

# **CURRICULUM OF EDUCATION**

**B. Ed (Hons.) 4 year Degree Program  
(Elementary & Secondary)  
Associate Degree in Education, M. Ed./  
MS. Education**

**(Revised 2010)**



**HIGHER EDUCATION COMMISSION  
ISLAMABAD – PAKISTAN**

## **CURRICULUM DIVISION, HEC**

|                               |                         |
|-------------------------------|-------------------------|
| Dr. Syed Sohail H. Naqvi      | Executive Director      |
| Prof. Dr. Altaf Ali G. Shaikh | Member (Acad)           |
| Mr. Muhammad Javed Khan       | Adviser (Academic)      |
| Ms. Ghayyur Fatima            | Director (Curri)        |
| Dr. M. Tahir Ali Shah         | Deputy Director (Curri) |

Composed by: Mr. Zulfiqar Ali, HEC, Islamabad  
Re-Composed by: Qazi Zahid Raza, HEC, Islamabad

## CONTENTS

|    |  |     |
|----|--|-----|
| 1. | Introduction.....  | 7   |
| 2. | Scheme of Studies B.Ed (Hons) 4 Year<br>Degree Program (Elementary)..... | 17  |
| 3. | Scheme of Studies B.Ed (Hons) 4-year<br>Degree Program (Secondary).....  | 23  |
| 4. | Scheme of Studies (Associate Degree in Education)<br>2-years.....        | 26  |
| 5. | Detail of Courses.....   | 30  |
| 6. | MED/MS Education Scheme of Studies.....                                  | 105 |

## PREFACE

The curriculum of subject is described as a throbbing pulse of a nation. By viewing curriculum one can judge the stage of development and its pace of socio-economic development of a nation. With the advent of new technology, the world has turned into a global village. In view of tremendous research taking place world over new ideas and information pours in like of a stream of fresh water, making it imperative to update the curricula after regular intervals, for introducing latest development and innovation in the relevant field of knowledge.

In exercise of the powers conferred under Section 3 Sub-Section 2 (ii) of Act of Parliament No. X of 1976 titled “**Supervision of Curricula and Textbooks and Maintenance of Standard of Education**” the erstwhile University Grants Commission was designated as competent authority to develop review and revise curricula beyond Class-XII. With the repeal of UGC Act, the same function was assigned to the Higher Education Commission under its Ordinance of 2002 Section 10 Sub-Section 1 (v).

In compliance with the above provisions, the HEC undertakes revamping and refurbishing of curricula after regular intervals in a democratic manner involving universities/DAs, research and development institutions and local Chamber of Commerce and Industry. The intellectual inputs by expatriate Pakistanis working in universities and R&D institutions of technically advanced countries are also invited to contribute and their views are incorporated where considered appropriate by the National Curriculum Revision Committee (NCRC).

To bring international compatibility to qualifications held from Pakistani universities/DAs for promotion of students mobility and job seekers around the globe, a Committee comprising of Conveners of the National Curriculum Revision Committee of HEC met in 2009 and developed a unified template for standardized 4-years/8-semesters BS degree programmes. This unified template was aimed to inculcate broader base of knowledge in the subjects like English, Sociology, Philosophy, Economics etc in addition to major discipline of study. The Bachelor (BS) degree course requires to be completed in 4-years/8-semesters, and shall require qualifying of 130-140 credit hours of which 77% of the curriculum will constitute discipline specific and remaining 23% will comprise compulsory and general courses.

In line with above, NCRC comprising senior university faculty and experts from various stakeholders and the respective accreditation councils has finalized the curriculum for BS and MS (Education). The

same is being recommended for adoption by the universities/DAIs channelizing through relevant statutory bodies of the universities.

**PROF. DR. ALTAF ALI G. SHAIKH**  
**Member Academics**

**March 2010**

## CURRICULUM DEVELOPMENT

### INTRODUCTION

The final meeting of the National Curriculum Revision Committee in Education was held on March 24-26, 2010 at the Higher Education Commission, Regional Centre, Lahore to finalize the revised draft curriculum purposed in NCRC's Preliminary Meetings held on October 5-7, 2009 at the Higher Education Commission, Regional Centre, Lahore and meeting of subcommittee on November 2 – 3, 2009, HEC (See Annexure I & II). The list of participants is as under:

|  |          |
|--|----------|
| Prof. Dr. Rehana Masrur<br>Dean Faculty of Education, AIOU,<br>Islamabad | Convener |
|--|----------|

|  |        |
|--|--------|
| Dr. Mahmood-ul-Hasan Butt,<br>Chief of Party Pre-STEP<br>House No. 14, Street No. 61, F-6/4,<br>Islamabad. | Member |
|--|--------|

|  |        |
|--|--------|
| Dr. Mussaret Anwar Sheikh<br><del>Associate Professor/Chairperson</del><br>Abbreviations Used: | Member |
|--|--------|

NCRC. National Curriculum Revision  
Committee

VCC. Vice-Chancellor's Committee

EXP. Experts

COL. Colleges

UNI. Universities

PREP. Preparation

REC. Recommendations

LI Learning Innovation

R&D Research & Development  
Organization

HEC Higher Education Commission

Member

Member

|   |        |
|---|--------|
| Dr. Khalid Hasan Bukhari<br>Head Department of Education<br>Faculty of Social Sciences, International Islamic<br>University, Islamabad                                  | Member |
| Dr. Humala Khalid<br>Professor, Department of Education<br>Lahore College for Women University,<br>Lahore   | Member |
| Dr. Nancy George<br>Project Director, Pre-STEP,<br>Pre-Services Teacher Education<br>Higher Education Commission, Islamabad   | Member |
| Dr. Bernadette L. Dean<br>Principal, Department of Education,<br>Kinnard College for Women,<br>Lahore   | Member |
| Prof. Dr. Uzma Quraishi,<br>Chairperson, Department of Education,<br>University of Management and Technology,<br>Lahore.  | Member |
| Dr. Rana Hussain<br>Head Graduate Program<br>Aga Khan University, Institute for Educational<br>Development, Karachi   | Member |
| Prof. Qaisera Shaikh<br>Acting Dean & Head Department of Education,<br>Beacon house National University School of Education<br>3-C, Zafar Ali Road Gulberg-5,<br>Lahore | Member |
| Dr. Muhammad Imran Yousaf<br>Assistant Professor, Department of Education<br>PMAS-Arid Agriculture University,<br>Rawalpindi  | Member |
| Dr. Fauzia Khurshid<br>Associate Professor, Department of Education,<br>NUML, Islamabad   | Member |

|   |        |
|---|--------|
| Dr. James Shafi<br>Professor of Education<br>Department of Education,<br>Forman Christian College University,<br>Ferozopur Road, Lahore | Member |
| Dr. Riasat Ali<br>Director, Department of Education<br>University of Sciences & Technology,<br>Bannu                                    | Member |
| Dr. Muhammad Saeed Shahid<br>Chairman, Department of Elementary Education,<br>IER, University of the Punjab,<br>Lahore                  | Member |
| Dr. Abdul Hameed<br>Associate Dean, School of Social Sciences and<br>Humanities<br>University of Management & Technology,<br>Lahore     | Member |
| Dr. Waheed Akbar<br>Assistant Professor, Department of Education<br>Hazara University, Mansehra   | Member |
| Dr. Ishtaiq Hussain<br>Director, Institute of Education and Research<br>Kohat University of Science and Tech. Kohat NWFP                | Member |
| Dr. Jamil Ahmed Memon<br>Additional Director (Acad), Institute of Education<br>Shah Abdul Latif University,<br>Khairpur                 | Member |
| Prof. Dr. M. Aslam Adeeb<br>Professor/ Dean, Faculty of Education<br>Islamia University of Bahawalpur,<br>Bahawalpur                    | Member |
| Prof. Dr. S. Abdul Ghaffar<br>Head, Department of Education<br>Qurtuba University of Science & Information Technology,<br>Peshawar      | Member |



|   |        |
|---|--------|
| Syed Naeem Ahmed<br>Assistant Professor<br>Hamdard University Institute of Education Social<br>Sciences, Karachi                  | Member |
| Dr. Ghulam Hussain Memon<br>Department of Education,<br>University of Karachi, Sindh  | Member |
| Mr. Allah Noor<br>Lecturer, Department of Institute of<br>Education & Research<br>Gomal University<br>D.I.Khan                    | Member |
| Dr. Muhammad Asif Malik<br>Professor & Chairman, Department of Education<br>University of Sargodha,<br>Sargodha                   | Member |
| Prof. Dr. Parveen Munshi<br>Dean, Faculty of Education, University of Sindh,<br>Jamshoro  | Member |
| Ms. Bushra Batool<br>Lecturer, Department of Education,<br>University of Balochistan,<br>Quetta                                   | Member |
| Mrs. Dilangaiz<br>Assistant Dean, Department of Education,<br>Karakoram International University,<br>Gilgat                       | Member |
| Dr. Ahmed Farooq Mashhadi<br>Professor/Chairman, Department of Education,<br>B.Z. University Multan                               | Member |
| Mr. Saqib Ali Khan<br>Technical Adviser, United Nations Population Fund,<br>Ministry of Education, Curriculum Wing,<br>Islamabad. | Member |

|   |                       |
|---|-----------------------|
| Miss Samina Anjum<br>Manager Training, Children's Global Network, Pak,<br>Islamabad   | Member                |
| M. Yaqub Bajwa<br>UNFPA, Ministry of Education, Curriculum Wing,<br>Islamabad.  | Member                |
| Ms. Bushra Batool<br>Lecturer, Department of Education, University of<br>Bolochistan, Quetta.   | Member                |
| Dr. Rizwan Akram Rana<br>Associate Professor / Chairman,<br>Department of Science Education, Institute of Educational<br>and Research,<br>University of the Punjab, Lahore. | Member                |
| Dr. Tayyab Alam Bukhari<br>Head, Department of Research and Development<br>Foundation University, College of Liberal Arts and<br>Sciences<br>New Lalazar Rawalpindi         |                       |
| Dr. Shagafuta Akhtar<br>Assistant Professor/<br>Head, Department of Education<br>Foundation University, College of Liberal Arts and<br>Sciences<br>New Lalazar, Rawalpindi  | Member /<br>Secretary |

The meeting started with recitation from the Holy Quran. The house then, unanimously selected Prof. Dr. Rehana Masruur as Convener and Dr. Shgufta Akhtar, as Secretary of the National Curriculum Revision Committee in Education.

The meeting started with a brainstorming session to review the challenges being faced in the field of education. The participants broadly focused on issues like nomenclatures of various degree programs, equivalence of different degree programs with similar titles, placement of the graduates of these overlapping degree programs and the nature of the education discipline i.e. "academic" vs. "professional".

## MINUTES OF PREMINARY MEETING

A meeting of the National Curriculum Review Committee on Education was held on October 5-7, 2009 at the Lahore Regional Campus of HEC. The meeting started with recitation from the Holy Quran. The house then, unanimously elected Prof. Dr. Rehana Masruur, Dean Faculty of Education, AIOU, Islamabad as the Convener of the National Curriculum Review Committee on Education whereas Prof. Dr. Abdul Hameed, Associate Dean of School of Social Sciences and Humanities, UMT Lahore, was elected as the Secretary of the Committee.

The meeting started with a brainstorming session to review the challenges being faced in the field of education. The participants broadly focused on issues like nomenclatures of various degree programs, equivalence of different degree programs with similar titles, placement of the graduates of these overlapping degree programs and the nature of the education discipline i.e. "academic" vs. "professional".

The general discussion led the groups to focus on the TORs on the National Revision Committee.

After this initial deliberation and discussion, the house decided to constitute two sub-committees, one for reviewing the B.Ed. 4-year program and other for M.Ed. (16+2) program.

### **Sub-Committee for B.Ed. (Four Year Program)**

- |                              |                      |
|------------------------------|----------------------|
| 1. Dr. Hamala Shaheen Khalid | Convener             |
| 2. Dr. Khalid Hassan Bukhari | Member               |
| 3. Dr. Muhammad Tayyab Khan  | Member               |
| 4. Dr. Riasat Ali            | Member               |
| 5. Mrs. Farhana Mukhtar      | Member               |
| 6. Dr. Rehana Masrur         | Member               |
| 7. Dr. Abdul Hameed          | Member               |
| 8. Dr. Mumtaz Amanat         | Member               |
| 9. Dr. Muhammad Asif Malik   | Member/<br>Secretary |

### **Sub-Committee for M.Ed. (16+2) Program**

- |                       |          |
|-----------------------|----------|
| 1. Ms Rana Hussain    | Convener |
| 2. Dr. Perveen Munshi | Member   |

|    |                           |        |
|----|---------------------------|--------|
| 3. | Dr. Hafiz Muhammad Iqbal  | Member |
| 4. | Dr. Muhammad Saeed Shahid | Member |
| 5. | Dr. Muhammad Shah         | Member |
| 6. | Dr. Ishtiaq Hussain       | Member |
| 7. | Dr. Muhammad Imran Yousaf | Member |
| 8. | Dr. Shoukat Ali           | Member |
| 9. | Dr. Jameel Ahmad Memon    | Member |

The rest of the participants were free to join any of the above mentioned two sub-committees. The Conveners of the committee were asked to co-opt any participant when and where need arisen.

The National Curriculum Revision Committee on Education made following decisions / observations during different sessions of the meeting:

1. It was resolved with a majority vote that the title of four year program would be "B. Ed. (Honours) not B.S. Education"
2. There would be two entry points for B.Ed. (Honour) program:
  - a. After completing HSSC (Intermediate)
  - b. After completing four semesters in a B.S. program
3. The new four year degree program will replace the existing B.A./ B.Sc. B.Ed. program
4. The 5<sup>th</sup> semester will be an entry point for those candidates who will be following their two year BS/B.Sc. and wish to join the 4 year B.Ed. program.
5. The 5<sup>th</sup> semester will also be an entry point for those students who have done conventional BA/B.Sc. and want to join 4 year B.Ed. program with possible deficiencies of four courses at the undergraduate level.
6. The service rules for induction of SST will be revised to accommodate the graduates of new degree program i.e. B.Ed. (Honour).
7. Participants were requested to revise / develop the course outlines and send them to the Convener and Secretary of NCRC.
8. A meeting of the core group may be held in near future at Islamabad for finalization of course outline and other requirements of the program.

The meeting ended with a vote of thanks to the chair, organizers and participants.

**Minutes of sub-committee meeting held on  
November 2-3, 2009 at HEC, Islamabad**

A meeting of the sub-committee of National Curriculum Revision Committee in Education was held on November 2-3, 2009 at Higher Education Commission, Islamabad. Following attended the meeting: -

| <b>Sr.</b> | <b>Name &amp; Designation</b>  |          |
|------------|--|----------|
| 1.         | Dr. Rehana Masrur, Dean Faculty of Education / Chairperson, Secondary Teacher Education Department, Allama Iqbal Open University, Islamabad.                             | Convener |
| 2.         | Dr. Hamala Shaheen Khalid, Dean Faculty of Humanities, Islamic and Oriental Learning / Chairperson, Department of Education Lahore College for Women University, Lahore. | Member   |
| 3.         | Dr. Abdul Hameed, Professor of Education, Associate Dean, School of Social Science and Humanities, University of Management & Technology, C-II, Johar Town, Lahore.      | Member   |
| 4.         | Ms. Shagufta Akhtar, Assistant Professor, Head of Education Department, Foundation University College of Liberal Arts and Sciences, New Lalazar, Rawalpindi.             | Member   |
| 5.         | Dr. Nabi Bux Jumani, Coordinator Pre-STEP, AIOU / Assistant Professor, Department of Secondary Teacher Education, Allama Iqbal Open University, Islamabad.               | Member   |
| 6.         | Dr. Nancy George, Director, Pre-Step Universities, Islamabad.  | Member   |

The participants discussed the curriculum framework and its characteristics. An overview of the context, courses and perceived characteristics of the B.Ed curriculum framework were analyzed. Curriculum of core courses, foundation, professional and specialized components need to be interwoven to improve the quality. An attempt of this kind will give a more meaningful direction. The meeting categorized the teacher education curriculum in to the following main components:

- I. Core Courses
- II. Foundation Courses
- III. Professional Courses
- IV. Specialized Courses

Members after brainstorming identified the courses and credit hours which were discussed and finalized by National Curriculum Revision Committee in Education held on 24-26 March, 2010 at the Higher Education Commission, Regional Centre, Lahore.

