process.

Useful research tools are able to focus on the research question or hypothesis. They may include questionnaires, interviews, and observations, all of which should be thoroughly prepared in light of study objectives and available data and information sources. For instance, sometimes new researchers prepare interview questions that do not serve to answer the research question. Sometimes interviews are selected as data collection tools, but there may be more appropriate data sources or better subjects to interview. Therefore, researchers should have alternative plans to accommodate any such eventualities.

Fourth meeting (week 4)

The supervisor will review Student Teachers' research tools and provide advice (as needed) on revisions or amendments. If a research tool is appropriate, it will be approved for data collection.

Ethical considerations during the data collection process will also be discussed. These are an important component of a valid research process. Ethical considerations include making sure participants' safety, security, and dignity are maintained. This can be done by taking steps to ensure their anonymity and confidentiality. Furthermore, researchers should obtain informed consent from participants regarding the use of data they provide.

Data collection (weeks 5–6)

Student Teachers will collect data during this period. In meetings with their supervisors, they should discuss the data collection process and their initial analyses. Supervisors should help determine if more data collection or more in-depth analysis is needed.

The data analysis process is ongoing, and after every cycle, Student Teachers will revise their previous plan and modify it according to emerged data.

Research seminar/workshop/group discussion (week 7)

Supervisor will conduct a seminar around Student Teachers' experiences during the data collection process. Student Teachers may choose to arrange a follow-up workshop or group discussion to further explore themes covered in the seminar.

Supervisors should be available during this period to discuss any difficulties Student Teachers have encountered during the data collection processes. They may also attend any follow-up sessions among the Student Teachers to learn more about possible issues and problems they are facing and to help them brainstorm solutions.

Continue cyclic procedure (week 8)

Student Teachers will continue the cyclic process of action research after modifying their collection and analysis processes.

Sixth and seventh meetings (weeks 9–10)

In meetings during this period, the supervisor should assess data analysis processes and discuss possible themes emerging from the research process thus far.

Eighth meeting (weeks 11–12)

The meeting during this period will involve fine-tuning the research findings and beginning the writing process.

Report writing is an important aspect of the research process and how the research findings will be disseminated.

A research report usually consists of the background, the aims, the methodology adopted for the research process,

and the outcomes and findings of the research. The structure and process of report writing depends on the type of research. In a quantitative research project, the report writing is usually completed toward the end of the project.

In contrast, in qualitative studies, report writing is usually a continuous and flexible process, as changes are made

to the scope, aims, and direction of the research process.

The supervisor should ensure that Student Teachers understand the variations between quantitative and qualitative reports

with regard to research theses and papers.

Ninth meeting (week 13)

Student Teachers will submit their research reports to their supervisor.

Tenth meeting (weeks 14–15)

Supervisors will meet with Student Teachers to discuss feedback and revisions for the final draft.

Student Teachers will revise their reports accordingly.

Eleventh meeting (week 16)

Student Teachers will submit their final research reports. This should be done on or before the last working day of the semester.

Resources

Online resources

- O'Brien, R. (1998). An overview of the methodological approach of action research.
□ □ Available from <http://www.web.ca/robrien/papers/arfinal.html>
- Seidel, J. V. (n.d.). Qualitative data analysis.
- □ □ Available from <http://www.scribd.com/doc/7129360/Seidel-1998-Qualitative-Data-Analysis>

Book

McNiff, J., Lomax, P., & Whitehead, J. (1996). *You and your action research project*. New York: Routledge.

Journals

- *Action Research*
- [□□http://arj.sagepub.com](http://arj.sagepub.com)
- *Educational Action Research*
- [□□http://www.tandfonline.com/toc/reac20/current](http://www.tandfonline.com/toc/reac20/current)
- *Journal of Action Research*
- [□□http://research.vancouver.wsu.edu/journal-of-action-research](http://research.vancouver.wsu.edu/journal-of-action-research)
- *International Journal of Action Research*
- [□□http://www.hampp-verlag.de/hampp_e-journals_IJAR.htm](http://www.hampp-verlag.de/hampp_e-journals_IJAR.htm)

CONTENT COURSES FROM DISCIPLINE-I

English Elective (Poetry)

Content Course I

(From Selected Discipline I)

Semester 5

Course: English Elective (Poetry)

Semester: 5th
Hrs.

Year: 3

Credit Value: 3

Course Description:

Poetry is metrical and rhythmical language which enriches the imagination of readers through its beautiful lines. It arouses the aesthetic sense and it is due to this process that appreciation of poetry is born. This course will refine imagination of readers, through it, they will enjoy the rhythm, harmony and beauty of poetic lines and will also be able to criticize and study human life with all its aspects.

Learning Outcomes:

At the end of this course, students will be able to;

- i) Refine and enrich their power of imagination.
- ii) Enjoy the rhythm, harmony and beauty of poetic lines.
- iii) Develop their Vocabulary and sense of Language.
- iv) Criticize and study human life with all its aspects.

Teaching Learning Approaches:

A variety of teaching and learning approaches will be used throughout the course; Such as, identifying rhythm

through stress and unstress pattern of syllables in the lines of poetry, reordering of words because in poetry syntax

is sometimes subordinate to rhythm and sonic effects so that at places order of the sentences is inverted and it can

be shown to the students to reorder the lines which will give them better understanding of the poem under study,

deletion is another activity which can be used to give better understanding of the way the poets use words under

the sway of the their needs for rhythm and sounds, at times poets use fewer words than the demand of the situation

so students can't understand the lines, therefore students should be trained to note deficiency of words and to insert

new words, and to substitute emotional words with plain words to note the meanings these lines give. There will also

be different levels of activities; such as, group discussions, presentations and critical appreciation on the part of

students under the guidance of teacher in order to point out figures of speech, poetic devices and development of

thought.

Week wise Distribution

Weeks	Session 1	Session 2	Session 3
Week 1	- To Dianeme - To Anthea Who may Command him Anything	To Daffodils	On his Blindness
Week 2	- The Sick Rose - The Tiger	Introduction to Songs of Experience	- Love's Secret - The Sun Flower
Week 3	The Daffodils	- It is a Beauteous Evening Calm and Free - It is not to be thought of	- The world - Composed upon Westminster Bridge Sep, 3, 1802
Week 4	- A slumber did my spirit seal - To Milton (London, 1802).	The Solitary Reaper	The Solitary Reaper
Week 5	Ode: Intimations of Immortality from Recollections of Early Childhood	Ode: Intimations of Immortality from Recollections of Early Childhood	Ode: Intimations of Immortality from Recollections of Early Childhood
Week 6	Kubla Khan	Kubla Khan	Kubla Khan
Week 7	Ode to the West Wind	Ode to the West Wind	Ode to the West Wind
Week 8	Stanzas written in Dejection, near Naples	- Stanzas April – 1814 - To Night	- Song - A widow bird state mourning for her love

Week 9	On first looking into Chapman's Homer	To Autumn	Ode to Nightingale
Week 10	Ode on a Grecian Urn	- To Sheep - Ode on Melancholy	La Belle Dame Sans Merci
Week 11	Ulysses	Ulysses	Ulysses
Week 12	The Lotos Eaters	The Lotos Eaters	The Lotos Eaters
Week 13	- Break, Break, Break - Tears, Idle Tears	- The Patriot - Love among the Ruins	My Last Duchess
Week 14	Sailing to Byzantium	- Sailing to Byzantium - Byzantium	Byzantium
Week 15	Among School Children	Among School Children	Among School Children
Week 16	The Hollow Men	The Hollow Men	The Hollow Men

Prescribed book:

The Winchester book of verse

Grading Policy ;

Twenty (20) marks will be given on the basis of internal evaluation; i.e

Assignment (A)

Appreciate any two of the following poems;

- | | | |
|------|------------------------------------|---|
| i. | The Daffodils (William Wordsworth) | 5 |
| ii. | Kubla Khan (S.T. Coleridge) | 5 |
| iii. | Ode on a Grecian Urn (John Keats). | 5 |

Assignment (B)

Appreciate any two of the following poems;

- | | | |
|------|-----------------------------------|---|
| i. | Ulysses (Alfred Lord Tennyson) | 5 |
| ii. | My Last Duchess (Robert Browning) | 5 |
| iii. | Sailing to Byzantium (W.B.Yeats) | 5 |

Thirty (30) marks will be allotted to midterm examination and fifty (50) marks will be awarded on the basis of

final term examination.