**The main agenda was:**

- To prepare scheme of studies and detailed course outline for Associate Degree in Education (ADE) in alignment with B.Ed (Hons.) Degree Programme for Elementary School Teachers.
- To finalize the scheme of studies and detailed course outline for B.Ed (Hons.) Degree Programme for Secondary School Teachers.
- To finalize the scheme of studies for M.Ed. / M.S Education.

The proceeding of the meeting was divided in different sessions of task for the accomplishment of agenda. On 1<sup>st</sup> day of the meeting, the committee after long deliberations, unanimously agreed on the scheme of studies for ADE aligned with B.Ed (Hons.) 4 year degree programme (elementary). The committee was then divided into four sub committees to prepare course outlines of different courses proposed in different semesters. On 2<sup>nd</sup> day, the committee started the work with the agenda of finalizing the scheme of studies and course outlines for B.Ed (Hons.) 4 year degree programme (secondary).

In the first session of 3<sup>rd</sup> day, the committee after finalization the curriculum of B.Ed (Hons.) 4 year degree programme (secondary), had a long discussion on M.Ed / M.S Education and finalized the scheme of studies.

The meeting ended with a vote of thanks to the chair, organizers and participants.

**Rationale of B.Ed. (12+ 4 years) Programme**

Professional education needs life time commitment and intensive training of four year's education such as the engineering, medical and law professions in keeping with the tradition of professional education, a new four year program B.Ed. (Hons) is presented in the following pages.

In order to make teaching a profession of choice through implementing B.Ed. (12+4) program developed in 2006, it is imperative to revise the current curriculum to improve the teacher development program further. A teacher in the classroom needs to be competent in the content areas as well as in teaching strategies in order to ensure expected student learning outcomes. As in any profession teachers should be provided the opportunity to practice teaching through interacting with the school and community. In the clinical model of developing teachers as professionals, it is important for that prospective teacher to gain adequate insight into the ground realities of school and classrooms through their attachments in schools and communities. This rich experience of practice enables prospective teachers to bring a positive attitude in classroom teaching and understanding a plurality of cultures.

Practice teaching is a major and joint responsibility of teacher training institutions, schools involving teacher educators, prospective teachers and school teachers. Inclusion of short term training with long term teaching practice will provide an opportunity to prospective teachers to extend their role in the school situation other than classroom teaching. During their short term teaching practice, prospective teachers can be engaged in administrative activities under supervision such as maintenance of school records and registers, management of laboratories and library, preparation of tests and assignments, admission and selection of students and classroom management, etc.

Planning and carrying out an action research activity, engaging in courses like critical thinking and reflective practices, studying contemporary issues and trends in education and involvement of prospective teachers in practical/field work would greatly reduce isolation of the teacher and will develop the habit of inquiry into practice. This breakthrough is expected to facilitate the process of multiculturalism and pluralism in our education system to bring about social transformation in the society.

Hence, a blend of content and pedagogical courses has been provided in the scheme of studies – the two years of graduate courses and two years long professional courses to prepare prospective teachers as professionals in education.

In addition, the revised curriculum is based on the principal of choice and flexibility, allowing different entry points and the accumulation of credits for the two year degree courses to be transferred to join the 4 year B.Ed (Hons) program.

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

### **Eligibility Criteria**

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

|                                 |  |
|---------------------------------|--|
| Duration:                       | 4 years                                      |
| Semester Duration:              | 16-18 weeks                                  |
| Semesters:                      | 8  |
| Course Load Per Semester:       | 15-18 Credit Hours                           |
| Number of Courses per semester: | 5-6 (not more than 3 lab/ practical courses) |

### **Structure of the Scheme**

| <b>Courses</b>             | <b>Credit Hours</b> |
|----------------------------|---------------------|
| Compulsory Courses         | 19                  |
| Professional Courses       | 51                  |
| Foundation Courses         | 24                  |
| Content Courses            | 26                  |
| Teaching Practice          | 15                  |
| <b>Total Credit Hours:</b> | <b>135</b>          |



**Year / Semester wise Scheme of Studies of B.Ed  
(Elementary)**

**1<sup>st</sup> 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          |
|      | <b>Total Credit Hours</b>                | <b>17</b>  |

**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          |
|      | <b>Total Credit Hours</b>                          | <b>17</b>  |

**2<sup>nd</sup> 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 G. Science (Professional)  | 3         |
| 5 | Instructional and Communication Technology (ICT) in Education (Professional) | 2         |
| 6 | Teaching Practice (Short Term)   | 3         |
|   | <b>Total Credit Hours</b>  | <b>17</b> |

### 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          |
|      | <b>Total Credit Hours</b>                  | <b>17</b>  |

### 3<sup>rd</sup> Year

### SEMESTER – V

| S.NO | COURSES  | CREDIT HRS |
|------|--|------------|
| 1    | English – III (Technical Writing & Presentation Skills) (Compulsory) | 3          |
| 2    | Foundations of Education (Foundation)                                | 3          |
| 3    | Content Course – I (from selected discipline – I)                    | 3          |
| 4    | Content Course – I (from selected discipline – II)                   | 3          |
| 5    | Curriculum Development (Foundation)                                  | 3          |
| 6    | Educational Psychology (Foundation)                                  | 3          |

|  |                           |           |
|--|---------------------------|-----------|
|  | <b>Total Credit Hours</b> | <b>18</b> |
|--|---------------------------|-----------|

**SEMESTER – VI**

| <b>S.NO</b> | <b>COURSES</b>   | <b>CREDIT HRS</b> |
|-------------|--|-------------------|
| 1           | Contemporary Issues and Trends in Education (Professional) | 3                 |
| 2           | Content Course – II<br>(from selected discipline – I)      | 2                 |
| 3           | Content Course – II<br>(from selected discipline – II)     | 3                 |
| 4           | Comparative Education (Professional)                       | 3                 |
| 5           | Introduction to Guidance and Counseling (Professional)     | 3                 |
|             | <b>Total Credit Hours</b>                                  | <b>15</b>         |

**4<sup>th</sup> Year**

**SEMESTER – VII**

| <b>S.NO</b> | <b>COURSES</b>   | <b>CREDIT HRS</b> |
|-------------|--|-------------------|
| 1           | Content Course – III<br>(from selected discipline – I)             | 3                 |
| 2           | Content Course – III<br>(from selected discipline – II)            | 3                 |
| 3           | Pedagogy – I (Methods of Teachings related to specialization – I)  | 3                 |
| 4           | Pedagogy – II (Methods of teaching related to specialization – II) | 3                 |
| 5           | Research Methods in Education (Professional)                       | 3                 |
| 6           | Teaching Practice (Short Term)                                     | 3                 |
|             | <b>Total Credit Hours</b>  | <b>18</b>         |

### SEMESTER – VIII

| S.NO | COURSES  | CREDIT HRS |
|------|--|------------|
| 1    | School Management (Professional)               | 3          |
| 2    | Test Development and Evaluation (Professional) | 3          |
| 3    | Teaching Practice (Long Term)                  | 6          |
| 4    | Research Project (Professional)                | 3          |
|      | <b>Total Credit Hours</b>                      | 15         |
|      | <b>Grand Total Credit Hours</b>                | 134        |

**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 Programme will continue for 3<sup>rd</sup> and 4<sup>th</sup> Year.

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

### **Eligibility Criteria**

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

|                                 |   |
|---------------------------------|---|
| Duration:                       | 4 years (8 Semesters)                           |
| Semester Duration:              | 16-18 weeks                                     |
| Semesters:                      | 8 #   |
| Course Load per semester:       | 15-18 Cr hr                                     |
| Number of Courses per semester: | 5-6 (not more than<br>3 lab/ practical courses) |

### **Structure of the Scheme**

| <b>Courses</b>             | <b>Credit Hours</b> |
|----------------------------|---------------------|
| Compulsory Courses         | 25                  |
| Professional Courses       | 36                  |
| Foundation Courses         | 30                  |
| Content Courses            | 24-33               |
| Teaching Practice          | 12                  |
| <b>Total Credit Hours:</b> | <b>127-136</b>      |

**Year/ Semester wise Scheme of Studies of B. Ed  
(Secondary)**

**1<sup>st</sup> YEAR**

**SEMESTER – I**

| <b>SR.NO</b> | <b>COURSES</b>  | <b>CREDIT HOURS</b> |
|--------------|---|---------------------|
| 1            | Islamic Studies / Ethics                              | 2                   |
| 2            | English – I   | 3                   |
| 3            | Foundations of Education                              | 3                   |
| 4            | Development of Education in Pakistan                  | 3                   |
| 5            | Content Course – I<br>(from selected discipline – I)  | 3                   |
| 6            | Content Course – I<br>(from selected discipline – II) | 3                   |
|              | <b>Total Credit Hours</b>                             | <b>17</b>           |

**SEMESTER - II**

| <b>SR.NO</b> | <b>COURSES</b>   | <b>CREDIT HOURS</b> |
|--------------|--|---------------------|
| 1            | English-II   | 3                   |
| 2            | Mathematics  | 3                   |
| 3            | Critical Thinking and Reflecting Practices             | 3                   |
| 4            | Human Development and Learning                         | 3                   |
| 5            | Content Course – II<br>(from selected discipline – I)  | 3                   |
| 6            | Content Course – II<br>(from selected discipline – II) | 3                   |
|              | <b>Total Credit Hours</b>                              | <b>18</b>           |

**2<sup>ND</sup> YEAR**

**SEMESTER - III**

| <b>SR.NO</b> | <b>COURSES</b>   | <b>CREDIT HOURS</b> |
|--------------|--|---------------------|
| 1            | Pakistan Studies                                       | 2                   |
| 2            | Computer Literacy                                      | 2+1                 |
| 3            | English – III  | 3                   |
| 4            | Content Course – III<br>(from selected discipline – I) | 3                   |

|   |   |           |
|---|---|-----------|
| 5 | Content Course – III<br>(from selected discipline – II) | 3         |
| 6 | General Methods of Teaching                             | 3         |
|   | <b>Total Credit Hours</b>                               | <b>17</b> |

### SEMESTER – IV

| SR.NO | COURSES  | CREDIT HOURS |
|-------|--|--------------|
| 1     | Content Course – IV<br>(from selected discipline – I)  | 3            |
| 2     | Content Course – IV<br>(from selected discipline – II) | 3            |
| 3     | Guidance and Counseling                                | 3            |
| 4     | Classroom Assessment                                   | 3            |
|       | Classroom Management                                   | 3            |
|       | Supervised School Experience /<br>Observation / Visits | 3            |
|       | <b>Total Credit Hours</b>                              | <b>18</b>    |

### 3<sup>RD</sup> YEAR

#### SEMESTER – V

| SR.NO | COURSES  | CREDIT HOURS |
|-------|--|--------------|
| 1     | Curriculum Development   | 3            |
| 2     | School, Community and Teacher  | 2+1          |
| 3     | Content Course – V<br>(from selected discipline – I)                   | 3            |
| 4     | Content Course – V ( )<br>(from selected discipline – II)              | 3            |
| 5     | Pedagogy – I (Methods of teachings related<br>to specialization – I)   | 3            |
| 6     | Pedagogy – II (Methods of teachings related<br>to specialization – II) | 3            |
|       | <b>Total Credit Hours</b>  | <b>18</b>    |

#### SEMESTER – VI

| SR.NO | COURSES  | CREDIT HOURS |
|-------|--|--------------|
| 1     | Research Methods in Education  | 3            |
| 2     | Pedagogy – III (Methods of teachings<br>related to specialization – I) | 3            |

|   |  |           |
|---|--|-----------|
| 3 | Pedagogy – IV(Methods of teachings related to specialization – II) | 3         |
| 4 | Test Development and Evaluation                                    | 3         |
|   | Teaching Practice (Short Term)                                     | 3         |
|   | Introduction to Statistics   | 3         |
|   | <b>Total Credit Hours</b>  | <b>18</b> |

#### 4<sup>TH</sup> YEAR

##### SEMESTER - VII

| SR.NO | COURSES                                     | CREDIT HOURS |
|-------|---|--------------|
| 1     | Inclusive Education                         | 3            |
| 2     | Contemporary Issues and Trends in Education | 3            |
| 3     | Research Project                            | 3            |
| 4     | Comparative Education                       | 3            |
|       | Information Communication Technology (ICT)  | 3            |
|       | <b>Total Credit Hours</b>                   | <b>15</b>    |

##### SEMESTER - VIII

| SR.NO | COURSES                               | CREDIT HOURS |
|-------|---------------------------------------|--------------|
| 1     | Educational Management and Leadership | 3            |
| 2     | Teaching Practice (Long Term)         | 6            |
| 3     | Environmental Education               | 3            |
|       | <b>Total Credit Hours</b>             | <b>12</b>    |

**Note:**

1. Universities / Institution may add additional and/or advance level content courses if deemed necessary.
2. Universities / Institution may re-organize the courses in various semesters according to the local needs and facilities / resources available (the flexibility is provided to facilitate the universities / institutions).
3. The specialized courses of pedagogy and content courses shall be developed by the concerned university according to the expertise and resources available for any area/s of specialization offered by the university/institution.



## ASSOCIATE DEGREE IN EDUCATION (ADE) TWO YEARS SCHEME OF STUDIES

### Eligibility Criteria

1. FA/F.Sc/ A levels with minimum 2<sup>nd</sup> 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       | 21           |
| Foundation Courses         | 15           |
| Content Courses            | 09           |
| Teaching Practice          | 06           |
| <b>Total Credit Hours:</b> | <b>67</b>    |

### 1<sup>ST</sup> YEAR

#### SEMESTER – I

| SR.NO | COURSES                                  | CREDIT HOURS |
|-------|--|--------------|
| 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            |
|       | <b>Total Credit Hours</b>                | <b>17</b>    |

**SEMESTER - II**

| SR.NO | COURSES  | CREDIT HOURS |
|-------|--|--------------|
| 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            |
|       | <b>Total Credit Hours</b>                          | <b>17</b>    |

**2<sup>nd</sup> YEAR****SEMESTER - III**

| SR.NO | COURSES  | CREDIT HOURS |
|-------|--|--------------|
| 1     | Teaching Literacy Skills (Professional)                                      | 3            |
| 2     | Art, Crafts and Calligraphy (Content)  | 3            |
| 3     | Teaching of Urdu/ Regional Languages (Professional)                          | 3            |
| 4     | Teaching of G. Science (Professional)  | 3            |
| 5     | Instructional and Communication Technology (ICT) in Education (Professional) | 2            |
| 6     | Teaching Practice (Short Term)   | 3            |
|       | <b>Total Credit Hours</b>  | <b>17</b>    |

**SEMESTER - IV**

| SR.NO | COURSES                                    | CREDIT HOURS |
|-------|--|--------------|
| 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            |
|       | <b>Total Credit Hours</b>                  | <b>17</b>    |

## Course Outlines Contents

| S. No | Courses  | Page No |
|-------|--|---------|
|       | <b>COMPULSORY COURSES</b>  |         |
| 1.    | Functional English-I (Compulsory)  |         |
| 2.    | English-II (Communication Skills) (Compulsory)                               |         |
| 3.    | English-III (Technical Writing & presentation skills) (Compulsory)           |         |
| 4.    | Islamic Studies/Ethics (Compulsory)  |         |
| 5.    | Computer Literacy (Compulsory)   |         |
| 6.    | General Mathematics (Compulsory)   |         |
| 7.    | Pakistan Studies (Compulsory)  |         |
|       | <b>PROFESSIONAL COURSES</b>  |         |
| 8.    | Methods of Teaching Islamic Studies (Professional)                           |         |
| 9.    | Teaching of Urdu/ Regional Languages (Professional)                          |         |
| 10.   | Teaching Literacy Skills (Professional)                                      |         |
| 11.   | Teaching of General Science (Professional)                                   |         |
| 12.   | Instructional and Communication Technology (ICT) in Education (Professional) |         |
| 13.   | Teaching of English (Professional)   |         |
| 14.   | Teaching of Mathematics (Professional)                                       |         |
| 15.   | Teaching of Social Studies (Professional)                                    |         |
| 16.   | Contemporary Issues and Trends in Education (Professional)                   |         |
| 17.   | Comparative Education (Professional)   |         |
| 18.   | Introduction to Guidance and Counseling (Professional)                       |         |
| 19.   | Research Methods in Education (Professional)                                 |         |
| 20.   | School Management (Professional)   |         |
| 21.   | Test Development and Evaluation (Professional)                               |         |
| 22.   | Research project (Professional)  |         |
|       | <b>FOUNDATION COURSES</b>  |         |
| 23.   | Child Development (Foundation)   |         |
| 24.   | General Methods of Teaching (Foundation)                                     |         |
| 25.   | Classroom Management (Foundation)  |         |
| 26.   | Classroom Assessment (Foundation)  |         |
| 27.   | School, Community and Teacher (Foundation)                                   |         |
| 28.   | Foundations of Education (Foundation)  |         |
| 29.   | Curriculum Development (Foundation)  |         |
| 30.   | Educational Psychology (Foundation)  |         |
|       | <b>CONTENT COURSES</b>   |         |
| 31.   | Urdu / Regional Languages (Content)  |         |
| 32.   | General Science (Content)  |         |

|     |  |  |
|-----|--|--|
| 33. | Art, Crafts and Calligraphy (Content)                              |  |
| 34. | Content Course – I (From selected discipline – I)                  |  |
| 35. | Content Course – I (From selected discipline – II)                 |  |
| 36. | Content Course – II (From selected discipline – I)                 |  |
| 37. | Content Course – II (From selected discipline – II)                |  |
| 38. | Content Course – III (From selected discipline – I)                |  |
| 39. | Content Course – III (From selected discipline – II)               |  |
|     |  |  |
| 40. | Teaching Practice (Short Term)                                     |  |
| 41. | Teaching practice  |  |
| 42. | Teaching Practice (Short Term)                                     |  |
| 43. | Teaching Practice (Long Term)                                      |  |
| 44. | Pedagogy – I (Methods of teaching related to specialization – I)   |  |
| 45. | Pedagogy – II (Methods of teaching related to specialization – II) |  |
|     |  |  |
| 46. | Development of Education in Pakistan                               |  |
| 47. | Critical Thinking and Reflecting Practice                          |  |
| 48. | Human Development and Learning                                     |  |
| 49. | Inclusive Education  |  |
| 50. | Educational Management and Leadership                              |  |
| 51. | Environmental Education  |  |
| 52. | Supervised School Experience / Observation / Visits                |  |

## DETAILS OF COURSES

**Title of Course**      **Functional English – I (Compulsory)**

**Credit Hours**      **3**

### **Objective**

- Enhance language skills and develop critical thinking.

### **Course Content**

1. Basics of Grammar
2. Parts of speech and use of articles
3. Sentence structure, active and passive voice
4. Practice in unified sentence
5. Analysis of phrase, clause and sentence structure
6. Transitive and intransitive verbs
7. Punctuation and spelling

### **Comprehension**

Answers to questions on a given text

### **Discussion**

General topics and every-day conversation (topics for discussion to be at the discretion of the teacher keeping in view the level of students)

### **Listening**

To be improved by showing documentaries/films carefully selected by subject teachers

### **Translation skills**

### **Urdu to English**

### **Paragraph writing**

Topics to be chosen at the discretion of the teacher

### **Presentation skills**

Introduction

*Note: Extensive reading is required for vocabulary building*

## **Recommended books**

### **Functional English**

#### a) Grammar

1. Practical English Grammar by A.J. Thomson and A.V. Martinet. Exercises 1. Third edition. Oxford University Press. 1997. ISBN 0194313492
2. Practical English Grammar by A.J. Thomson and A.V. Martinet. Exercises 2. Third edition. Oxford University Press. 1997. ISBN 0194313506

#### b) Writing

Writing. Intermediate by Marie-Christine Boutin, Suzanne Brinand and Françoise Grellet. Oxford Supplementary Skills. Fourth Impression 1993. ISBN 0 19 435405 7 Pages 20-27 and 35-41.

#### c) Reading/Comprehension

Reading. Upper Intermediate. Brian Tomlinson and Rod Ellis. Oxford Supplementary Skills. Third Impression 1992. ISBN 0 19 453402 2.

#### d) Speaking

### **Title of Course: Functional English – II (Communication Skills)**

**Credit Hours: 3**

#### **Objectives**

- Enable the students to meet their real life communication needs.

## **Course Contents**

### **Paragraph writing**

Practice in writing a good, unified and coherent paragraph

### **Essay writing**

Introduction

### **CV and job application**

Translation skills

Urdu to English

### **Study skills**

Skimming and scanning, intensive and extensive, and speed reading, summary and précis writing and comprehension

### **Academic skills**

Letter/memo writing, minutes of meetings, use of library and internet

### **Presentation skills**

Personality development (emphasis on content, style and pronunciation)

*Note: documentaries to be shown for discussion and review*

## **Recommended books**

### **A. Communication Skills**

#### a) Grammar

1. Practical English Grammar by A.J. Thomson and A.V. Martinet. Exercises 2. Third edition. Oxford University Press 1986. ISBN 0 19 431350 6.

#### b) Writing

2. Writing. Intermediate by Marie-Christine Boutin, Suzanne Brinand and Françoise Grellet. Oxford Supplementary Skills. Fourth Impression 1993. ISBN 019 435405 7 Pages 45-53 (note taking).
3. Writing. Upper-Intermediate by Rob Nolasco. Oxford Supplementary Skills. Fourth Impression 1992. (particularly good for writing memos, introduction to presentations, descriptive and argumentative writing). ISBN 0 19 435406 5

c) Reading

1. Reading. Advanced. Brian Tomlinson and Rod Ellis. Oxford Supplementary Skills. 3<sup>rd</sup> Impression 1991. ISBN 0 19 453403 0.
2. Reading and Study Skills by John Langan
3. Study Skills by Riachard Yorky.

**Title of Course:        Functional English – III  
                                  (Technical Writing & Presentation Skills)**

**Credit Hours:         3**

**Objectives**

- Enhance language skills and develop critical thinking

**Course Contents**

**Presentation skills**

**Essay writing**

Descriptive, narrative, discursive, argumentative

**Academic writing**

How to write a proposal for research paper/term paper

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

**Technical Report writing**

**Progress report writing**

*Note: Extensive reading is required for vocabulary building*

**Recommended books**

Technical Writing and Presentation Skills

a) Essay Writing and Academic Writing

1. 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).
2. College Writing Skills by John Langan. Mc=Graw-Hill Higher Education. 2004.



3. Patterns of College Writing (4<sup>th</sup> edition) by Laurie G. Kirszner and Stephen R. Mandell. St. Martin's Press.
- b) Presentation Skills
- c) Reading
- The Mercury Reader. A Custom Publication. Compiled by northern Illinois University. General Editors: Janice Neulib; Kathleen Shine Cain; Stephen Ruffus and Maurice Scharon. (Note: A reader which will give students exposure to the best of twentieth century literature, without taxing the taste of engineering students).

**Title of Course: Islamic Studies**

**Credit Hours: 3**

**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

5)

**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, (1993), "*Principles of Islamic Jurisprudence*" Islamic Research Institute: Islamabad: Pakistan, International Islamic University.

Bhatia, H. S. (1989) "*Studies in Islamic Law, Religion and Society*" New Delhi: Deep & Deep Publications

Dr. Muhammad Zia-ul-Haq, (2001). "*Introduction to Al Sharia Al Islamia*" Islamabad, Pakistan: Allama Iqbal Open University

Hameed ullah Muhammad, '*Introduction to Islam Mulana Muhammad Yousaf Islahi*,'

Hameed ullah Muhammad, "*Emergence of Islam*" , Islamabad: IRI.

Hameed ullah Muhammad, "*Muslim Conduct of State*" Islamabad, Pakistan: Hussain Hamid Hassan, u leaf Publication.

Mir Waliullah, (1982), "*Muslim Jrisprudence and the Quranic Law of Crimes*" Islamic Book Service.

**Title of Course:**       **Computer Literacy**

**Credit Hours:**       **3**

**Course Descriptions**

Computer is a power tool of information and communication technology has become an important of our life. The efficiency in the office or home is now defined partially in proportion to use of computer at these places. Classroom, which is full of computer users, is no exception. The prospective teachers need to understand the rule of computer as a machine and a partner to effective teacher. The course is designed to provide computer knowledge and skill to the teacher so that teaching effectiveness can be enhanced.

**Learning Outcomes**

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

- define computer terminology
- identify the basic components of a computer and describe the function of each.
- use the keyboard to interact with the computer
- describe different applications of computers in education.
- develop skills to use computer in educational settings.
- communicate through computer with friends, and teachers in and outside the country.
- use computer for research, data analysis and presentations

**Course Outline**

**Unit 01: Introduction**

- 1.1 Definition and Importance of Computer
- 1.2 Basic Concepts of the Computer Hardware
- 1.3 Input and Output Devices
- 1.4 Functions of Computer

**Unit 02: Computer Software**

- 2.1 Concept of Software
- 2.2 Types of Software
- 2.3 Applications of Computer in Education

**Unit 03: Word Processing and Document Handling**

- 3.1 Creating, Saving and Opening a Document
- 3.2 Composing and editing Educational Documents
- 3.3 Inserting and resizing tables, pictures and shapes
- 3.4 Line Spacing, paragraphing and formatting text
- 3.5 Page Setup and Printing document

**Unit 04 Spreadsheet (Excel)**

- 4.1 Features of M.S. Excel
- 4.2 Sum/Subtractions/Multiplication/division/  
Percentage/ Average/ If statement
- 4.3 Sorting and Filtering Data
- 4.4 Inserting Charts and Graphs

**Unit 05 PowerPoint**

- 5.1 Composing Presentations
- 5.2 Delivering Presentations

**Unit 06 Internet and Information Highways**

- 6.1. Network, Types of Network, Server and Client
- 6.2. Internet, World Wide Web, Search Engines,  
Internet Browser
- 6.3. E-Mail Management
- 6.4. Online Educational Resources
- 6.5. Educational databases

**Unit 07 Computer Based Instructions**

- 7.1 Computer Based Instructions: an introduction
- 7.2 Computer Assisted Instruction
- 7.3 Computer Based Assessment

**Course Evaluation**

|                   |            |
|-------------------|------------|
| Assignments       | 20         |
| Mid Semester Test | 25         |
| Final Project     | 15         |
| Final Test        | <u>40</u>  |
| <b>Total</b>      | <b>100</b> |

**Recommended Books**

Faden, P.D., and Vogel, R.M. (2003). *Methods of Teaching*, Boston: Mc-Graw Hills.

Joyce, B., Weil M., and Calhoun, E. (2000). *Models of Teaching, 6th ed.* Boston: Allyn and Bacon.

Norton, P. (2000). *Introduction to Computers 5<sup>th</sup> ed*; New York: Mc-Graw Hill Book Co.

Norton, P. (2003). *Introduction to Computers, 5th ed.*, New York:

McGraw-Hill Book Co.

Norton, P., & Spragu, D. (2001). *Technology for Teaching*, Boston: Allyn and Bacon.

Sharma, A. (1999). *Modern Educational Technology*, New Delhi: Prentice-Hall.

Sharma, S. R. (2000). *Effective Classroom Teaching Modern Methods, Tools and Techniques*. Jaipur: Mangal Deep Publications.

Shelly, G. B. & Vermaat, M. E. (2008). *Discovering Computer*. Pakistan: Book Media

**Title of Course      General Mathematics**

**Credit Hours        3**

**Pre-requisites      SSC (Metric) Level Mathematics**

### **Objectives**

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

- Understand the use of the essential tools of basic mathematics;
- Apply the concepts and the techniques in their respective disciplines;
- Model the effects non-isothermal problems through different domains;

### **Contents:**

#### **1. Algebra:**

*Preliminaries:* Real and complex numbers, Introduction to sets, set operations, functions, types of functions. *Matrices:* Introduction to matrices, types of matrices, inverse of matrices, determinants, system of linear equations, Cramer's rule. *Quadratic equations:* Solution of quadratic equations, nature of roots of quadratic equations, equations reducible to quadratic equations. *Sequence and Series:* Arithmetic, geometric and harmonic progressions. *Permutation and combinations:* Introduction to permutation and combinations, *Binomial Theorem:* Introduction to binomial theorem. *Trigonometry:* Fundamentals of trigonometry, trigonometric identities. *Graphs:* Graph of straight line, circle and trigonometric functions.

#### **2. Statistics:**

*Introduction:* Meaning and definition of statistics, relationship of statistics with social science, characteristics of statistics, limitations of statistics and main division of statistics. *Frequency*

*distribution*: Organisation of data, array, ungrouped and grouped data, types of frequency series, individual, discrete and continuous series, tally sheet method, graphic presentation of the frequency distribution, bar frequency diagram histogram, frequency polygon, cumulative frequency curve. *Measures of central tendency*: Mean, median and modes, quartiles, deciles and percentiles. *Measures of dispersion*: Range, inter quartile deviation, mean deviation, standard deviation, variance, moments, skewness and kurtosis.

### Recommended Books

Kaufmann. J. E., '*College Algebra and Trigonometry*', PWS-Kent Company, Boston, Latest Edition.  
Swokowski. E. W., '*Fundamentals of Algebra and Trigonometry*', Latest Edition.  
Walpole, R. E., '*Introduction of Statistics*', Prentice Hall, Latest Edition.  
Wilcox, R. R., '*Statistics for The Social Sciences*',

**Title of Course:** Pakistan Studies

**Credit Hours:** 3

**Pre-requisites:** SSC (Metric) Level Mathematics

### Objectives

- Develop vision of historical perspective, government, politics, contemporary Pakistan, ideological background of Pakistan.
- Study the process of governance, national development, issues arising in the modern age and posing challenges to Pakistan.

### Course Outline

1. **Historical Perspective**
  - 1.1. Ideological rationale with special reference to Sir Syed Ahmed Khan, Allama Muhammad Iqbal and Quaid-i-Azam Muhammad Ali Jinnah.
  - 1.2. Factors leading to Muslim separatism
  - 1.3. People and Land
    - i. Indus Civilization
    - ii. Muslim advent
    - iii. Location and geo-physical features.