Apart from that there will be several non-graded assignments / informal evaluation.

English Elective (Prose) Content Course II (From Selected Discipline I) Semester 6

Course: English Elective (Modern English Prose)

Semester: 6th

Year: 3

Credit

Value: 3 Hrs.

Course Description:

The scope of the book, "Modern English Prose" is rather comprehensive. Practically every type of modern prose

has been illustrated. There are extracts from professors, critics, journalists, historians, novelists, philosophers,

even from an economist and a scientist. Every phase of modern life has been treated in these extracts. In the book,

the extracts have been grouped under three heads: (a) History and Biography, (b) Fiction, (c) Essays and Literary Criticism.

Many of the pieces included in the first group are really contemporary history blended with biography. For the

second group, fiction is a loose enough term, we have in this section extracts from novels, entire short stories.

The third group is comprised of: pure essays and literary criticism.

Learning Outcomes:

At the end of this course, students will be able to;

- i. Develop their language ability
- ii. Develop their power of imagination
- iii. Enjoy reading and writing
- iv. Get acquainted with the lives and deeds of great men
- v. Comprehend literary criticism

Teaching and Learning Approaches:

Various types of teaching and learning approaches will be used through out the course; such as, reading for

comprehension, students will be motivated to read for enjoying the literary language and knowledge of the

content. Students will be given instructions to read intensively in order to understand the theme and other

technical aspects of the texts. During the intensive teaching strategies, students will be advised to use judgment,

reasoning, interpretation and appreciation in order to grasp the texts from various aspects and angles.
Students

will be trained to pick writer's intentions, arguments, style in the texts, so that to enjoy the texts and know about

its technical and literary aspects. Moreover, students will be involved in activities; such as, group discussions,

pair share, etc. Students will also be prepared for extensive reading strategies e.g. reading for pleasure and fluency.

Week wise distribution

Parts	Weeks	Session 1	Session 2	Session 3
History and Biography (Part 1)	Week 1	The Gentle Shakespeare	The Gentle Shakespeare	The Sack of Rome
	Week 2	Napoleon	Napoleon / The Duke of Wellington	The Duke of Wellington
	Week 3	Gladstone	The Storm	The Storm
	Week 4	The Lusitania	The Lusitania	Lenin
	Week 5	War Guilt	Lord Oxford and Asquith	The Patriotism of Britain
Fiction (Part 2)	Week 6	The Bridge	The Ghost Ship	The Ghost Ship
	Week 7	At the River's Edge	The Baiting	The Baiting
	Week 8	The Tea Shop	The Farm	The Farm
	Week 9	In Charge	In Charge / The Great Exhibition	The Great Exhibition
	Week 10	A Village Cricket Match	The Last Meal	The Last Meal
Essays and Literary Criticism (Part 3)	Week 11	A Piece of Chalk	A Piece of Chalk / Macbeth	Macbeth
	Week 12	Lord Cantilupe's Political Faith	Lord Cantilupe's Political Faith / Caesar's Funeral	Caesar's Funeral
	Week 13	Walking	Walking / The World of Work	The World of Work
	Week 14	Style	Style / Innovations in Poetry	Innovations in Poetry
	Week 15	The Purpose of Education	The Purpose of Education / Remedying World Finance	Remedying World Finance
	Week 16	The Future of Earth	The Future of Earth	Review of the Course

Prescribed Book:

Modern English Prose

By: Guy Boas, M.A.

Grading Policy:

Twenty (20) marks will be allotted on the basis of internal evaluation; i.e.

Assignment: Attempt all the questions

Q.1. Compare and contrast Belloc's attitude towards Napoleon with Guedalla's attitude towards Wellington.

Write a brief comparative estimate of their prose.

07

Q.2. What makes the description of the Tay Bridge so vivid and gripping?

05

Q.3. What are the prominent features of the world of Dickens as portrayed by QuillerCouch. Explain. 08

Thirty (30) marks will be given on the basis of midterm examination and fifty (50) marks will be awarded on

the basis of final term examination.

There will also be informal assessments throughout the semester.

English Elective (Novel) Content Course III (From Selected Discipline I) Semester 7

Course: English Elective (Novel)

**Semester: 7th
Value: 3 Hrs.**

Year: 4

Credit

Course Description:

This course is comprised of two novels: 1). “Lord of the Flies” and 2) “A passage to India”. Novel is taken from the French word, “Novela”, which means something new. Novel is a story in fiction having a plot with realistic touches of life.

Lord of the Flies is an allegorical novel dealing with the theme of evil and the conflict between evil and good.

Golding himself has said that the novel shows not the triumph of evil over good. But good rescued from the clutches of evil. Golding has shown narrative gift in the novel and a lot of suspense is created in the course of

the story and we want eagerly and anxiously for what will happen next. There are realistic pictures of boys behaviour about if there are no social control and parental authority. In this novel, Golding has also shown his gift for character Portrayal. There is suspense and abundance of dramatic situations. If fear and terror are the dominant note of “Lord of the Flies”, Pathos is not far behind.

A passage to India deals with the Anglo Indian relationship in which both the English and the American were

interested. Two great races with different heritage and history happened to meet. Aziz and Fielding represent two great races which came into contact on an unequal footing. The Novel expands on the theme of fiction and

fission, love and hatred , separation and union , negation and affirmation. Mrs. Moore impelled by her good nature wanted to promote relations with Indians but Adela Quested wanted to know Indians without knowing the Indians. Foster belonged to an age when belief in absolute values were eroded. Foster has shown impartiality in the portrayal of his main characters. His characters are both round and flat.

The novel is an example of classical compactness. It is a balanced combination of apt phrases, ironical

remarks and symbolism. Political, Social and Spiritual aspects of life have been touched in this novel.

Learning Outcomes:

At the end of this course Students will be able to;

- i. Gain knowledge of some facts and learn some lesson through the story.
- ii. Acquaint themselves with the style of story writing/ narrative style.
- iii. Comprehend Literary Language and terms.
- iv. Improve their reading skills.

Teaching and Learning Approaches:

A number of teaching and learning approaches will be followed through which students will be enabled to demonstrate their understanding of story theme, character development, plot, vocabulary and other story elements. They will be asked to connect a theme of the novel to their own lives. Students will be asked to share their point of view, their interests, concerns or social issues. Students will be helped by the teachers to follow reading skills and strategies; such as, assign each page a title, form anticipatory questions, jot down

questions throughout each chapter, underline vocabulary which is critical to understand the text and mark any

literary devices, etc.