2. **Government and Politics in Pakistan**
  - 2.1. Political and constitutional phases:
    - a. 1947-58
    - b. 1958-71
    - c. 1971-77
    - d. 1977-88
    - e. 1988-99
    - f. 1999 onward
  
3. **Contemporary Pakistan**
  - 3.1. Economic institutions and issues
  - 3.2. Society and social structure
  - 3.3. Ethnicity
  - 3.4. Foreign policy of Pakistan and challenges
  - 3.5. Futuristic outlook of Pakistan

**Recommended Books**

Afzal, M. Rafique. (1988), *Political Parties in Pakistan*, Vol. I, II & III. Islamabad: National Institute of Historical and cultural Research.

Akbar, S. Zaidi. (2000) *Issue in Pakistan's Economy*. Karachi: Oxford University Press.

Aziz, K.K. Party, (1976), *Politics in Pakistan*, Islamabad: National Commission on Historical and Cultural Research

Burki, Shahid Javed. (1980). *State & Society in Pakistan*, The Macmillan Press Ltd.

Haq, Noor ul. (1993) *Making of Pakistan: The Military Perspective*. Islamabad: National Commission on Historical and Cultural Research.

Muhammad Waseem, (1987) *Pakistan Under Martial Law*, Lahore: Vanguard.

S.M. Burke and Lawrence Ziring. (1993) *Pakistan's Foreign policy: An Historical analysis*. Karachi: Oxford University Press.

Sayeed, Khalid Bin. (1967) *The Political System of Pakistan*. Boston: Houghton Mifflin.

Zahid, Ansar. (1980), *History & Culture of Sindh*. Karachi: Royal Book Company.

Ziring, Lawrence. (1980), *Enigma of Political Development*. Kent England: WmDawson & sons Ltd.

| <b>Title of Course</b> | <b>Methods of Teaching</b> |
|------------------------|----------------------------|
| <b>Credit Hours</b>    | <b>3</b>                   |



### **Course Description**

The purpose of course is to prepare prospective teachers in learning and using different method and techniques of teaching in order to make teaching learning process effective. Various aspects of instructions are highlighted to help teacher practice different teaching strategies successfully.

### **Learning Outcomes**

After completion of this course students will be able to:

- explain the basic concepts of teaching.
- demonstrate the essential attributes of the effective teacher.
- describe the importance and types of teacher planning...
- practice different teaching methods in classroom.
- organize classroom discussion and demonstrate its appropriate use.
- apply various techniques to motivate students.
- select appropriate audio visual aids in classroom teaching.
- prepare lesson plans.

### **Course outline:**

- |               |  |
|---------------|--|
| <b>Unit 1</b> | <b>Introduction</b><br>1.1. Definitions of Teaching<br>1.2. The concept of Effective Teaching<br>1.3. Role of teacher for conducive learning environment<br>1.4. Personal Characteristics of an Effective Teacher<br>1.5. Professional Characteristics of an Effective Teacher<br>1.6. The concepts of Teaching Methods, Strategies and Techniques |
| <b>Unit 2</b> | <b>Lesson Planning in Teaching</b><br>2.1. The Need for lesson Planning<br>2.2. Approaches to lesson Planning<br>2.3. Weekly Planning<br>2.4. Daily Planning<br>2.5. Unit Planning<br>2.6. Course Planning   |
| <b>Unit 3</b> | <b>Steps in Lesson Planning</b><br>3.1. Introduction   |

- 3.2. Presentation
- 3.3. Generalization
- 3.4. Application
- 3.5. Recapitulation
- 3.6. The Lesson Plan Format

**Unit 4 Pedagogy by Level**

- 4.1. Pedagogy of early childhood education
- 4.2. Pedagogy of elementary education

**Unit 5 Inquiry Method**

- 5.1. The Inductive Method
- 5.2. Deductive Method of inquiry
- 5.3. Scientific Method
- 5.4. The Problem Solving Approach
- 5.5. Advantages and Limitations of Inquiry Method

**Unit 6 Activity Methods & Cooperative learning**

- 6.1. Individual Project
- 6.2. Group Project
- 6.3. Research Projects
- 6.4. Cooperative learning
- 6.5. Techniques of cooperative learning
- 6.6. Advantages and Limitations of activity and cooperative Method

**Unit 7 Demonstration Method**

- 7.1. What is Classroom Discussion
- 7.2. Planning the Discussion
- 7.3. Organizing the Discussion
- 7.4. Practicing in asking questions
- 7.5. Practicing in answering the questions
- 7.6. Assessing the discussion
- 7.7. Advantages and Limitations of Discussion Method

**Unit 8 Student Motivation**

- 8.1. Concept of Motivation
- 8.2. Intrinsic Motivation
- 8.3. Extrinsic Motivation
- 8.4. Theories of Motivations
- 8.5. Strategies to Motivate Students

**Unit 9 Teaching Skills**

- 9.1. Set induction
- 9.2. Presentation

- 9.3. Identify learning difficulties of students
- 9.4. Prepare lesson according to individual needs
- 9.5. Students Evaluation

#### **Unit 10 Teaching Tools**

- 10.1. Selecting the Audio Visual Material
- 10.2. Planning To Use the Materials
- 10.3. Preparing For the Audio Visual Activity
- 10.4. Kinds of AV Materials
  - White Board / Marker
  - Charts, Posters, Maps, Graphs & Models
  - Text Books
  - Hand Outs
  - Projectors
  - Multimedia

#### **Recommended Books**

- Allen, Mendler, (2009).”*Motivating Students Who Don’t Care*”: Successful Techniques for Educators. Amazon.com
- Arends, R.I. (2007) “*Learning to Teach*” (7<sup>th</sup> Edition, McGraw Hill International Edition). Boston: McGraw Hill.
- Ellington, H et al. (2005) “*Handbook of Educational Technology*” (3<sup>rd</sup> Edition). London: Kogan Page Limited.

**Title of Course:**            **Teaching of Urdu**

**Credit Hours:**            **3**

#### **Course Description**

Urdu is our national language and taught in Pakistan as a compulsory subject from class one to intermediate. The subject teaching course includes the teaching of prose, poems and grammatical concepts which will develop Urdu language skills in a structured, graded progression.

#### **Learning Outcome**

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

### Specific Objectives of course:

The course will provide the knowledge of:

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

### Course Outline

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

### Recommended Books

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

**Title of Course**                      **Teaching Literacy Skills**

**Credit Hours**                      **3**

### Learning Outcomes

After studying this unit, prospective students will be able to:

- Use the different activities of development of Comprehension.
- Aware of the importance and significance of oral language in literacy

- Use different activities to develop interest in the use of dictionary
- Use the principles of teaching and learning for effective literacy skills development
- Capable to use information technology in their teaching
- Maintain the balance between different activities
- Assess their students formative and summative progress

## Course Outline

### Unit 1 Developing Comprehension Skills

#### 1.1 Skimming and Scanning

#### 1.2 Sequencing Activity

##### 1.2.1 Goldilocks Sequencing

##### 1.2.2 Cinderella Sequencing

##### 1.2.3 Magnifying Glass Game

##### 1.2.4 Magnifying Glass Sheet

#### 1.3 Alphabetical Order

##### 1.3.1 Ordering Books

#### 1.4 Miss out the Vowels!

#### 1.5 4R: A complex activity to Develop Literacy Skills

#### 1.6 Speech, Spelling and Reading

#### 1.7 Feeling Words

### Unit 2 Areas Of Literacy Knowledge

- 2.1 Oral language to support literacy
- 2.2 Purposes of Text and its range
- 2.3 Word meaning and vocabulary knowledge
- 2.4 Orthographic and morphemic knowledge
- 2.5 Fluency and Phrasing: Reading aloud
- 2.6 Comprehension outcomes
- 2.7 Linguistic structures and features of written texts
- 2.8 Using meta-cognitive and self-management strategies

### Unit 3 Dictionary Skills and Reflecting on Reading

- 3.1 Dictionary Game
- 3.2 Dictionary Search
- 3.3 Dictionary Definitions
- 3.4 Different activities to build up dictionary skills
- 3.5 Selecting Favorite Book

- 3.6 Book Review
- 3.7 Sharing Books
- 3.8 Rewarding Reading
- 3.9 Reading around the Solar System
- 3.10 Bookmark Slogans

**Unit 4 Maintaining Balance in Activities**

- 4.1 Teaching skills as a way to gain meaning
- 4.2 Time management
  - 4.2.1 Guided Instruction
  - 4.2.2 Independent Work
- 4.3 Use of Constructivists Activities: Respect of Students Knowledge
- 4.4 Effective Integration of Print and Electronic Media
- 4.5 Formative Assessment

**Unit 5 Performance Assessment for Reading**

- 5.1 Select a Text
- 5.2 Provide Writing Prompts
- 5.3 Work with Scoring Rubrics
- 5.4 Some Sample Rubric
- 5.5 Developing Rubric
- 5.6 Using Rubric for Assigning Grades

**Unit 6 Principles of Learning and Teaching**

- 6.1 The supportive learning environment
- 6.2 Independence, interdependence and self-motivation.
- 6.3 Students' needs, backgrounds, perspectives and interests
- 6.4 Developing Deep thinking Levels
- 6.5 Assessment practices as an integral part of teaching and learning
- 6.6 Learning Connections: practice beyond the classroom

**Unit 7 Socio-economic Backgrounds and Literacy**

- 7.1 Poverty and Literacy
- 7.2 Gender Equity and Literacy
- 7.3 Overcoming the Challenge of Diversity
- 7.4 Role of Regional Languages in Enhancing Literacy
- 7.5 Cultural Diversity and Literacy

- Unit 8**                    **Teaching Information Literacy Skills**
- 8.1      Information literacy: concept and strategic context
  - 8.2      Information literacy: charting your progress
  - 8.3      Starting out: embedding and integrating your teaching into curricula
  - 8.4      Preparing and reviewing your teaching
  - 8.5      Promoting Information literacy
  - 8.6      Promotion of Information literacy to schools
  - 8.7      Promotion Information literacy to students

**Suggested Readings**

Gallo, M. L. (2004). *Reading the World of Work: A Learner- Centered Approach to Workplace Literacy and ESL*. Melbourne Krieger Publishing Company.

Ivey R. (2003). Information literacy: How do librarians and academics work in partnership to deliver effective learning programs? *Australian Academic and Research Libraries*, 34(2):100-113.

Macpherson K. (2004). Undergraduate information literacy: A teaching framework. *Australian Academic and Research Libraries*, 35(3);226-241.

**Title of Course**                    **Teaching of General Science**

**Credit Hours:**                    **3**

**Course Description**

The study of General Science in Primary and Secondary school is linked to National prosperity and economic development. The course is designed for the effective interactive ways of teaching science. The course will highlight the power of observation and inquisitiveness in general sciences studies. It will also focus on how to relate facts, concepts, theories to every day experience.

**Learning Outcome**

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

## **Specific Objectives of course**

The course will enable learners to;

1. Understand scientific concepts
2. Differentiate between scientific products and scientific processes
3. Understand the underlying principle of science education
4. Apply appropriate methods and techniques for effective learning in Science

## **Course Outline**

### **Unit 01 Nature of Science**

- 1.1 Definition of science
- 1.2 Science as a process: Scientific Method
- 1.3 Science as a product: Scientific Knowledge

### **Unit 02 Aims / Objectives Teaching General Sciences**

- 2.1 History of Science Education
- 2.2 Aims / Objectives of teaching General Science at Elementary level

### **Unit 03 Methods of Teaching General Science**

- 3.1 Demonstration cum-lecture method
- 3.2 Discovery method
- 3.3 Project method
- 3.4 Other innovative method

### **Unit 04 Approaches of Teaching General Science**

- 4.1 Teaching approach
  - a) Problem solving
  - b) Inquiry techniques
  - c) Exploration
  - d) Observation
  - e) Experiment
- 4.2 Teaching Strategies
  - a) Scope & propose of practical activities
  - b) Science laboratory
  - c) Safety measure in laboratory

### **Unit 05 Teaching Aids**

- 5.1 Need & importance of teaching aids
- 5.2 Types of teaching aids



- 5.3 Principles of using teaching aids
- 5.4 Using low cost teaching aids

**Unit 06                    Characteristics of effective Science Teaching**

- 6.1 Characteristics of lesson planning
- 6.2 Characteristic qualities of science teacher
- 6.3 Effective questioning

**Unit 07                    Evaluation**

- 7.1 Designing a test
- 7.2 Administering & scoring a test
- 7.3 Interpreting test results

**Recommended Books:**

- Lawson, Anton. E. (1995). "*Science teaching and development of thinking*". California: Wadsworth publishing company
- Rehman Mehmooda (1999). "*Teaching of science and mathematics*". Peshawar: Ijaz printer, Pakistan

**Title of Course: Instructional and Communication Technology (ICT)**

**Credit Hours:            3**

**Course Description**

The Principle role of instructional technology is to help improve the overall efficiency of the teaching learning process. Introduction to instructional technology and its foundations includes, audio visual aids, computer systems, networks, and multimedia and digital technology in educational and cooperate training environment.

**Learning Outcome**

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

**Specific Objectives of course**

The course will enable learners to;

- Understand the meaning, concept and importance of instructional technology in education process
- Know the meaning of learning and appreciate what is effective

- teaching and learning by using latest instructional technology
- Select, arrange and use appropriate methods/strategies and material for effective use of technology
- Develop indigenous materials as instructional aids

### Course Outline

- 1) Concept of instructional and communication technology
- 2) Role of instructional communication technology in learning
- 3) Instructional technology and audio visual aids
- 4) System approach and its application to instructional technology
- 5) Instructional technology and computer assisted learning
- 6) Types of media and their uses in learning situation
- 7) Teaching and assessment strategies

### Recommended Books:

Ely, D. (1999). *Toward a philosophy of instructional technology: thirty years on*. *British Journal of Educational Technology* v30 no4 (pp.305-10).

Rowland, G.(1993). "*Designing and Instructional Design*". *Educational technology research and development* (1042-1629), 41 (1), p. 79.

Seels, B. B. & Richey, R. C. (1994). *Instructional technology: The definition and domains of the field*. Bloomington, IN: Association for Educational Communications and Technology.

Smith, P. L. & Ragan, T. J. (2005). *Instructional Design*. Third edition. Hoboken, NJ: John Wiley & Sons, Inc.

Solomon, D. L. (2000). *Philosophical inquiry in instructional technology: the forgotten pathway to learning*. Paper presented at the Association for Educational Communications and Technology (AECT) 2000 International Convention (22nd, Long Beach, CA, February 16-20, 2

### Journals/Periodicals:

International journal of instructional technology  
Journal of educational technology

**Title of Course            Teaching of English**

**Credit Hours:            3**

### Course Description

This course will equip prospective teachers with knowledge and skills to teach English in grades I through VIII. They will become familiar with the English curriculum and expected student learning outcomes.

Prospective teachers will learn the use of different language skills to enhance variety of instructional methods that promote active learning of English, including making and using teaching and learning materials. They will plan English lessons and activities.

### **Learning Outcomes**

At the end of the course, the prospective teachers are expected to be:

- familiar with the four language skills - Listening, Speaking reading and writing
- identify and prepare activities for developing four skills
- apply modern methods and approaches in teaching of English
- prepare lesson plans of Prose, Poetry, Composition and Grammar
- Effective use of audio visual aids.
- measure and evaluate the students' progress during teaching of English
- as a foreign / second language

### **Course Outline**

#### **Unit 01 Four skills of language learning**

- 1.1. Listening Comprehension Skills
  - 1.1.1 Techniques of developing listening ability
  - 1.1.2. Careful listening habits
  - 1.1.3. Use of Cassette-player for developing listening ability
  - 1.1.4. Using Video-Cassettes for effective listening
  - 1.1.5. Methods of teaching listening
  - 1.1.6. Sub Skills
- 1.2 Speaking Skills
  - 1.2.1. Favorable classroom environment for speaking
  - 1.2.2. Value of pronunciation and intonation in speaking
  - 1.2.3. Conversation and dialogue
  - 1.2.4. Language games for oral expression
  - 1.2.5. Vocabulary building
- 1.3 Reading Skills
  - 1.3.1 Importance of silent and loud reading
  - 1.3.2 Methods of teaching Reading
  - 1.3.3. Sub skills

- 1.4 Writing Skills
  - 1.4.1. Techniques of good handwriting
  - 1.4.2. Importance of spelling in Writing
  - 1.4.3. Creative writing (essays/paragraphs)
  - 1.4.4. Writing letters and invitations to friends
  - 1.4.5. Writing applications

#### **Unit 02 Teaching of English**

- 2.1. Teaching of prose
- 2.2. Teaching of poems
- 2.3. Teaching of composition
- 2.4. Teaching of vocabulary
- 2.5. Teaching of pronunciation

#### **Unit 03 Methods of teaching English**

- 3.1. Grammar – Translation method
- 3.2. Direct method
- 3.3. Audio-lingual approach
- 3.4. Structural approach
- 3.5. Communicative approach
- 3.6. Word building

#### **Unit 04 Teaching of Grammar**

- 4.1. Functional approach towards grammar teaching.

#### **Unit 05 Lesson Planning**

- 5.1. Importance of activities in all kinds of lessons
- 5.2. Value of different steps in lesson planning.
- 5.3. New teaching approaches; activity based.
- 5.4. Planning Structural lessons
- 5.5. Planning a Prose and Poetry lesson
- 5.6. Planning a Paragraph, a Story and an Essay
- 5.7. Planning a Grammar lesson

#### **Unit 06 A.V.Aids in Teaching of English**

- 6.1. Need and importance
- 6.2. Charts, Models, Pictures, role plays, Flash Cards, Toys and Real Objects
- 6.3. Radio, Cassette player, Language Laboratory
- 6.4. Television, VCR, Movies
- 6.5. Slides, Filmstrip, OHP, multimedia Projector

#### **Unit 07 Assessment**

- 7.1. Construction of Objective type test.

## 7.2 Construction of subject type test.

### Recommended Books

Cook V. (1991). *Second Language Learning and Language Teaching*, 2nd ed. London, Arnold

Mohammad. T. (1998). *Modern Approaches to the Teaching of English as Second Language*, Lahore: Majeed Book Depot.

Murcia, M.C. (1991), *Teaching English as a Second Foreign Language*, 2<sup>nd</sup> Ed. New Bury House: A Division of Harper Collins Publishers.

Rob Nohand (1993). *Conversation*, London: Oxford University Press.

Sheikh. N. A. (1998). *Teaching of English as a Second Language*. Lahore: Carvan Book House.

|                        |                                      |
|------------------------|--------------------------------------|
| <b>Title of Course</b> | <b>Teaching of Mathematics</b>       |
| <b>Credit Hours:</b>   | <b>3</b>                             |
| <b>Prerequisite</b>    | <b>Content course in Mathematics</b> |

### Course Description

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

### Learning Outcomes

At the end of the course, the prospective teachers will be able to:

- Describe the nature, history and development of mathematics at elementary level in Pakistan
- Acquire the skills and competencies required for the teaching of mathematics at elementary level
- Apply effectively the various methods of teaching mathematics
- know and use techniques and strategies of teaching mathematics at elementary level
- Make and use teaching aids effectively

## **Course outline**

### **Unit 01 Introduction**

- 1.1 Nature of mathematics
- 1.2 Place of mathematics in elementary school curriculum
- 1.3 Educational value of mathematics
- 1.4 Use of mathematics in everyday life
- 1.5 Use in the study of other subjects
- 1.6 Use of math in different vocations
- 1.7 Aesthetic / cultural value and mathematics

### **Unit 02 Methods of Teaching Mathematics:**

- 2.1 Inductive Method
- 2.2 Deductive Method
- 2.3 Analytic method
- 2.4 Synthetic Method
- 2.5 Heuristic Method
- 2.6 Project Method
- 2.7 Problem Solving Method

### **Unit 03 Techniques of Teaching Mathematics**

- 3.1 Oral work, written work, assigned work, project work
- 3.2 Discussions/ Group work
- 3.3 Drill and practice:  
Forms of classrooms organization (whole class, large group, small group, individual work)

### **Unit 04 Teaching Aids and Mathematics Laboratory**

- 4.1 Importance of teaching aids in mathematics teaching
- 4.2 Some important modern teaching aids for mathematics including computer
- 4.3 How to set up a mathematics laboratory in elementary school
- 4.4 How to use teaching aids and mathematics laboratory
- 4.5 Use of low cost /no cost materials (from classrooms and surroundings) for teaching of mathematics
- 4.6 Child centered Activities in mathematics (educational trips, preparation of materials

etc)

**Unit 05 Measuring Achievements in Mathematics**

- 5.1 Preparation of different type of tests in mathematics
- 5.2 Using tests for diagnostic purpose
- 5.3 Interpreting test results

**Unit 06: Planning Mathematics Learning**

- 6.1 Importance of planning in teaching of mathematics.
- 6.2 Planning for the full course.
- 6.3 Scheme of work.
- 6.4 Lesson planning.
- 6.5 Qualities of good lesson plan.
- 6.6 Development of model lesson plans.

**Unit 07 History of Mathematics**

- 7.1. Historical review of the development of Mathematics Education.
- 7.2 Contribution of Muslim Mathematicians.
- 7.3 Contribution of Hindus and other mathematicians

**Unit 08 Contents appropriate to the stage level**

**Recommended Books:**

Fauvel, John & Jeremy Gray (1990). *The History of Mathematics: A Reader*. London: Macmillan Press Ltd.

Greer, Brian and Gerry Mulhern, (1989). *New Directions in Mathematics Education*. New York: Routledge.

Lacombe, Antony. (1985) *Mathematical Learning Difficulties in the Secondary School: Pupils' needs and Teacher's Role*. England: Milton Keynes,

Leon, Burton & Jaworski, Barbara (Editors) (1995). *Technology in Mathematics Teaching*, Chartwell.

Orton, Anthony Wain Geoffrey (Editors) (1994), *Issues in Teaching of Maths*, London: Cassell Villiers House.

**Title of Course            Teaching of Social Studies**

**Credit Hours:            3**

**Prerequisite                      Content Course**

**Course Description**

This course will equip prospective teachers with knowledge and skills to teach social studies in grade I through VIII. They will become familiar with the social studies curriculum and expected student learning outcomes. Prospective teachers will learn to use a variety of instructional methods that promote active learning of social studies including making and using teaching and learning materials. They will plan social studies lessons and activities and practice teaching social studies with peers.

**Learning outcomes**

- To understand the basic knowledge and skills to teach social studies.
- To inculcate the instructions methods to promote active learning
- To develop lesson plan and teach accordingly.
- To use learning aids effectively.

**Course Outline**

**Unit 01 Introduction**

- 1.1 The developmental tasks of elementary years.
- 1.2 Educating children for a different society.
- 1.3 Changing our vision: developing a national and a global sense of citizenship.
- 1.4 Global connections: one aim of social studies curriculum.
- 1.5 Rationale for social studies global connections.
- 1.6 The child's ability to learn about others near and far.

**Unit 02 Discovering the Essence of Social Studies**

- 2.1 Social studies in search of definitions
- 2.2 Social studies and child with special needs
- 2.3 Goals of social studies education
- 2.4 Characteristics of an effective social studies curriculum.

**Unit 03 Getting Ready to Teach Social Studies**

- 3.1 Planning social studies experiences for young children.
- 3.2 Knowledge about the child



- 3.3 Key developmental milestones of preschool-primary age children
- 3.4 Young preschoolers: working with three-year-olds
- 3.5 Older preschoolers: working with four and five-year-olds
- 3.6 Older preschoolers: working with four and five-year-olds
- 3.7 Social and emotional development during early years

#### **Unit 04 Planning Developmentally Appropriate Social Studies**

- 4.1 Planning and teaching appropriate social studies experiences
- 4.2 Planning social studies experiences
- 4.3 Do we know why children are doing what they do?
- 4.4 Objectives are important, but children are the reason for teaching
- 4.5 Source of learning objectives
- 4.6 Engaging parents in the planning process
- 4.7 The community as a curricular source
- 4.8 Lesson plans and units
- 4.9 Selecting a planning strategy
- 4.10 Getting ready to plan social studies experience: using the DAP perspective
- 4.11 Thematic teaching
- 4.12 The project approach
- 4.13 Learning centers
- 4.14 Technology in the classroom

#### **Unit 05 Learning about past and Present**

- 5.1 Developing a sense of history
- 5.2 Exploring key elements of history
- 5.3 The many worlds of history
- 5.4 Connecting history education with Elementary Education

#### **Unit 06 Geography and the young Child**

- 6.1 Geography in the early childhood curriculum
- 6.2 Fostering geographic knowledge
- 6.3 Building global connections through geography
- 6.4 Themes and skills in geography
- 6.5 Creating an appropriate geography curriculum
- 6.6 Helping children build knowledge about the

physical environment.

**Unit 07 Making Socially Responsible Citizens**

- 7.1 Building a community
- 7.2 Fostering positive values and social skills in young children
- 7.3 Developing civic and social responsibilities

**Unit 08 Growing up in a Muslim Society**

- 8.1 Muslim Society

**Unit 09 Preparing children to make informed Choices**

- 9.1 Bringing the “outside World” into Elementary Education classroom
- 9.2 Learning about economics
- 9.3 Becoming environmentally responsible citizens
- 9.4 Teaching about special social issues

**Recommended Books**

Reference Material Iarolimek, John. (1986). *Social Studies in Elementary Education*. London: Macmillan

Savage, Tom V and Armstrong, David G. (1987). *Effective Teaching in Elementary Social Studies*. New York: Macmillan.

Wilma R. Melendex, V. B. & Melba Fletcher. (2000). *Teaching Social Studies in Early Education*. Africa, xvii, 299p.

Wilma Robles de Melendez, Vesna Beck and Melba Fletcher. (2000). *Teaching Social Studies in Early Education*. United Kingdom: Delmar

**Title of Course Contemporary Issues and Trends in Education**

**Credit Hours: 3**

**Introduction**

Competent teachers are usually knowledgeable in their respective content areas. Being part of the education system, teachers need to be aware of the contemporary issues and trends in education. Issues such as population explosion, HIV/AIDS, Gender Development, sustainable development require a broad based knowledge approach for teacher preparation. Therefore, a course on contemporary issues and trends in education is considered significant to develop an insight among teachers.

**Learning Outcomes**

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

- argue on the positive and negative impact of the information

- explosion
- explore the gap between madrassah and mainstream education and identify appropriate government responses
- identify barriers to the achievement of universal literacy and how these may be removed at the local level
- discuss the gradually reducing gender disparity in education in Pakistan and its likely consequences
- analyze the relationship between national curriculum structure and career opportunities
- consider how best environmental awareness can be enhanced through schools
- consider the consequence of the growing privatization of education

## **Course Outline**

### **Unit 01 Education as a Complex Enterprise**

- 1.1 Diversity of aims and approaches in education.
- 1.2 Variety of philosophical approaches to education.
- 1.3 Education in different periods and societies

### **Unit 02 Madrassah Education**

- 2.1 Madrassah: origin, aims and objectives
- 2.2 Role of madrassah in 21<sup>st</sup> century
- 2.3 System of education in madrassah
- 2.4 Madrassah reforms in Pakistan

### **Unit 03 Universal Literacy**

- 3.1 Literacy and individual rights
- 3.2 Factors affecting program for universal literacy: medium of instruction
- 3.3 Formal and Non formal education: Advantages and disadvantages

### **Unit 04 Gender Disparity**

- 4.1 Concept of gender equality
- 4.2 Factors affecting the status and role of women
- 4.3 Steps towards reducing gender disparity.

### **Unit 05 Population Education:**

- 5.1 Concept of Population Education.
- 5.2 Factors affecting Population Education.

- 5.3 Impact of Population Growth on National Development.
- 5.4 Roles and responsibilities of family, school, mosque and community in population education.
- 5.5 Steps towards population planning and welfare.

#### **Unit 06 Environmental Awareness**

- 6.1 Types of pollution
- 6.2 Causes of pollution
- 6.3 Environmental education

#### **Unit 07 Privatization of Education**

- 7.1 Government resources and multiple demands
- 7.2 Need of private sector education
- 7.3 Challenges of quality education

#### **Unit 08 Information in Education**

- 8.1 New concept of information explosion
- 8.2 Expanding learning resources
- 8.3 Information and communication technology (ICT) literacy
- 8.4 Technology in education

#### **Recommended Books**

- AIOU (2006) *Population Education Course MA EPM 584*, Islamabad: AIOU.
- Badran, M. (2005). *The Gender of Islam*, Al-Ahram: Cairo.
- Haltak, J. (1990). *Investing in the Future, Setting Educational Priorities in the Developing World*, Paris, UNESCO. McGraw-Hill Kogakusha.
- Ministry of Education, Curriculum Wing (2010), *13 Modules on Various Core Themes of Population Education*, Islamabad.
- Modhukar Indira (2003). *Changing Demands of Technical and Vocational Education*, Annual Publication New Delhi.
- Mohantry, Jagannath. *Primary and Elementary Education*, Deep & Deep Publication Private Ltd.
- Pakistan, Govt: (2003). *Education for All*, Ministry of Education Curriculum Wing Islamabad.
- Rao, V. K. (2004). *Population Education* efficient Printer, New Delhi.
- Sylvester, C. (1994). *Feminist Theory and International Relation*, in Post Modern Era, Cambridge University Press.
- UNESCO, Pakistan (2004). *Quality of education in Pakistan*, UNESCO Office, Islamabad.

Usmani, B. D. (2004). *Women Education in 21<sup>st</sup> Century Annual publication*, New Delhi.

W. H. O. (2005). *Emerging Issues in Water and Infections*, U.N.O. Publishers, Philadelphia.

Walt, S. (1992). *The Renaissance of Security Students*, New York. Colombia Press.

**Title of Course**                      **Comparative Education**

**Credit Hours:**                      **3**

**Course Description**

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

**Learning Outcomes:**

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

- Describe the meaning and significance of comparative education
- Compare the education systems of selected developed countries
- Compare the education systems of selected developing countries
- Analyze critically the education system of Pakistan

**Course Outline:**

**Unit 01 Introduction to Comparative Education**

- 1.1 Concept of comparative education – meaning, need and scope
- 1.2 Purpose of comparative education
- 1.3 Methods & Comparative Education

**Unit 02 Elements of Comparative Education (Both qualitative and quantitative dimensions)**

- 2.1 Objectives
- 2.2 Curricula
- 2.3 Teaching methodology
- 2.4 Assessment and evaluation (student achievement, examination system)
- 2.5 Facilities
- 2.6 Educational structure
- 2.7 Administrative and financial set up
- 2.8 Teacher education

**Unit 03 Comparative View of Systems of Education in Pakistan**

- 3.1 Private and public
- 3.2 Madrassah and formal education
- 3.3 Formal vs. Distance and non-formal education

**Unit 04 Comparative Education in Developed Countries**

- 4.1 USA
- 4.2 UK
- 4.3 Japan
- 4.4 Singapore

**Unit 05 Comparative Education in Developing Countries**

- 5.1 India
- 5.2 China
- 5.3 Malaysia
- 5.4 Pakistan

**Unit 06 Global Issues in Comparative Perspective (focusing developing countries)**

- 6.1. Quality education
- 6.2. Education For All
- 6.3. Recruitment of teachers at elementary and secondary levels
- 6.4. Admission procedure at higher education level.