Week wise Distribution

Novel: Lord of the Flies

Weeks	Session 1	Session 2	Session 3
Week 1	Chapter-1: Sound of the Shell	Chapter-1: Sound of the Shell	Chapter-2 Fir of the Mountain
Week 2	Chapter-2: Fire on the Mountain	Chapter-3: Huts on the Beach	Chapter-3: Huts on the Beach
Week 3	Chapter-4: Painted Faces and Long Hair	Chapter-4: Painted Faces and Long Hair	Chapter-5 Beast from Water
Week 4	Chapter-5 Beast from Water	Chapter-6: Beast from Air	Chapter-6: Beast from Air
Week 5	Chapter-7 Shadows and Tall Trees	Chapter-7 Shadows and Tall Trees	Chapter-8: Gift for the Darkness
Week 6	Chapter-8: Gift for the Darkness	Chapter-9: A View to a Death	Chapter-9: A View to a Death

Week 7	Chapter-10: The Shell and the Glasses	Chapter-10: The Shell and the Glasses	Chapter-11: Castle Rock
Week8	Chapter-11: Castle Rock	Chapter-12: Cry for the Hunters	Chapter-12: Cry for the Hunters

Week wise Distribution

Novel: A Passage to India

Weeks	Session 1	Session 2	Session 3
(Part –I, Mosque) Week 9	Chapter- 1	Chapter-2	Chapter- 2
Week 10	Chapter-3	Chapter- 4	Chapter-5
Week 11	Chapter-6	Chapter-7	Chapter-8
Week 12	Chapter-8	Chapter: 9-10	Chapter-11
(Part-2, Caves) Week 13	Chapter: 12-13	Chapter: 14-15	Chapter: 16-18
Week 14	Chapter: 19-20	Chapter: 21-23	Chapter - 24
Week 15	Chapter: 25-26	Chapter: 27-29	Chapter: 30-32
(Part-3 Temple) Week16	Chapter: 33-34	Chapter: 35-36	Chapter: 36-37

Prescribed Books:

- Lord of the Flies by William Golding.
- A Passage to India by E.M. Foster.

Grading Policy

Twenty (20) marks will be given on the basis of internal evaluation; i.e

Assignment (A):Critically appreciate the novel “Lord of the Flies” while supporting your arguments by giving

criticism of prominent literary critics.

10

Assignment (B):Critically appreciate the novel “A Passage to India” while supporting your arguments by giving

criticism of prominent literary critics.

10

Thirty (30) marks for mid-term examination and fifty (50) marks for final term examination. There will also be

various types of informal evaluation throughout the semester.

Physics

Content Course I

(From Selected Discipline I)

Semester 5

MECHANICS

TOPICS	SCOPES.
<u>1. VECTOR OPERATIONS:</u>	
• Vector in 3 dimensions. • Vector Products. • Vector derivatives and operations. • Gradient, Divergence and curl of a Vector. • field, curl and line integral • Vector Integrations • Divergence Theorem. • application to specific cases. • Converting from differential to integral forms. • Stokes' Theorem.	Introduction, Direction Cosines, Spherical polar coordinates, applications. Scalar and Vector Products, Multiple Products Divergence and curl of a vector, and gradient of a scalar. Physical applications of each type, Divergence and Flux of a Vector Line, Surface and Volume Integrals Derivation, Physical importance and
<u>2. PARTICLE DYNAMICS.</u>	
• [Advanced applications of Newton's laws]. • Equation of motion. • Time dependent forces. • Effect of drag forces on motion. • Non inertial frames and Pseudo forces.	Frictional forces: microscopic basis of this force. Dynamics of Uniform Conical pendulum; the rotor, motion the banked curve. Deriving kinematics equations $X(t)$, $V(t)$ using integrations. Constant and Non constant Forces and special examples. Obtaining $X(t)$, $V(t)$ for this case using integration method. Applying Newton's Laws to obtain $V(t)$ for the case of motion with time dependent drag (viscous) forces, terminal velocity. Projectile motion/air resistance. Qualitative discussion to develop Calculation of pseudo forces for simple Cases (linearly accelerated referenceframe). Centrifugal force as an example of pseudoforce, carioles

force.

- Limitation of Newton's Laws.
- Suggested level.

Discussion.

Ch:6: Resnick, Halliday and Krane. (R.H.K.) Vector Analysis, Dr. Muhammad Ali Khattak, University of Peshawar. Vector Analysis, Muhammad Afzal. Vector Analysis, Dr. S.M. Yousaf.

- **3. WORK AND ENERGY.**
- Work done by a constant force,
- work done by a variable force (1-Dimension).
- Work done by a variable force (2-dimensional case) at the
- Work energy theorem,
- General proof of work energy theorem.
- **4. Power.**
- Reference Frames different inertial frames.

Essentially a review of grade-XII concepts use of integration work done (e.g. in vibration of a spring obeying Hook's Law). Obtaining general expression force and applying to simple cases e.g. pulling a mass

end of a fixed string against gravity.

Qualitative Review of work energy theorem. Derivation using integral calculus. Basic formula; and applications.

Energy changes with respect to observer in

Recommended book

(Hollyday Resnik & Krane)

5. CONSERVATION OF ENERGY.

- Conservative, and non conservative forces.
- One-dimensional conservative system.
- 2,3 dimensional conservative system.
- Conservation of energy in a system of particles.

Definition of either type of force & examples; work done in a closed path. 1-D conservative system; force as the gradient of potential energy, applications in the case of a spring and force of gravity.

Obtaining velocity in terms of U and E; stable, unstable and neutral equilibrium. Analytic solution for $x(t)$.

Change in P.E. for motion in 3-d. Force as the gradient of the potentials. Work done in 2,3, dimensional motion.

Law of conservation of total energy of an isolated system.

Recommended book

(Hollyday Resnik & Krane)

6. SYSTEMS OF PARTICLES.

- Two particle systems and generalization to many particle systems.
- Centre of mass of solid objects.
- Calculating C.M. of; Uniform Rod.
- Cylinder.
- Sphere.
- Momentum changes in a system of variable mass.
- mass as a function of time).

Centre of mass: Its position velocity and equation of motion.

Calculation of Centre of Mass of solid objects using integral Calculus.

Derivation of basic equation; application

to motion of rocket (determination of its

Recommended book **(HollydayResnik&Krane)**

7. COLLISION.

- | | |
|---|---|
| • Elastic collision, Conservation of momentum during collision. | a) One dimensions. |
| • Inelastic collision, collision in centre of mass reference frame. | b) Two dimensions (Oblique collisions)
One and two dimension. Simple applications obtaining velocities in c. m. frame. |

Recommended book **(HollydayResnik&Krane)**

8. ROTATIONAL DYNAMICS.

- | | |
|--|--|
| • Overview of rotational Dynamics. | Relationships between linear & angular variables, scalar and vector form. Kinetic energy of rotation; Moment of inertia. |
| • Parallel axis theorem. | Prove and Illustrate; apply to simple cases. |
| • Determination of moment application of torque. | Equations of rotational motion and effects of inertia of various shapes. |
| • Rotational dynamics of rigid bodies. | |
| • Combined rotational and transactional motion. | Rolling without slipping. |

Recommended book **(HollydayResnik&Krane)**

9. ANGULAR MOMENTUM.

- | | |
|----------------------------------|--|
| • Angular velocity. | Definition, Conservation of angular momentum, effects of Torque. |
| • Stability of spinning objects. | Discussion with examples. |
| • The spinning Top. | Effects of torque on the angular momentum, precessional motion. |

Recommended book **(HollydayResnik&Krane)**

10. GRAVITATION.

- | | |
|---|---|
| • Review of basic Concepts of gravitation. Gravitational effect of a spherical mass distribution. | Mathematical treatment. |
| • Gravitational potential energy. | Develop equation using integration techniques; calculation of escape velocity. |
| • Gravitational field & potential. | Develop the idea of field of force. |
| • Universal Gravitational law. | Motion of planets and Kepler's Laws.