**Recommended Books:**

Isani, and Virk, M.L. (2006) *Higher Education in Pakistan*. Islamabad: National Book Foundation.

**Title of Course: Introduction to Guidance and Counseling**

**Credit Hours: 3**

### **Course description**

The elementary teacher needs to have a basic knowledge of school guidance and counseling techniques to address students' personal and social problems she or he may encounter in the classroom. The course will assist the trainee teacher to perform the basic skills of school guidance and counseling. This course will increase the trainee teacher's ability to exercise active listening skills, reflect students' concerns, assist students to arrive at solutions to problems they present, and advise them on potential solutions to stated difficulties.

### **Learning Outcomes**

On successful completion of this course, learners will be able to:

- Demonstrate knowledge of the importance of guidance and counselling to support the teacher's role in the classroom
- Explain the role of various members of a guidance and counselling system in supporting learners in addressing their future choices and social challenges
- Demonstrate the skills of student advisement in making responsible social choices and decisions
- Assist students in making informed choices to solve personal, educational and social problems they confront
- Refer students to resources that can assist them in solving social and personal problems they encounter.

### **Course outline**

#### **Unit 1 Introduction to Guidance and Counselling**

- 1.1. Define and differentiate Guidance and Counselling
- 1.2. Objectives of Guidance
- 1.3. Principles of Guidance
- 1.4. List the various members of a counselling team and explain their responsibilities

#### **Unit 2 The role of guidance and counselling personnel**

- 2.1. Teacher in guidance and counselling
- 2.2. Psychologist in student services
- 2.3. Administrator in guidance and counselling
- 2.4. Career counsellor
- 2.5. Librarian in guidance and counselling

#### **Unit 3 Techniques of Guidance**

- 3.1. How the teacher can assist the learner to make informed choices to guide their future

- 3.2. Assisting the learner in personal and social development
- 3.3. Developing guidance skills: questioning techniques, active listening

**Unit 4 Basic skills of Counselling**

- 4.1. Identifying elementary social problems the classroom teacher can resolve
- 4.2. Exercising basic counselling skills in a controlled situation
- 4.3. Evaluating basic counselling techniques among peers

**Unit 5 Services of Guidance**

- 5.1. Orientation service
- 5.2. Testing service
- 5.3. Educational and occupational services
- 5.4. Counselling services
- 5.5. Placement services
- 5.6. Follow up services
- 5.7. Research & evaluation services

**Unit 6 Evaluation of the guidance program**

- 6.1. Types of evaluation in guidance and counselling
- 6.2. Program evaluation

**Unit 7 Cumulative Record Card**

- 7.1. Nature and purpose of the Cumulative Record Card (CRC)
- 7.2. Advantages of the CRC
- 7.3. Design of CRC

**Assessment in the course**

Written test to measure acquisition of theoretical knowledge

Demonstrations of counselling skills

Role plays for peer evaluation (guidance and counselling situations)

**Title of Course: Research Methods in Education**

**Credit Hours: 3**

**Course Description**

This course is designed for B.Ed honors candidates to prepare them to situate themselves as researching professionals and at the same time enhance their own professional practice. Students will engage in a



critical analysis of different research work and relate it to their own context. The units provides students with the opportunity to engage with the research literature and to establish how different researchers techniques help improve the overall classroom situation

### **Specific Objectives**

At the end of the course, the learners will be able to

- Discuss the meaning, nature & scope of research in education
- Situate themselves as researching professionals
- Conduct research in different educational settings
- Write research report and present it effectively

### **Course Outline**

- Unit 1            The Nature of Educational Research**
- 1.1. Definitions of Educational Research
  - 1.2. Scope and importance
  - 1.3. Scientific method
  - 1.4. Research problem and topic
  - 1.5. Characteristics of research problem
- Unit 2   The Researching professional**
- 2.1. Qualities of a researcher
  - 2.2. Teacher as researcher
  - 2.3. Research ethics
- Unit 3   Types of Educational Research**
- 3.1. Descriptive Research
  - 3.2. Experimental Research
  - 3.3. Historical Research
  - 3.4. Action Research
- Unit 4   Techniques of Reviewing Literature**
- 4.1. Primary sources
  - 4.2. Secondary sources
- Unit 5   Methodology**
- 5.1. Population
  - 5.2. Sampling
  - 5.3. Instrument
  - 5.4. Data collection procedure

## **Unit 6 Data Analysis**

- 6.1. Descriptive
- 6.2. Inferential

## **Unit 7 Report Writing**

- 7.1. Writing formats & Presentation
- 7.2. Referencing

### **Recommended Books:**

Best & James (2003) *Research in Education*  
Crtswell, J. W (2009. *Research Design*", London: Sage Publications.  
Fraenkel, J. & Norman, E. (2005) *How to Design and Evaluation Research* (8<sup>th</sup> edition)  
L.R. Gay. (2001) *Educational Research*.

**Title of Course:     School Management**

**Credit Hours:        3**

### **Course Description**

This course focuses on developing effective elementary school leaders. The aim of the course is to make prospective teachers well acquainted with the process of running schools in effective and efficient manner besides being well versed with the duties and responsibilities of the head teachers. The course covers knowledge about school management; organization; function of head teachers, record keeping and school-community relations related matters.

### **Learning Outcomes**

After completing this course prospective teachers will be able to:

- Manage and plan school academic matters effectively
- Manage and plan school budget matters effectively
- Manage and plan students affairs related to co-curricular activities
- Manage library and instructional material related matters
- Manage upward, downward and horizontal communication
- Manage and plan school – community relationship activities.
- Resolve conflicts among different custodians of school community.
- Maintenance and management of school infrastructure and programs.

**Course outline:**

**Unit 1 Introduction**

- 1.1 Definition and concept of organization, administration and management
- 1.2 Importance and impact of effective management
- 1.3 Elements of management

**Unit 2 Role of head teacher as manager**

- 2.1 Head teacher and children
- 2.2 The head teacher and teachers
- 2.3 Working with parents
- 2.4 Head teacher and supporting staff

**Unit 3 Planning the curriculum**

- 3.1 Developing and planning yearly calendar for school activities
- 3.2 Assigning roles to staff
- 3.3 Monitoring and supervising curriculum
- 3.4 Curriculum revision

**Unit 4 Health, safety and co-curricular activities**

- 4.1 Planning activities to promote health and safety measures
- 4.2 Planning and aligning co-curricular activities with yearly calendar

**Unit 5 Management structure**

- 5.1 Management arrangement
- 5.2 Collective responsibility
- 5.3 A senior management team
- 5.4 The deputy heads
- 5.5 The art of delegation
- 5.6 Appraisal criteria

**Unit 6 Communication in schools**

- 6.1 Meetings in school (preparation, conduct and recording the proceedings)
- 6.2 Establishing a communication network

**Unit 7 Record keeping in schools**

- 7.1 Attendance record
- 7.2 Enrollment record
- 7.3 Examination record

- 7.4 Financial records
- 7.5 Maintaining stock registers
- 7.6 School registers

**Unit 8 Day to day concerns**

- 8.1 School day activities
- 8.2 Arranging the classes
- 8.3 Staffing arrangement
- 8.4 In time directions to address day needs
- 8.5 Conflict management

**Unit 9 School Plant:**

- 9.1 maintenance of building
- 9.2 maintenance of Library
- 9.3 maintenance of play ground
- 9.4 maintenance of horticulture

**Recommended Books:**

Burden, P. (1995) *Classroom Management and Discipline*. New York: Longman.

Hoy, W.K. & Miskel, G.C (1996) *Educational Administration: Theory Research and Practice*, (5<sup>th</sup> ed.) New York: McGraw Hill Inc.

Lunenburg & Ornstein,(2004) *Educational Administration: Concepts and Practices Tony Bush: Theories of Educational management*.

Robbins, S.P. (1996). *The Administrative Process*. Sydney: Prentice Hall.

**Title of Course: Test Development and Evaluation**

**Credit Hours: 3**

**Course Description**

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

**Learning outcomes**

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

- Understand the concept of evaluation and testing
- Determine the qualities of a good test.
- Plan and construct appropriate classroom test to evaluate student's performance.

- Make report of the test results to different stake holders.

### **Course contents**

- Unit 01: Test, testing and evaluation**  
 1.1 Meaning of test, testing and evaluation.  
 1.2 Purpose, Principles and scope of test and evaluation.  
 1.3 School Evaluation program.
- Unit 02: Types of Evaluation**  
 2.1 Placement Evaluation  
 2.2 Diagnostic Evaluation  
 2.3 Formative Evaluation  
 2.4 Summative Evaluation
- Unit 03: Types of test**  
 3.1 Essay type test  
 3.2 Objective type test  
     3.2.1 Recognition type items  
     3.2.2 Recall type items  
 3.3 Verbal tests
- Unit 04: Test Construction**  
 4.1 Planning the test  
 4.2 Preparing the test items  
 4.3 Assembling the test
- Unit 05: Test Administration and analysis**  
 5.1 Administration/conducting the test  
 5.2 Item analysis and modification
- Unit 06 Qualities of a good test**  
 6.1 Reliability  
 6.2 Validity  
 6.3 Adequacy  
 6.4 Objectivity  
 6.5 Differentiability
- Unit 07: Interpretation of test scores**  
 7.1 Percentage  
 7.2 Ordering and ranking  
 7.3 Frequency Distribution  
 7.4 Measure central tendency (Mean, Median and mode)

7.5 Pictorial forms (Graph, polygon, histogram)

**Unit 08: Reporting the test results to:**

- 8.1 Students
- 8.2 Parents
- 8.3 Administration

**Unit 09: Counseling of students after reporting the results**

**Assessment criteria**

|  |          |
|--|----------|
| Construction of tests of any school subjects | 20 marks |
| Conducting and scoring of the tests          | 10 marks |
| Analysis and modification of the tests       | 20 marks |
| Final examination                            | 50 marks |

**Recommended Books:**

- Ebel, Robert (2004). *Essentials of Educational Measurement*. India: Prentice hall.
- Freeman, Richard, (2004). *Planning and Implementing Assessment*. New York: Rout ledge Flamer.
- Georg, David (2003). *Trends in Measurement and Evaluation Techniques*. New Delhi: Commonwealth.
- James William (2005). *Evaluation and Development of School Educations*. New Delhi: Anmol Publications.
- Kubiszyn, Tom, (2003). *Educational testing and Measurement: Classroom Application and Practice*. United States: John Wiley & sons, Inc.
- Smith, D, (2005). *Theory of Educational Measurement*. New Delhi: Commonwealth.
- Smith, D. (2005). *History of Measurement and Evaluation*. New Delhi: Commonwealth.
- Smith, D., (2005). *Methods of Educational Measurement*, New Delhi: Commonwealth.
- Swain, Sanjaya, (2005). *Educational Measurement, Statistics and Guidance*. Kalyani Publications.

**Title of Course: Child Development**

**Credit hours: 3**

**Course description**

This course is intended to orient learning about the process and

mechanism of children development with reference to language, cognition, emotional, social, physical, and characteristics of these aspects. Students will also be exposed to different theoretical basis for such development and how to manage learning for children at different levels of development. Student will be provided with real experiences to study/observe children at different levels of development in order to enhance their understanding. The course will be delivered in a manner to develop knowledge, skills and attitudes of prospective teachers so as to create conducive environment for children. The student-teacher will be assessed in terms of application of knowledge in making teaching learning process suitable in meeting the needs of children.

### **Learning Outcomes**

After studying the course the students will be able to:

- describe the theoretical basis of child development and their application to educational setting
- explain basic concepts in child growth, development.
- differentiate between various aspects of child development;
- demonstrate an understanding of Individual differences of students and children with special needs.
- Practice appropriate teaching methods for students.

### **Course outline**

#### **Unit 1 Introduction to Growth and Development**

- 1.1. Overview of Growth and Development
- 1.2. Nature and Nurture controversy
- 1.3. General Principles of Child Development
- 1.4. Factors influencing Child Development

#### **Unit 2 Physical Development**

- 2.1. The ABCs of Genetics
- 2.2. Life before birth
- 2.3. Physical Development in childhood
- 2.4. Physical Characteristics of Learners and appropriate physical
- 2.5. Activities in schools at the following levels
- 2.6. Preschool and Kindergarten
- 2.7. Elementary Level

#### **Unit 3 Intellectual Development**

- 3.1. Definition of intelligence

- 3.2. Measurement of intelligence
- 3.3. Intellectual Development from Infancy to Adolescence
- 3.4. Intellectual Characteristics of Learners and organization of relevant activities in the classroom at the following levels.
- 3.5. Preschool and Kindergarten
- 3.6. Elementary Level

#### **Unit 4 Social Development**

- 4.1. Social Development from Infancy to Adolescence
- 4.2. Social Characteristics of Learners and provision of suitable
- 4.3. activities at the following level.
- 4.4. Preschool and Kindergarten
- 4.5. Elementary Level

#### **Unit 5 Emotional Development**

- 5.1. Emotional Development from Infancy to Adolescence
- 5.2. Emotional Characteristics of Learners of and provision of relevant activities at the following level
- 5.3. Preschool and Kindergarten
- 5.4. Elementary Level

#### **Unit 6 Moral Development**

- 6.1. Morality as rooted in child nature
- 6.2. Morality as the Adoption of social norms
- 6.3. Moral development from Infancy to adolescence and moral characteristics of learners and provision of suitable activities to inculcate moral values at the following levels
- 6.4. Preschool and Kindergarten
- 6.5. Elementary Level

#### **Unit 7 Language Development**

- 7.1. What is Language development
- 7.2. Components of Language
- 7.3. Environmental Influences on Language
- 7.4. The Sequence of Language Development at different stages
- 7.5. Preschool and Kindergarten
- 7.6. Elementary Level



## **Unit 8 Human Learning and Classroom Teaching**

- 8.1. Definition of Learning
- 8.2. Factors Affecting Learning
- 8.3. Laws of Learning
- 8.4. Learning and Maturation
- 8.5. Role of teacher in classroom learning

## **Unit 9 Individual Differences**

- 9.1. Sources and Types of Individual Differences
- 9.2. Heredity and Environment.
- 9.3. Differences in Learning and Thinking Styles.
- 9.4. Effects of Individual Differences on Learning.
- 9.5. Strategies for dealing with individual differences.
- 9.6. Children with special needs.
- 9.7. Educational interventions for the special students.