(Derivation & explanation). Motion of satellites.

Energy considerations in planetary and satellite motion, Qualitative discussion on application of gravitational law to the Galaxy. |

Recommended book **(HollydayResnik&Krane)**

11. BULK PROPERTIES OF MATTER.

- | | |
|---|---|
| <ul style="list-style-type: none"> • Elastic properties of matter. | Physical basis of elasticity Tension, Compression & Shearing. Elastic Modulus, Elastic limit. |
| <ul style="list-style-type: none"> • Fluid Static's. | Variation of pressure in fluid at rest and with height in the atmosphere. |
| <ul style="list-style-type: none"> • Surface Tension. | Physical basis; role in formation of drops and bubbles. |

Recommended book **(HollydayResnik&Krane)**

12. Fluid Dynamics.

- | | |
|---|---|
| | General concepts of fluid flow; streamline and the equation of continuity. |
| <ul style="list-style-type: none"> • Bernoulli's Equation. | Derivation and some applications such as dynamic lift thrust on a rocket. |
| <ul style="list-style-type: none"> • Viscosity. | Physical basis; obtaining the coefficient of viscosity, practical example of viscosity, fluid flow through a cylindrical pipe [Poisenille's law]. |

Recommended book **(HollydayResnik&Krane)**

13. SPECIAL THEORY RELATIVITY.

- | | |
|--|---|
| <ul style="list-style-type: none"> • Trouble with classical Mechanics. or paradoxes in classical ideas of time, length, and velocity. | Qualitative discussion of the inadequacy |
| <ul style="list-style-type: none"> • Postulates of Relativity. | Statements and Discussion. |
| <ul style="list-style-type: none"> • The Lorentz Transformation, inverse transformation. Velocities. | Derivation, Assumptions on which derived; application of the same Transformation of |
| <ul style="list-style-type: none"> • Consequences of Lorentz transformation. | Relativity of time; relativity of length. |
| <ul style="list-style-type: none"> • Relativistic momentum. | Derivation. |
| <ul style="list-style-type: none"> • Relativistic energy. | Derive $E = mc^2$. |

Recommended book **(HollydayResnik&Krane)**

Practical's suggestion

- a) During the two years of B.Sc. the students be required to perform one mini project, in addition to 12 experiments per section (i.e. Section-A: 12 Experiments, Section-B: 12 Experiments, + 1 mini project). The distribution of marks between experiments and project would be,

Practical-A	:	15 marks,		Practical-A	:	10 marks,
Practical-B	:	15 marks,	OR	Practical-B	:	10 marks,
				Project	:	10 marks,
Total	:	30 marks.		Total	:	30 marks.

While the students would be expected to construct and submit the report of the project, they would be expected to demonstrate working and be examined in detail for the project at the time of final examination.

- b) The projects should conform to a standard requiring a level of construction and data acquisition etc. To specify this level, a list of projects with the detailed write-ups was provided by the committee.
- It would be the responsibility of the colleges to provide the student with major equipment while the students would be expected to provide consumable parts. The teachers would be expected to help and guide the students in the choice, construction and use of the projects to obtain data.

LIST OF PROPOSED EXPERIMENTS TO BE INTRODUCED AT B.SC. LEVEL IS AS

PRACTICAL – A
TITLE OF EXPERIMENT:

(Mechanics, Properties of matter, Heat, Waves, Electricity and Magnetism).

1. Modulus of rigidity by static and dynamic methods.
2. To study the damping features of an oscillating system using Simple pendulum of variable mass.
3. Measurement of viscosity of liquid by stoke's/ Poiseulli's method.
4. To study the dependence of centripetal force on mass, radius, and angular velocity of a body in circular motion.
5. Investigation of phase change with position in a travelling wave and measure the velocity of sound by C.R.O.
6. Calibration of thermocouple, metal resistance and thermister using a digital multimeter.
7. Determination of stefan's constant.
8. Measurement of refractive index of liquid by Newton's rings.
9. Measurement of velocity of light using Laser and a rotating mirror.

10. Measurement of Planck's constant using spectrometer.
11. To study the characteristics of photo emission and determination of Planck's constant using a photo cell.
12. Measurement of specific rotation of sugar by polarimeter and determination of sugar concentration in a given solution.
13. Determination of wavelength of Laser Light by diffraction grating and comparing the resolution of different grating.
14. Measurement of time constant ($T=RC$) of capacitor (RC) system and use of the same as differentiator and integrator.
15. Measurement of Dielectric constant of different solids using read switch method.
16. To study variation of magnetic field produced by a Current carrying
 - (a) Straight Conductor.
 - (b) Circular Loop as a function of position and current using a search coil and CRO.
17. To study magnetic force law between two current carrying coils.
18. To study the B-H curve and measuring the magnetic parameters.

PRACTICAL – B

(Modern Physics and Electronics)

19. Measurement of Hall effect in a Semi-Conductor wafer.
20. To Study the characteristic curves of a G. M. counter and use it to determine the absorption coefficient of α -Particle in Aluminium.
21. To study the following characteristics in an Acceptor / Rejecter Circuit (i) Frequency response (ii) Band width (iii) phase relation
 - (iv) Measurement of L.
22. Determination of e/m of electron.
23. To set up a half wave and fullwave rectifier and study the following factors:
 - (i) Smoothing effect of a capacitor.
 - (ii) Ripple factor and its variation with load.
 - (iii) Study of regulation of output voltage with load.
24. To set up a single stage transistor amplifier and measure its
 - (i) voltage gain
 - (ii) Band width.
25. To set up an oscillator circuit and measure its frequency by an oscilloscope.
26. To set up and study various logic gates (AND, OR, NAND etc.) using diode and to develop their truth table.

27. To set up an electronics switching circuit using transistor LDR and demonstrate its use as a Not Gate.
28. Determination of Range -Energy Curve for particle and determination of air equivalent of Mica and Aluminium.
29. To study randomness of nuclear decay using G. M. counter and determining the decay characteristics of radioactive materials.
30. Detection of Nuclear Radiations by parallel plate ionization chamber and verification of inverse square law.
31. To study the properties of a plasma using a flame and metallic pendulum.
32. To study Voltage-Current characteristics of an Electric discharge in
 - (i) Neon
 - (ii) Krypton
 - (iii) Argon
 - (iv) Mercury
 (Any three) discharge tubes.

LIST OF SUGGESTED PROJECTS

1. Colliding objects.
2. Energy transformations ET-1.
3. Angular Momentum.
4. Energy Transformation-II.
5. Falling objects.
6. Vibrating systems.
7. Electrostatic Force.
8. Building and Electrometer/application.
9. Building high voltage power supply.
10. Building an amplifier using op-amps.
11. Building a low voltage power supply.
12. To Construct an Electrical Resonance system.
13. Magnetic forces.
14. Centripetal force.

Physics

Content Course II

(From Selected Discipline I)

Semester 6

WAVES AND OSCILLATIONS

TOPICS.

SCOPES

1. Harmonic Oscillations.

- | | |
|--|---|
| • Simple harmonic oscillation (SHM). | Obtaining and solving the basic equations of motion $x(t)$, $v(t)$, $a(t)$ Energy. Considerations in S.H.M. |
| • Application of SHM | Torsional Oscillator; Physical pendulum, simple pendulum. |
| • SHM and uniform circular motion, combinations of Harmonic motions. | Lissajous patterns. |
| • Damped Harmonic Motion. | Equation of damped harmonic motion, discussion of its solution. |
| • Forced Oscillation and resonance. of its solution. | Equation of forced oscillation, discussion |

Recommended book

(HollydayResnik&Krane)

2. WAVES.

- | | |
|--|---|
| • Mechanical waves Travelling waves. dispersion. | Phase velocity of travelling waves; sinusoidal waves; Group speed and |
| • Waves speed. | Mechanical analysis. |
| • Wave equation. | Discussion & solution. |
| • Power and intensity in wave motion. | Derivation & discussion. |
| • Principle of superposition (basic ideas) | Interference of Waves, standing Waves. |
| | Phase changes on reflection; Natural frequency, resonance. |

Recommended book

(HollydayResnik&Krane)

3.SOUND.

- | | |
|---------------------|--|
| • Beats Phenomenon. | Analytical treatment. |
| • Doppler Effect. | Moving source, moving observer, both object and source moving. |

Recommended book

(HollydayResnik&Krane)

4. LIGHT.

- Nature of light.
- Light as an Electromagnetic wave.

Visible light (Physical characteristics)
Speed of light in matter: Physical aspects, path difference, phase difference etc.

Recommended book **(HollydayResnik&Krane)**

5.INTERFERENCE

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Coherence of sources; Double slit interference, analytical treatment. Adding of Electromagnetic waves using phasors.

- Interference from thin films.
- Michelson Interferometer.

Newton's rings (analytical) treatment. (Discussion to include use of a compensating plate; Michelson interferometer use in determining velocity of light.

Fresnel's Biprism and its use.

Recommended book **(HollydayResnik&Krane)**

- Diffraction.

Diffraction at single slit; intensity in single slit diffraction using phasor treatment and analytical treatment using addition of waves. Double slit interference & diffraction combined.

Diffraction at a circular aperture.

- Diffraction from multiple slits

Discussion to include width of the maxima.

- Diffraction grating. Discussion, use in spectrographs.
Dispersion and resolving power of gratings.

Recommended book **(HollydayResnik&Krane)**

- Holography. Qualitative discussion.
- Polarization. Basic definition, production of
- polarization by polarizing sheets, by reflection, by double refraction and double scattering.
- Description of polarization states. Linear, Circular, elliptic polarization.
- Rotation of plane of polarization. Use of polarimeter

Recommended book **(HollydayResnik&Krane)**

7. THERMODYNAMICS

- Temperature, Kinetic theory of the ideal gas, work done on an ideal gas. Review of previous concepts.
- Internal energy of an ideal gas. To include the Equipartition of energy.
- Intermolecular forces. Vander Waals equation of state. Qualitative discussion.

Recommended book **(HollydayResnik&Krane)**

8. STATISTICAL MECHANICS.

- Statistical Distribution and Mean values. Mean free path and microscopic calculations of mean free path.
- Distribution of molecular speeds, distribution of energies. Maxwell distribution; Maxwell Boltzmann energy distribution; internal energy of an ideal gas.
- Brownian motion. Qualitative description. Diffusion, conduction and viscosity.

Recommended book **(HollydayResnik&Krane)**

9. HEAT.

- Review of previous concepts. First law of Thermodynamics & its applications to adiabatic, isothermal, cyclic and free expansion.
- First law of thermodynamics, transfer of heat.

Recommended book **(HollydayResnik&Krane)**

10. ENTROPY & SECOND LAW OF THERMODYNAMICS.

- Reversible and irreversible Definition, discussion. Heat engine.

processes, 2nd law. Carnot cycle, Carnot engines.

- Thermodynamic temperature scale.
- Entropy.

Refrigerators & Second Law. Calculation of efficiency of heat engines.

Absolute Zero: negative temperature, (discussion).

Entropy in reversible process. Entropy in irreversible process. Entropy & Second Law. Entropy & probability.

Recommended book

(Hollyday Resnik & Krane)

- Low Temperature physics.

Liquefaction of gases: Joule Thomson effect.

Physics

Content Course III

(From Selected Discipline I)

Semester 7

ELECTRICITY AND MAGNETISM

TOPICS.

SCOPE.

1. ELECTROSTATICS.

- Electric Charge: Conductors and Insulators
- Vector form of Coulomb's Law.
- Quantization and conservation of charge.
- (Discussion)

(Review of previous concepts)
Coulomb's law for point charges.

2. ELECTRIC FIELD.

- Field due to a point charge; due to several point charges, electric dipole.
- Electric field of continuous charge distribution.
- Point charge in an electric field.
- Dipole in an electric field.
- Gauss's Law.
- (Integral and differential forms)
- Applications of Gauss's Law
- (Integral Form).

e.g. Ring of charge; disc of charge
infinite line of charge.
Torque on and energy of a dipole in a uniform field.
Electric flux; Gauss's law;
Charged isolated conductors; conductor With a cavity, field near a charged conducting sheet. Field of infinite line of charge; Field of infinite sheet of charge. Field of

spherical shell.

Field of spherical charge distribution.

3. ELECTRIC POTENTIAL.

- Potential due to point charge.
- Potential due to collection of point charges.
- Potential due to dipole.
- Electric potential of continuous charge distribution.
- Equipotential surfaces.
- Calculating the field from the potential.

Field as the gradient of derivative of potential. Potential and field inside and outside an isolated conductor.

4. CAPACITORS AND DIELECTRICS.

- Capacitance; calculating the electric field in a capacitor.
- Capacitors of various shapes, cylindrical, spherical etc.
- Energy stored in an electric field.

- Energy per unit volume. Capacitor with dielectric.
- Application of Gauss' Law to capacitor with dielectric.

Electric field of dielectric: An atomic view.

5. ELECTRIC CURRENT.

- Electric Current.
- conductivity (Microscopic & macroscopic view of resistivity).
- Ohm's Law.
- Semiconductors, superconductors.

Current density, Resistance, resistivity,

Basic definition. Analogy between current and heat flow. Microscopic view of ohms law. Energy transfers in an electric circuit. Descriptive, giving basic idea.

6. DC CIRCUITS.

- Calculating the current in a single loop, multiple loops;
- voltages at various elements of a loop.
- RC Circuits.

Use of Kirchhoff's 1st & 2nd Law.

Growth and Decay of current in an RC circuit. Analytical treatment.

Recommended book

(Holliday Resnik & Krane)

7. MAGNETIC FIELD EFFECTS.

- Magnetic field, B.
- Magnetic force on a charged particle, magnetic force on a current. Torque on a current loop.
- Magnetic dipole.

Basic idea.

Recall the previous results. Do not derive.

Define. Energy of magnetic dipole in field. Discuss quantitatively.