## **Recommended Books**

- Arif, H. A. (2003). *“Child Development and Learning”*. Lahore: Majeed Book Depot.
- Berk, L. E. (2006). *“Child Development”*. (7<sup>th</sup> Edition). Pearson\_Prentice Hall: Pearson Education, Inc.
- Cook, J., & Cook. (2010). *“The World of Children”* 2<sup>nd</sup> edition. Boston, M A. Parson Education Inc.
- Meggitt, C. (2006). *“Child Development An illustrated Guide”* (2<sup>nd</sup> edition). New York: The McGraw-Hill Companies, Inc.
- Merman, A& Bronson, P. (2009). *“Nature Shock: New thinking about children”*. New York: Hachette Book Group.
- Santrock, J.W. (2001) *“Educational Psychology”*. Boston: McGraw Hill.
- Santrock, J.W. (2003). *“Child Development”*, New York: McGraw Hill.
- Vander Zanden, J. W. (1997) *“Child Development”*. (6<sup>th</sup> Edition). New York: The McGraw-Hill Companies, Inc

**Title of Course            Classroom Management**

**Credit Hours            3**

### **Course description**

Prospective teachers will learn about best practices of effective classroom management, how to establish a productive classroom environment, and how to apply a variety of management techniques to help students become responsible for their behaviors and choices. They will learn how to increase student motivation and build positive student-teacher relationships. They will practice and develop skills to minimize

and prevent classroom and behavior management problems. Prospective teachers will learn how to manage space, materials, equipment and students during and between activities and how classroom management is affected by, for example, availability of resources and space, the age and grade of children, multi-grade and single grade classes. Prospective teachers will be provided an opportunity to practice new skills and knowledge about classroom management with peers and in a school.

### **Learning Outcomes**

On completion of this course trainee teachers will be able to:

- Explain the meaning and concept of classroom management
- Demonstrate the establishment of a constructive classroom learning environment
- Apply various management techniques to assist learners to be responsible for their classroom behavior
- Demonstrate classroom organization to increase student motivation
- Analyze classroom situations to minimize behavioral problems
- Organize learning within a classroom environment to maximize available resources and space according to a variety of ages and grade levels of learners and
- Evaluate classroom organization in simulated and actual classroom situations.

### **Course Outline**

#### **Unit 1 Introduction to classroom management**

- 1.1. Elements of “classroom management” in the context of elementary education
- 1.2. Variety of roles of the teacher in managing the elementary classroom

#### **Unit 2 Classroom organization to encourage learner interest and class participation**

- 2.1. The elements of classroom organization
- 2.2. Impact/outcomes of various kinds of classroom organization on student behavior
- 2.3. Classroom activity for managing learning
- 2.4. Organizing and managing field trips and class visits

### **Unit 3 Design of the effective learning classroom**

- 3.1. Identifying resources for learning
- 3.2. Using displays and visuals for enhancing the learning environment in the classroom
- 3.3. Seating arrangements for learning experiences
- 3.4. Physical facilities to enhance the learning environment
- 3.5. Evaluating the effective learning classroom
- 3.6. Managing the overcrowded classroom

### **Unit 4 Maintaining classroom records**

- 4.1. Record-keeping systems: their establishment and maintenance

### **Unit 5 Incentives and rewards in the classroom environment**

- 5.1. How to maximize student success and minimize behavioral problems in the classroom
- 5.2. Incentive systems in the classroom setting

### **Unit 6 Managing Classroom Discipline**

- 6.1. Creating a positive classroom environment for student responsibility
- 6.2. Strategies for managing potential disciplinary issues before they become problems

### **Assessment Criteria**

- Student teachers are able to describe the elements of a positive classroom environment and explain why they have made the arrangements they have done (written assignment)
- Practical classroom construction of a positive learning environment
- Demonstrate positive classroom management through role plays and simulations
- Final examination

### **Recommended Books and Resources**

<http://712educators.about.com/od/discipline/tp/disciplinetips.htm>

Top Ten Tips for Classroom Discipline and Management

<http://www.adprima.com/managing.htm>

Effective Praise Guidelines

**Title of Course:**       **Teaching Literacy Skills**

**Credit Hours:**       **3**

### **Course Description**

Literacy is typically described as the ability to read and write. It is a concept claimed and defined by a range of different theoretical fields. For UNESCO, literacy is the "ability to identify, understand, interpret, create, communicate, compute and use printed and written materials associated with varying contexts. The course is designed to enable teachers to play their parts effectively in increasing literacy rate in Pakistan and improve students' ability to understand, interpret, create, and communicate.

### **Learning Outcome**

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

### **Specific Objectives of course**

The course will enable learners to;

- Understand the meaning, concept and importance of teaching literacy in education process
- Select, arrange and use appropriate methods/strategies and material for effective teaching of literacy
- Develop indigenous materials as instructional aids for teaching literacy

### **Course Outline:**

1. Concept of Literacy and its political impact
2. Developing Literate environment
3. Teaching beginning Reading
4. Teaching Numeracy
5. Teaching beginning writing
6. Teaching Scientific literacy
7. Teaching New literacies

### **Recommended Books:**

Andrew J. Coulson, *Delivering Education*, Hoover Institution, p. 117, [http://media.hoover.org/documents/0817928928\\_105.pdf](http://media.hoover.org/documents/0817928928_105.pdf), retrieved 2008-11-22

Goody, J. (1986). *The logic of writing and the organization of society*. New York: Cambridge University.

Janet C. Richards, Michael C. McKenna (2003). *Integrating multiple literacies in K-8 classrooms: cases, commentaries, and practical applications*.

Knobel, M. (1999). *Everyday literacies: Students, discourse, and social practice*. New York: Lang; Gee, J. P. (1996). *Social linguistics and literacies: Ideologies in Discourses*. Philadelphia: Falmer.

Kress, G. (2003). *Literacy in the new media age*. London: Routledge.  
Literacy in the Information Age: Final Report of the International Adult Literacy Survey, OECD 2000. PDF

Zarcadoolas, C., Pleasant, A., & Greer, D. (2006). *Advancing health literacy: A framework for understanding and action*. Jossey-Bass: San Francisco, CA.

## **Title of Course      Classroom Assessment**

**Credit Hours      3**

### **Course description**

This course emphasizes the link between learning and assessment. During this course, prospective teachers will develop their knowledge and understanding of formative and summative learning assessment and how teachers use assessment to inform decisions about teaching and learning. They will develop a range of practical assessment skills to use in the classroom with students of different ages, grades and subjects including using questions and tasks to assess learning, and giving oral and written feedback on student work.

### **Learning Outcomes**

After studying this course, the prospective teachers will be able to:

- Understand the concept and nature of assessment
- Differentiate between standardized and classroom tests
- Integrate objectives with learning assessment
- Develop and analyze test items of different levels
- Understand different alternative classroom assessment techniques
- Interpret test scores and results of different assessment techniques

## **Course Outline**

### **Unit 01 Concept of Classroom Assessment**

- 1.1 Distinction between assessment, evaluation and measurement
- 1.2 Purpose of assessment
- 1.3 Comparison between standardized and classroom assessment
- 1.4 Individual and group assessment

### **Unit 02 Achievement Tests**

- 2.1 Definition and Characteristics
- 2.2 Characteristics of a good achievement test
- 2.3 General guidelines for test construction (rules, table of specification etc.)
- 2.4 Types of test items
  - a) Essay type test items
  - b) Objective type test

### **Unit 03 Test Construction**

- 3.1 Defining the learning outcomes
- 3.2 Preparation of a test items/questions
- 3.3 Assembly the tests

### **Unit 04 Test Administration and Analysis**

- 4.3 Administration/conducting the test
- 4.4 Item analysis and modification

### **Unit 05 Interpreting Test Scores**

- 5.1 Percentage
- 5.2 Ordering and ranking
- 5.3 Frequency distribution
- 5.4 Pictorial form (graph, polygon, histogram)

### **Unit 06 Grading and Reporting Results**

- 6.1 Concept of grading – need and importance
- 6.2 Types of grading
- 6.3 Reporting results to different stakeholders

### **Recommended Books**

Angelo, T.A. & Cross, P.K. (1993). *Classroom Assessment Techniques* (2nd ed.). San Francisco: Jossey-Bass.

Ebel, Robert (2004). *Essentials of Educational Measurement*. India: Prentice hall.

Freeman, Richard, (2004). *Planning and Implementing Assessment*.

New York: Routledge Flamer.

Kubiszyn, Tom, (2003). *Educational testing and Measurement: Classroom Application and Practice*. United States: John Wiley & sons, Inc.

Kumari, Sarita (2005). *Education Assessment, Evolution and Remedial*. ISHA Books.

Mehnaz Aziz, (2007) *Assessing children's Development through Observation*, Children's Global net work Pakistan.

Smith, D, (2005). *Theory of Educational Measurement*. New Delhi: Commonwealth.

Smith, D. (2005). *History of Measurement and Evaluation*. New Delhi: Commonwealth.

Smith, D., (2005). *Methods of Educational Measurement*, New Delhi: Commonwealth.

Swain, Sanjaya, (2005). *Educational Measurement, Statistics and Guidance*. Kalyani Publications.

Thomas A. and K. Patricia Cross, 1993, *Classroom Assessment Techniques: A Handbook for College Teachers*, Second Edition, San Francisco: Jossey-Bass Publishers.

**Title of Course**                      **School, Community and Teacher**

**Credit Hours:**                      **3**

### **Course Description**

This course is designed to provide an opportunity to develop awareness about linkage among school, community and teacher for effective education program. Through this course the student have an exploration of interaction between teaching and learning within school and community. The course emphasized that how to experience the social contact with the community, and how to mobilize community for the development of the school. The course include a wider issue include culture, gender, special needs, equity and equality and collaborative working condition within the school and community. This course will provide an orientation for the process of socialization and social development. It's also emphasize on social factors which may affect education. This course have not only a theoretical perspective, it has some practical aspects as well like community work, health promotion activities, and promotion of healthy environment.

### **Learning Outcomes**

After completion of the course, the student will be expected to:

- Discuss relation between school and community.

- Know the process of linkage among the school community and teacher for effective education.
- Identify the social factors affecting education and how it can support the development of education.
- Know the role of teachers and school in socialization of student and development of society
- 5. Enable prospective teachers to contribute in community work, health promotion activities and endorsement of healthy environment.

### **Course Outline**

#### **Unit 01 Society, Community and Culture**

- 1.1 Definition, Structure and function.
- 1.2 Individual Status and his/her role in the society
- 1.3 Social interaction
- 1.5 Cultural diversity
- 1.6 Culture and Cultural elements of Pakistani community.
- 1.7 Role of education in strengthening Pakistani community.

#### **Unit 02 Group and Group Dynamics.**

- 2.1 Meaning of group
- 2.2 Group dynamics
- 2.3 Types of social groups
- 2.4 Individual behavior and group behavior
- 2.5 Role of school and teacher in molding individual and group behavior

#### **Unit 03 Socialization**

- 3.1 Meaning and aims of socialization
- 3.2 Agencies of socialization
- 3.3 Stages of social development
- 3.4 Role of school in socialization
- 3.5 Teacher as role model as participating in community and health activities.

#### **Unit 04 Social Institutions**

- 4.1 Definition of social institutions
- 4.2 Types of social institutions
  - 4.2.1 The family
  - 4.2.2 Economic institutions
  - 4.2.3 Religious institutions
  - 4.2.4 Educational institutions



#### 4.2.5 Play and recreational institutions

### **Unit 05 School and Community**

- 5.1. Relationship between school and community
- 5.2. Effects of school on community
- 5.3. Effects of community on school
- 5.4. A critical analysis of effective role of school and teachers in Pakistani community

### **Unit 06 Social Control**

- 6.1. Definition
- 6.2. Social deviation, peace, harmony and tolerance
- 6.3. Methods of social control
- 6.4. Role of community, school and teacher in developing peace, harmony and tolerance

### **Unit 07 Teacher School and Students**

- 7.1 Are teacher born or made?
- 7.2 Effective and reflective teaching
- 7.3 Creative and critical teaching
- 7.4 Teacher Effectiveness
  - 7.4.1 Academic learning time (ALT)
  - 7.4.2 Class room management
  - 7.4.3 Co-curriculum activities
  - 7.4.4 Clarity in academic and non-academic structures
  - 7.4.5 Creating expressive environment in classrooms.
  - 7.4.6 Reflection or productive feedback

### **Unit 08 Technological Change**

- 8.1 Technological change and its impact
- 8.2 Sources/forces of technological change
- 8.3 Technology and jobs
- 8.4 Technology and ethical values
- 8.5 Utilitarian view of technology

### **Recommended Books:**

Chaudhary, M. Iqbal, *Sociology*, Aziz Publishers, Lahore: Urdu Bazar.  
Hafeez Sabiha, Pakistani Society Volti, R. (2002) *Society and technological change* (6<sup>th</sup> ed.) Worth Publishers.  
Mehnaz Aziz, School and Family Partnership, (2007), *Children's Global Network*, Pakistan.  
Sadker Marya Pollack and David Miller Sadker (2003). *Teachers'*

*School and Society*. (6<sup>th</sup> Ed) McGraw Hill Book Company New York USA.

Tagga, Abdul Hamid, School, Maashra Owar Ustad. Sarwar, Ghulam Rana, School, Maadrsha owar Ustad.

**Title of Course                      Foundations of Education**

**Credit Hours                              3**

**Course Description**

This course will focus on the ideological, philosophical, psychological, socio-economic and historical foundations of education. The major focus will be on developing an understanding of the participants how different philosophical theories affect education. The course will also include historical development of education of the Pakistan. Emphasize will be given on analyzing various sociological, political, economic and ideological forces that influence the process of education in our culture context. This course will also be used to develop the ability in prospective teachers to interpret knowledge within its historical, philosophical, ideological, and social contexts, which will lead to produce critical perspectives on education both within, and outside of, schools.

**Learning outcome**

The students will be able to:

- Explain the important features of foundation of education
- Specify the role of educational thinkers in education
- Discuss the modes of education
- Discuss historical development of Pakistan
- Evaluate the issues and problems of education.

**Course Outline**

**Unit 1 Ideological Foundation of Education**

- 1.1. Islamic Foundations
- 1.2. Islamic concept of Peace
- 1.3. Other religions and Islam
- 1.4. Ideology and teachers

**Unit 2 Philosophical Foundations of Education**

- 2.1. Philosophy and Education
- 2.2. Main Philosophical Thoughts

- 2.3. Idealism
- 2.4. Realism
- 2.5. Pragmatism
- 2.6. Re-constructionism

**Unit 3 Psychological Foundations of Education**

- 3.1. Learning and Maturation
- 3.2. Individual Differences
- 3.3. Self Concept
- 3.4. Academic Aptitude
- 3.5. Instructional Strategies and Psychology

**Unit 4 Socio-Economic Foundations of Education**

- 4.1. Concept of Society and Culture
- 4.2. Social Conditions and Education
- 4.3. Economic Conditions and Education
- 4.4. Politics and Education

**Unit 5 Historical Foundations of Education in Pakistan**

- 5.1. Pre-Pakistan Period (712 A.D. to onward)
- 5.2. Period from 1947-1958
- 5.3. Period From 1959-1971
- 5.4. Period from 1972-1979
- 5.5. Period from 1980 -1991
- 5.6. Period from 1992 – to date

**Unit 6 Aims of Education**

- 6.1. Aims, Goals and Objectives
- 6.2. Taxonomies of Objectives
- 6.3. Aims and Objectives of Education in Pakistan

**Unit 7 Problems and Issues in Education in Pakistan**

- 7.1. Universalization of Primary Education
- 7.2. Literacy
- 7.3. Medium of Instruction
- 7.4. Diversification of Education
- 7.5. Environmental Education
- 7.6. Gender and Education
- 7.7. Islamization of Education
- 7.8. Special Education
- 7.9. Health Education / Drug Education
- 7.10. HIV / Aids, STIs, Hepatitis

**Recommended Book**

Canestrari, A. (2009). *Foundations of Education*. New York: Sage Publications.