Recommended book

(Holliday Resnik & Krane)

8. AMPERE'S LAW.

- Biot-Savart Law.
- current loop, force on two parallel current carrying conductors.
- Ampere's Law.
- application to solenoids and toroids. (Integral form).

Analytical treatment and application to a

Integral and differential forms;

Recommended book

(Holliday Resnik & Krane)

9. FARADAY'S LAW OF ELECTROMAGNETIC INDUCTION.

- Faraday's Law.
- Lenz's Law.
- Motional E.M.F.
- Induced electric fields.

Magnetic flux. consequences of Faraday's Law.

Discussion, Eddy currents etc.

Quantitative analysis.

Calculation and application.

Recommended book

(Holliday Resnik & Krane)

10. MAGNETIC PROPERTIES OF MATTER.

- Gauss's Law for Magnetism
- conservation of magnetic flux;
- differential form of Gauss's Law.
- Origin of Atomic and Nuclear magnetic moments.
- Magnetization.
- Magnetic Materials.

Discussing and developing concepts of

Basic ideas; Bohr Magneton.

Defining M , B , H .

Paramagnetism, Diamagnetism, Ferromagnetism, Discussion. Hysteresis in Ferromagnetic materials.

11. INDUCTANCE.

- Inductance.
- LR Circuits.
- Energy stored in a Magnetic field.
- Electromagnetic Oscillation.
- analysis using differential equations.(without considering damped and forced oscillations). Forced electromagnetic oscillations and resonance.

Basic definition. Inductance of a Solenoid; Toroid.

Growth and Decay of Current; analytical treatment.

Derive. Energy density and the magnetic field.

Qualitative discussion. Quantitative

Recommended book

(HollidayResnik&Krane)

12. ALTERNATING CURRENT CIRCUITS.

- Alternating current.
- capacitive elements.
- Single loop RLC circuit.
- Power in A. C. circuits.
- Transformer.

AC current in resistive, inductive and

Analytical expression for time dependent solution. Graphical analysis, phase angles. Power: phase angles; RMS values power factor.

Basic transformer equation.

Recommended book

(HollidayResnik&Krane)

13. MAXWELL'S EQUATIONS.

- Summarizing the electromagnetic equations.
- Induced magnetic fields
- Maxwell's equations. and implications.

Gauss's law for electromagnetism; Faraday Law; Ampere's Law.

Development of concepts, application. & displacement current.

(Integral & Differential forms) Discussion

Recommended book

(HollidayResnik&Krane)

14. ELECTROMAGNETIC WAVES.

- | | |
|---|---|
| • Generating an electromagnetic wave. | |
| • Traveling Waves and Maxwell's equations. | Analytical treatment; obtaining differential form of Maxwell's equations; |
| • obtaining the velocity of light from Maxwell's equations. | |
| • Energy transport and the Poynting Vector. | Analytical treatment and discussion of physical concepts. |

Recommended book**(Holliday Resnik & Krane)****15. ELECTRONICS.**

- | | |
|--|--|
| • Semiconductor materials. | Idea of energy bands and energy |
| • gaps(qualitative). P-type, n-type materials. | |
| • Junction diode. as rectifiers. | Structure, Characteristics and application |
| • Transistor. | Basic structure and operation. |
| • Transistor biasing. | Biasing for amplifiers; Characteristics of common base, common emitter, common collector, load line, operating point, hybrid parameters. |
| • Transistor as an amplifier. | Common emitter mode. |
| • Amplification with feedback oscillators. | Positive & Negative feedback. Oscillators. Multivibrators. |
| • Logic gates. | OR, AND, NOT, NAND, NOR and their |
| • basic applications. | |

Recommended book**(Holliday Resnik & Krane)**

CONTENT COURSES FROM DISCIPLINE-II

Mathematics

Content Course I (From Selected Discipline II) Semester 5

Semester : 05
Hours:03

Year: 03

Credit

Course Outline:

- 1) **Limits and continuity:** Functions, limit of a function. Graphical approach. Properties of limits.
Theorems of limits. Limits of polynomials, rational and transcendental functions. Limits at infinity,
infinite limits, One-sided limits. Continuity.
- 2) **Derivatives:** The derivative, techniques of differentiation. Derivatives of polynomials, rational,
exponential, logarithmic and trigonometric functions. The chain rule. Implicit differentiation. Rates
of change in natural and social sciences. Related rates. Linear approximations and differentials.
Higher derivatives, Leibnitz's theorem.
- 3) **Applications of derivatives:** Applications of the differentiation. Increasing and decreasing functions.

Relative extrema and optimization. First derivative test for relative extrema. Convexity and point of inflection. The second derivative test for extrema. Curve sketching. Mean value theorems. Intermediate forms and L'Hospitals rule. Inverse functions and their derivatives.

- 4) **Integration:** Anti derivatives and integrals. Areas and distances. Riemann sums and the definite integral. Properties of Integral. The fundamental theorem of calculus. Indefinite Integrals and net change theorem. The substitution rule.
- 5) **Techniques of integration:** Integrals of elementary functions. Integration by parts. Integrals of trigonometric functions. Integrals of logarithmic and exponential functions. Integration by substitution. Integration by partial fractions. Integral tables. Improper integrals.
- 6) **Applications of integrals:** Area between curves and average value. Volumes. Arc length. Area of a surface of revolution. Applications to economics, physics, engineering and biology.
- 7) **Infinite series:** Sequences and series. Convergence and absolute convergence. Tests for convergence: divergence test, integral test, p-series test, comparison test, limit comparison test, alternating series test, ratio test, root test. Power series. Convergence of power series. Representation of functions as power series. Differentiation and integration of power series. Taylor and Maclaurin series. Approximations by Taylor polynomials.
- 8) **Conic section, parameterized curves and polar coordinates:** Curves defined by parametric equations. Calculus with parametric curves: tangents, areas, arc length. Polar coordinates. Polar curves, tangents to polar curves. Areas and arc length in polar coordinates. Cylindrical coordinates, spherical coordinates. Conic section. Conic section in polar coordinates.
- 9) **Vectors and analytic geometry in space:** Three-dimensional coordinate system, vectors. The dot product, the cross product. Equations of lines and planes. Cylinders and Quadric surfaces.
- 10) **Vector-valued functions and motion in space:** Vector functions and space curves. Derivatives and integrals of vector valued functions. Arc length. Curvature, normal and binormal vectors.
- 11) **Multiple integrals:** Double integrals over rectangular domains. Iterated integrals. Double integrals over non-rectangular domains. Double integrals in polar coordinates. Triple integrals. Triple integrals in cylindrical and spherical coordinates. Applications of double and triple integrals. Change of variables in multiple integrals.
- 12) **Integration in vector fields:** Vector fields. Line integrals. Green's theorem on rectangular domain; Green's theorem over more general domains. Curl and divergence. Surface integrals over scalar and vector fields. Divergence theorem. Stokes' theorem.

Week Plan for Math-1

Week 1: Functions, limit of a function. Graphical approach. Properties of limits. Theorems of limits.

Limits of polynomials, rational and transcendental functions. Limits at infinity, infinite limits, One-sided limits. Continuity.

Week 2: The derivative, techniques of differentiation. Derivatives of polynomials, rational, exponential, logarithmic and trigonometric functions. The chain rule. Implicit differentiation.

Week 3: Rates of change in natural and social sciences. Related rates. Linear approximations and differentials. Higher derivatives, Leibnitz's theorem.

Week 4: Applications of the differentiation. Increasing and decreasing functions. Relative extrema and optimization. First derivative test for relative extrema. Convexity and point of inflection. The second

derivative test for extrema. Curve sketching. Mean value theorems. Intermediate forms and L'Hospitals

rule. Inverse functions and their derivatives.

Week 5: Anti derivatives and integrals. Areas and distances. Riemann sums and the definite integral. Properties of Integral.

Week 6: The fundamental theorem of calculus. Indefinite Integrals and net change theorem. The

substitution rule.

Week 7: Integrals of elementary functions. Integration by parts. Integrals of trigonometric functions.

Integrals of logarithmic and exponential functions. Integration by substitution. Integration by partial

fractions. Integral tables. Improper integrals.

Week 8: Area between curves and average value. Volumes. Arc length. Area of a surface of revolution. Applications to economics, physics, engineering and biology.

Week 9: Sequences and series. Convergence and absolute convergence. Tests for convergence: divergence test, integral test, p-series test, comparison test, limit comparison test, alternating series test,

ratio test, root test.

Week 10: Power series. Convergence of power series. Representation of functions as power series. Differentiation and integration of power series. Taylor and Maclaurin series.

Approximations by Taylor polynomials.

Week 11: Curves defined by parametric equations. Calculus with parametric curves: tangents, areas,

arc length. Polar coordinates. Polar curves, tangents to polar curves.

Week 12: Areas and arc length in polar coordinates. Cylindrical coordinates, spherical coordinates.

Conic section. Conic section in polar coordinates.

Week 13: Three-dimensional coordinate system, vectors.

The dot product, the cross product. Equations of lines and planes. Cylinders and Quadric surfaces.

Week 14: Vector functions and space curves. Derivatives and integrals of vector valued functions.

Arc length. Curvature, normal and binormal vectors.

Weak 15: Double integrals over rectangular domains. Iterated integrals. Double integrals over non-rectangular domains. Double integrals in polar coordinates. Triple integrals. Triple integrals in cylindrical and spherical coordinates. Applications of double and triple integrals. Change of variables in multiple integrals.

Weak 16: Vector fields. Line integrals. Green's theorem on rectangular domain; Green's theorem over more general domains. Curl and divergence. Surface integrals over scalar and vector fields. Divergence theorem. Stokes' theorem

References

1. G.B. Thomas, R.L. Finney, *"Calculus and Analytic Geometry"*, 11th edition, Pearson Education.
2. J. Stewart, *"Calculus early transcendentals"*, 7th Edition.
3. H. Anton, *"Calculus: A New Horizon"*, 6th edition, 1999, John Wiley, New York.

Mathematics

Content Course II

(From Selected Discipline II)

Semester 6

Semester : 06
Credit Hours:03

Year: 03

Algebra and Elements of Topology

- 1) **Determinants:** Computing of determinants of order two and three. Permutations of order two and three and definitions of determinants of the same order. Definition of higher order determinants.
Properties. Expansion of determinants.
- 2) **Matrices and linear systems:** Matrices. Operations with matrices. The inverse of a matrix. Linear systems of the form $AX = B$ with A an invertible matrix. General linear systems.
- 3) **Linear spaces and subspaces:** K^n ($K = \mathbb{R}$ or $\mathbb{C}$) as linear spaces. Linearly dependent and linearly independent systems of vectors in K^n . Linear subspaces of K^n . System of generators. Bases and dimension of a vector space. Intersections, sums and direct sums of subspaces.
- 4) **Groups:** Definition of a group. More examples: dihedral groups, matrix groups, the quaternion group. Free groups. Permutation groups. The cycle decomposition of a permutation. The sign of a permutation. The alternating group. Direct product of two groups. Examples. Definition of a subgroup. Cyclic groups and cyclic subgroups. The subgroups of $\mathbb{Z}$. The subgroup generated by a set. Cosets and Lagrange's theorem.
- 5) **Topological spaces:** Topology on a set; open and closed subsets, neighbourhoods. Examples.
Limit points and accumulation points. Interior, closure, dense subsets. Constructing new topological spaces: Cartesian products, induced topology, quotient topology. Continuous maps, open and closed maps, homeomorphisms.
- 6) **Metric spaces:** Metric spaces, isometries. Examples. Cauchy sequences, complete metric spaces.
Completion. Function spaces.

Week Plan for Math-2

- Week 1:** Computing of determinants of order two and three. Permutations of order two and three and definitions of determinants of the same order.
- Week 2:** Definition of higher order determinants. Properties. Expansion of determinants.
- Week 3:** Matrices. Operations with matrices. The inverse of a matrix.
- Week 4:** Linear systems of the form $AX = B$ with A an invertible matrix. General linear systems.

Weak 5: K^n ($K = \mathbb{R}$ or $\mathbb{C}$) as linear spaces. Linearly dependent and linearly independent systems of vectors in K^n . Linear subspaces of K^n .

Weak 6: System of generators. Bases and dimension of a vector space.

Weak 7: Intersections, sums and direct sums of subspaces.

Weak 8: Definition of a group. More examples: dihedral groups, matrix groups, the quaternion group. Free groups.

Weak 9: Permutation groups. The cycle decomposition of a permutation. The sign of a permutation.

Weak 10: The alternating group. Direct product of two groups. Examples. Definition of a subgroup.

Weak 11: Cyclic groups and cyclic subgroups.

Weak 12: The subgroups of $\mathbb{Z}$. The subgroup generated by a set. Cosets and Lagrange's theorem.

Weak 13: Topology on a set; open and closed subsets, neighbourhoods. Examples. Limit points and accumulation points. Interior, closure, dense subsets.

Weak 14: Constructing new topological spaces: Cartesian products, induced topology, quotient topology. Continuous maps, open and closed maps, homeomorphisms.

Weak 15: Metric spaces, isometries. Examples. Cauchy sequences.

Weak 16: Complete metric spaces. Completion. Function spaces

References:

1. Ch. W. Curtis, "*Linear Algebra*", Springer 2004.
2. T. Apostol, "*Multi Variable Calculus and Linear Algebra*", 2nd ed., John Wiley and sons, 1997.
3. D.S. Dummit and R.M. Foote, "*Abstract Algebra*", third edition, Wiley and sons, 2004.
4. J.B. Fraleigh, "*A First Course in Abstract Algebra*", third edition, Wiley and sons, 2003.
5. J. Kelly, "*General Topology*", Springer, 2005.
6. K. Jänich, "*Topology*", Springer, 1994.
7. J. Hocking, G. Young, "*Topology*", Dover Publications, 1961.
8. J. R. Munkres, "*Topology - A First Course*", Prentice-Hall, 2003.
9. G. Simmons, "*Topology and modern analysis*", McGraw-Hill, 1963.
10. S. Lipschutz, "*General Topology*", McGraw-Hill, 2004.
11. J. Dugundji, "*Topology*", Allyn and Bacon, 1966.

Mathematics

Content Course III

(From Selected Discipline II)

Semester 7

Differential Equations and Mechanics

- 1) **Preliminaries:** Classification of linear differential equations. Existence and uniqueness of solutions.
The notion of initial value problem.
- 2) **Scalar differential equations:** Homogeneous linear differential equations of order one of the form $x'(t) = a(t)x(t)$; $a(t)$ being a complex scalar valued function. Variation of parameters. Nonhomogeneous linear differential equations of order one of the form $x'(t) = a(t)x(t) + f(t)$; $a(t)$ and $f(t)$ being complex scalar valued functions. Differential equations with separate variables.
Differential equations of Bernoulli and Riccati type. Integrating factors. Clairaut equation.
- 3) **Linear differential systems of order one:** Homogeneous second order differential equations with constant coefficients. The exponential of complex numbers. Systems of linear differential equations with constant coefficients. Structure of the solutions of such systems. Scalar differential equations of order n with constant coefficients. The undetermined coefficients method.
- 4) **Statics:** Composition and resolution of forces. Particles in equilibrium. Parallel forces, moments, couples. General conditions of equilibrium of coplanar forces. Principle of virtual work. Friction, centre of mass and gravity.
- 5) **Dynamics:** Fundamental laws of Newtonian mechanics. Motion in a straight line. Uniformly accelerated and resisted motion. Velocity and acceleration and their components in Cartesian and polar coordinates, tangential and normal components, radial and transverse, Relative motion. Angular velocity. Conservative forces, projectiles. Central forces and orbits. Simple harmonic motion damped and forced vibrations, elastic strings and springs.

Week Plan for Math-3

Week 1: Classification of linear differential equations. Existence and uniqueness of solutions. The notion of initial value problem.

Week 2: Homogeneous linear differential equations of order one of the form $x'(t) = a(t)x(t)$; $a(t)$ being a complex scalar valued function. Variation of parameters.

Weak 3: Nonhomogeneous linear differential equations of order one of the form $x'(t) = a(t)x(t) + f(t)$;

$a(t)$ and $f(t)$ being complex scalar valued functions. Differential equations with separate variables.

Weak 4: Differential equations of Bernoulli and Riccati type. Integrating factors. Clairaut equation.

Weak 5: Applications of the differentiation. Increasing and Homogeneous second order differential equations with constant coefficients. The exponential of complex numbers.

Weak 6: Systems of linear differential equations with constant coefficients. Structure of the solutions

of such systems. Scalar differential equations of order n with constant coefficients. The undetermined coefficients method.

Weak 7: Composition and resolution of forces. Particles in equilibrium. Parallel forces, moments, couples. General conditions of equilibrium of coplanar forces.

Weak 8: Principle of virtual work.

Weak 9: Friction.

Weak 10: Centre of mass and gravity.

Weak 11: Fundamental laws of Newtonian mechanics. Motion in a straight line. Uniformly accelerated and resisted motion.

Weak 12: Velocity and acceleration and their components in Cartesian and polar coordinates, tangential and normal components, radial and transverse,

Weak 13: Relative motion. Angular velocity.

Weak 14: Conservative forces, projectiles.

Weak 15: Central forces and orbits

Weak 16: Simple harmonic motion damped and forced vibrations, elastic strings and springs.

References:

1. V. I. Arnold "Ordinary Differential Equations", Springer, 1991.
2. T. Apostol, "Multi Variable Calculus and Linear Algebra", 2nd ed., John Wiley and sons, 1997.
3. Synge JL, Griffith BA, "Principles of Mechanics", McGraw Hill, New York.
4. F. Chorlton, "Textbook of Dynamics", 1983, Ellis Horwood Ltd.
5. L. A. Pars, "Introduction to Dynamics", 1953, Cambridge University Press.
6. Q.K. Ghorl, "Introduction to Mechanics (Revised Edition)" West Pakistan Publishing Company Limited, Lahore.

Zoology

Content Course I

(From Selected Discipline II)

Semester 5

Objectives:

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

1. identify the importance of zoology.
2. describe basic components of living organisms.
3. explain cell and its organelles.

Course Outline:

Unit-1 Introduction to Zoology

- 1.1 Branches
- 1.2 Importance

Unit-2 Basic components of Living organisms

- 2.1 Carbohydrates
- 2.2 Proteins
- 2.3 Lipids

Unit-3 Food and Nutrition

- 3.1 Balance diet
- 3.2 Malnutrition

Unit-4 Cell and its organelles

- 1.1 Composition
- 1.2 Structure
- 1.3 Function

Unit-5 Microorganisms

- a. Bacteria
- b. Viruses
- c. Diseases

Unit-6 Diversity of Life

6.1 Basic units of classification

Unit-7 Invertebrate Phyla

1.1 Protozoa to Echinoderms

Reference books:

- Biology Books Peshawar Text Book Board
- Integrated principles of Zoology by Hickman
- Zoogeography and paleontology by S. S Ali
- Ecology by Odum
- Evolution by Moodi
- Animal behaviour by Prasad
- Genetics by Strickberger
- Economic Zoology by S. Chand and Prasad

Zoology

Content Course II

(From Selected Discipline II)

Semester 6

Objectives:

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

1. differentiate between chordates and vertebrates.
2. describe organs and organ systems.
3. identify the relationship between living things and non living things.

Course Outline:

Unit-1: Chordates and Vertebrates

- 1.1 Pisces
- 1.2 Amphibians
- 1.3 Reptiles
- 1.4 Birds and mammals

Unit-2 Organ and Organ Systems

- 2.1 Structure
- 2.2 Function

Unit-3 Genetics

- 3.1 Laws of Mendel
- 3.2 Blood Groups
- 3.3 Linkage
- 3.4 Crossing over
- 3.5 Cell division
- 3.6 Mutation
- 3.7 Chromosomal aberration

Unit-4 Evolution

- 4.1 Natural Selection
- 4.2 Lamarckism

4.3 Darwinism

Unit-5 Ecology

5.1 Ecosystems

5.2 Food chain

5.3 Food web

5.4 Population Ecology

5.5 Community Ecology

Unit-6 Adaptations

d. Aquatic

e. Aerial

f. Cursorial

g. Fossorial

h. Arboreal

Reference books:

- Biology Books Peshawar Text Book Board
- Integrated principles of Zoology by Hickman
- Zoogeography and paleontology by S. S Ali
- Ecology by Odum
- Evolution by Moodi
- Animal behaviour by Prasad
- Genetics by Strickberger
- Economic Zoology by S. Chand and Prasad

Zoology

Content Course III

(From Selected Discipline II)

Semester 7

Objectives:

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

1. identify different stages of development.
2. describe animal behavior.
3. explain scope of biotechnology.

Course Outline:

Unit-1 Developmental Biology

- 1.1 Stages of development
- 1.2 Regeneration

Unit-2 Animal Behaviour

- 2.1 Behaviour
- 2.2 Learning and its types
- 2.3 Communication
- 2.4 Social Organization
- 2.5 Migration

Unit-3 Zoogeography

- 3.1 Regions
- 3.2 Distribution of Animals
- 3.3 Barriers

Unit-4 Economic Zoology

- 4.1 Cultures
- 4.2 Zoonosis
- 4.3 Animal products

Unit-5 Biotechnology

- 5.1 Scope and Importance
- 5.2 Concept of DNA/ RNA
- 5.3 Gene
- 5.4 Protein Synthesis

Unit-6 Research Methodology

6.1 Introduction

6.2 Processes

Reference books:

- Biology Books Peshawar Text Book Board
- Integrated principles of Zoology by Hickman
- Zoogeography and paleontology by S. S Ali
- Ecology by Odum
- Evolution by Moodi
- Animal behaviour by Prasad
- Genetics by Strickberger
- Economic Zoology by S. Chand and Prasad