Eugene, F.P. (2005). *Critical issues in education: Anthology of reading*. New York: Sage Publications.  
Goldblatt, P.F., & Smith, D. (2005). *Cases for teacher development*. New York: Sage Publications.  
Holt, L.C. (2005). *Instructional patterns: Strategies for maximizing students learning*.  
Murphy, D. (2005). *Foundations/Introduction to Teaching*. USA: Allyn & Bacon, Inc. New York: Sage Publications.  
Semel, S. F. (2010). *Foundations of education: The essential texts*. USA: Routledge

**Title of Course**                      **Curriculum Development**

**Credit Hours**                      **3**

**Course Description**

This course is intended to orient the prospective teachers about the principle, process and procedure of curriculum design and development. The participants will be informed about various foundations on which the curriculum is based, defining and delineating the objectives, selection of content, its scope and outcomes, teaching strategies, curriculum evaluation, design of instructional materials. This course will also include various factors that affect the process of curriculum development and implementation. Students will be provided exposure to various curriculum development models and theories to enhance their understanding. The course will be delivered within the context of existing curriculum and the bodies and procedures adopted for curriculum development process in Pakistan.

**Learning Outcomes**

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

- understand the concept of curriculum
- aware about the process of curriculum development in Pakistan
- examine the components of curriculum development
- differentiate between different types of curriculum
- write curriculum objectives in behavioral terms
- state the critical issues, problems and trends in curriculum

## **Course Outline**

### **Unit 01 Introduction to Curriculum**

- 1.1. The definition of Curriculum
- 1.2. Various forms of Curriculum
- 1.3. Elements of Curriculum: Objectives, Content selection, Curriculum implementation, evaluation of curriculum.
- 1.4. Learning experiences and assessment of students learning

### **Unit 02 Foundations of Curriculum**

- 2.1. Philosophical
- 2.2. Psychological
- 2.3. Sociological

### **Unit 03 Curriculum: Aims, Goals and Objectives**

- 3.1. Distinction between aims, goals & objectives
- 3.2. Taxonomies of educational objectives
  - a) Cognitive domain
  - b) Affective domain
  - c) Psychomotor domain
  - d) Solo Taxonomy of educational objectives

### **Unit 04 Models of Curriculum**

- 4.1. Tyler Model
- 4.2. Wheeler Model
- 4.3. Dynamic Model
- 4.4. Skel Beck Model

### **Unit 05 Designs of Curriculum**

- 5.1. Subject-based
- 5.2. Activity-based

### **Unit 06 Process of Curriculum Development in Pakistan**

- 6.1. Curriculum development at elementary and secondary level
- 6.2. Role of teacher in curriculum development process at various levels

### **Unit 07 Curriculum Change**

- 7.1. Process of Curriculum Change
- 7.2. Various issues in Curriculum change

### **Recommended Books:**

Beane I.A, Toefel C.F & Alessi S.J (1986). *Curriculum Planning & Development*. Boston and Bacon.

Farooq, R.A. (1993). *Education system in Pakistan*. Islamabad: Asia Society for the Promotion of Innovation and Reforms in Education.

Kelley A.V (1999). *The Curriculum: Theory and Practice*. London. Paul Chapman.

McNeil J. D (1990). *Curriculum: A Comprehensive Introduction*, (4th.ed) Los Angeles: Harper Collins

Murray P. (1993). *Curriculum Development & Design*, (5<sup>th</sup> ed),

Sharma R.C (2002). *Modern Methods of Curriculum Organization*. New Delhi:

**Title of Course**                      **Educational Psychology**

**Credit Hours:**                      **3**

**Course Description**

The purpose of this course is to *develop learner's* insight. Its unique approach helps students teachers to understand different psychological concepts by encouraging them to examine their own learning and then showing them how to apply these concepts as teachers. This course concentrates on core concepts and principles. It gives readers an in-depth understanding of the central ideas of educational psychology.

**Learning Outcomes**

By the end of the course students should be able to:

- describe in detail the multidisciplinary nature of educational psychology
- familiarize students with basic theories derived from various discipline which are related to education
- develop critical thinking about and appreciation of education psychology as multidisciplinary subject
- familiarize with the concept of test development

**Course Outline**

- Unit 1**                      **Introduction to psychology**
- 1.1. Schools of thoughts
  - 1.2. Structuralism
  - 1.3. Functionalism
  - 1.4. Behaviorism
  - 1.5. Nature and function of educational Psychology
  - 1.6. Four way teaching agenda of educational

psychology

**Unit 2 Fundamentals of Human Development**

- 2.1. Overview of Growth and Development
- 2.2. General nature of growth and Development
- 2.3. Factors influencing Child Development

**Unit 3 Learning**

- 3.1. Definition of learning
- 3.2. Learning theories
- 3.3. Learning Process

**Unit 4 Information Processing**

- 4.1. What is Memory
- 4.2. Parts of memory
- 4.3. What is Forgetting
- 4.4. Methods to improve memory

**Unit 5 Intelligence**

- 5.1. Concept of intelligence
- 5.2. Theories of intelligence
- 5.3. Individual difference
- 5.4. Intelligence Testing

**Unit 6 Measurement and evaluation in educational Psychology**

- 6.1. Test
- 6.2. Characteristics of Test
- 6.3. Reliability
- 6.4. Validity
- 6.5. Items Analysis

**Recommended Books**

Ormrod, Jeane, (2010) *Educational Psychology: Developing Learners:* Pearson

Santrock, [John W.](#), (2001) *Educational Psychology*, USA. Mc-Graw-Hill Anita Woolfolk; Educational Psychology, USA.

**Title of Course            General Science**

**Credit Hours:            3**

**Objectives**

## **Course Outline**

### **Unit 1 Scientific Methods**

- 1.1 Observations
- 1.2 Hypothesis
- 1.3 Theory
- 1.4 Role of Statistics in Research

### **Unit 2 Matter and Forces**

- 2.1. Role of Statistics in Research
- 2.2. Types of matters
- 2.3. Atomic theory of Matter
- 2.4. Elements and Compounds
- 2.5. Mixtures and Solutions
- 2.6. Molecular structure
- 2.7. Force
- 2.8. Motion
- 2.9. Speed
- 2.10. Velocity
- 2.11. Acceleration
- 2.12. Equation of motion
- 2.13. Laws of Motion

### **Unit 3 Energy**

- 3.1. Role of Statistics in Research
- 3.2. Work, Resistance / Friction
- 3.3. Theory of Energy
- 3.4. Conversation of Energy from one form to another
- 3.5. Law of conversation of energy

### **Unit 4 Head and Light**

- 4.1. Head
- 4.2. Transfer of Heat
- 4.3. Measurement of Head and its units
- 4.4. Evaporation
- 4.5. Sources of Light
- 4.6. Reflection of Light
- 4.7. Regular and irregular reflection
- 4.8. Spherical Mirrors
- 4.9. Total internal reflection
- 4.10. Lances and image formation
- 4.11. Structure of Eye and Camera

### **Unit 5 Structure of Cell**

- 5.1. Structure of animal and plant cell



- 5.2. Cell division
- 5.3. Cell Theory
- 5.4. Variation in Human Life
- 5.5. Role of Genes in Human Life
- 5.6. Twin and its types

#### **Unit 6 Ecology**

- 6.1. Factors Effecting Ecology
- 6.2. Biotic Components of ECO System
- 6.3. Abiotic Components of ECO System
- 6.4. Food Chain
- 6.5. Algae and Fungal
- 6.6. Animals and its importance

#### **Unit 7 Human Systems**

- 7.1. Blood circulatory system
- 7.2. Digestic system
- 7.3. Reproductive system
- 7.4. Reproductive system
- 7.5. Execratory system

#### **Unit 8 Metals**

- 8.1. Difference between metals and non metals
- 8.2. Formulae of different compounds
- 8.3. Extraction of Metals from its ore
- 8.4. Alloys
- 8.5. Rusting and corrosion

#### **Unit 9 Non Metals**

- 9.1 Gases and their Preparation
- 9.2 Oxygen and its preparation
- 9.3 Hydrogen an
- 9.4 Nitrogen
- 9.5 Halogen

#### **Recommended Books**

Agha Khan University Examination Board (2002) General Sceicne IX-X (based on National Curriculum 2002). Karachi: AGKEB.  
William Lewis Eikenberry (2008) The teaching of general science, The University of Chicago Press.

**Title of Course**        **Art, Crafts and Calligraphy**

**Credit Hours**        **3**

**Course Description**

The course covers different aspects of art and craft education including sketching, composing, shapes and colors, painting and calligraphy. It also focuses on indigenous crafts including clay modeling and toy-making. Art portfolio-based assessment will be done at the end of the course

**Learning Outcome**

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

**Specific Objectives of course**

The course will provide the knowledge of;

- Art and crafts and objectives of its teaching
- Selecting appropriate techniques of teaching art and crafts
- Helping learners in attaining additional meaning of communication to express the thoughts, ideas and feelings through art and crafts media
- Developing among learners the aesthetic sense and responding beauty in the environment and culture
- Maintaining safe environment in art classroom

**Course Outline**

- 1) Definition and significance of art and crafts
- 2) Approaches of art and crafts
  - a) Integrated b) Topical c) Sketching
- 3) Modern methods of arts and crafts
  - a) Instruction
  - b) demonstration
  - c) Inquiry
  - d) Free Expression
  - e) creative expression
  - f) fixed topic method
- 4) Teaching of art and crafts

- a) Effective teaching of art and crafts
  - b) Responsibilities of an art and crafts teacher
- 5) Modes in art and crafts
    - a) Paper work
    - b) Stenciling
    - c) Calligraphy
    - d) Masks and puppets
  - 6) Painting, still life and landscape
  - 7) Toy making and clay modeling
    - a) clay work b) clay modeling
  - 8) Recycling in art and crafts
  - 9) Evaluation in art and crafts

**Recommended Books**

Bhatti. etal (2000). “*An introduction to drawing and Art and Craft*” (first edition): Karachi. Metropolis Academy

Clark. R., (2002) “*An introduction to Art education*” (2<sup>nd</sup> Edition). Toronto . AN. Plan Book.

Hume Helen (1990). “*A survival kit for secondary school art teacher*”. NY. The center for applied research in education

Jenson Eric (2001). “*Art with the brain in mind*”. Alexandria VA. Association for Supervision and Curriculum Development

**Title of Course:    Development of Education in Pakistan**

**Credit Hours:        3**

**Course Description**

This course is designed to develop prospective teachers towards knowledge of education of the development of education in Pakistan. Prospective teachers will develop their knowledge about different phases of development of education keeping in view different stages like preprimary education, primary education, elementary education, secondary education and higher education. In this process different policies and plans will also be studied. Teacher educator will ensure that different components of education like curriculum, teacher education, school buildings, physical facilities are also taken into account during the enactment of the course.

## **Learning Outcomes**

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

- Understand role of Islamic values and ideology of Pakistan in education.
- Decipher the nature and purposes of education in the Mughal empire, the British period and post independence period.
- Delineate the historic roots and subsequent development of the madrassah education.
- Evaluate education in Pakistan in the light of different policies and plans.
- Critically analyze educational development at different levels of education i.e Pre-primary education, Primary education, Elementary education, secondary education and higher education.

## **Course outline**

### **Unit 01 Education, its meaning and types**

- 1.1 Definitions and meaning of Education
- 1.2 Types of education
  - a) Formal
  - b) Non Formal
  - c) Informal
- 1.3 Education as a process
- 1.4 Aims of education as stated in National Educational policy 2009

### **Unit 02 Education in sub-continent Indo-Pak Since 712 A.D**

- 2.1 Education in sub-continent Indo-Pak during Muslim period since 712A.D
- 2.2 Education in sub-continent Indo-Pak during Mughal period
- 2.3 Education in sub-continent Indo-Pak during British rule.
- 2.4 Comparison of characteristics of Education system between Muslim period and British rule.

### **Unit 03 Education in Pakistan after independence**

- 3.1: First Educational Conference 1947.
- 3.2: National Education Commission 1959.

- 3.3: Education Commission for Welfare of students 1962.
- 3.4: Education policy 1972.
- 3.5: National Education Policy 1978.
- 3.6: Education policy 1992-2010
- 3.7: Education Sector reforms 2001
- 3.8: Education policy 2009
- 3.9: Comparison of characteristics of different education policies and their role in the development of education in Pakistan.

**Unit 04 Status of Formal Traditional System of Education**

- 4.1 Pre-primary education
- 4.2 Primary Education
- 4.3 Elementary Education
- 4.4 Secondary Education
- 4.5 Higher Education
- 4.5 Vocational Education
- 4.6 Technical Education
- 4.7 Teacher Education

**Unit 05 Madrassah Education**

- 5.1: Madrassah Education During Mughal Period
- 5.2: Madrassah Education During British Period
- 5.3: Madrassah Education after independence
- 5.4: Study of “Muslim education movements”, contribution of Deoband, Aligarh, Jamia Millia, Anjuman-e-Himayatul Islam, Sindh Madersat-ul-Islam.

**Unit 05 Education as an agent of Change**

- 5.1 Meaning and factors of social change
- 5.2 Education as tool for social change
- 5.3 Education as conservative and creative force.
- 5.4 Education for peace and universal brotherhood.

**Unit 06 Salient Features of Education Policies**

- 6.1 All Pakistan Educational Conference 1947
- 6.2 The Commission on National Education 1959
- 6.3 The Education Policy 1972-80
- 6.4 National Education Policy 1979
- 6.5 National Education Policy 1992
- 6.6 National Education Policy 1998-2010
- 6.7 National Education Policy 2009

### **Recommended Books:**

Al-Naqib-al-Attas, Syed Muhammad (1979). *Aims and Objectives of Education*, Jeddah: King Abdul Aziz University.

Iqbal Muhammad, (1999). *The Reconstruction of Religious thought in Islam*, Lahore: Shaikh Muhammad Ashraf.

John, S. Brubacher (1987). *Modern Philosophies of Education*, New Delhi: TATA McGraw Hill Publication Co.

Mansoor, A. Qureshi, (1983). *Some Aspects of Muslim Education*, Lahore: Universal Books.

**Title of Course      Critical Thinking and Reflecting practices**

**Credit Hours          3**

### **Learning Outcomes**

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

- Differentiate between 'Good' and 'Bad' bent of mind
- Ask and analyze thought provoking Questions
- Understand the relationship of critical thinking with **reading and writing**
- Foster rational motivation among the students.
- Apply critical thinking in different content areas
- Develop the habit of contributive thinking
- Understand the concept and role of reflection and **reflective practice** as a tool for raising critical consciousness
- Use reflection as a tool of inquiry into practice

### **Course Outline**

#### **Unit 01      Introduction**

- 1.1 Introduction to the Fundamentals of Critical Thinking
- 1.2 Why Critical Thinking Matters?
- 1.3 Critical Thinking and the Process of Analysis
  - A. Teaching Students to Think Theoretically
  - B. Teaching Students to Think Empirically

#### **Unit 02      Strategies and Techniques to develop critical Thinking**

- 2.1 Brain Storming

- 2.2 Concept Mapping
- 2.3 Generalization and Testing the Limits
- 2.4 Venn Diagram
- 2.5 Logical Reasoning
- Unit 03    Critical Thinking and Art of Questioning**
  - 3.1 Critical Thinking and Socratic Questioning
  - 3.2 Teaching Students to Ask Good Questions & Follow up the Implications of Thought
  - 3.3 Teaching Students to narrate, analyze, and evaluate their own 'Points'
  - 3.4 View' and of others
  - 3.5 Open and Close ended Questions
- Unit 04    Critical Thinking and its Applications**
  - 4.1 Interrogating the Text
  - 4.2 Primary and Secondary Sources
  - 4.3 Characteristics of Academic Text
  - 4.4 Status of Evidence
  - 4.5 Status of The Author
  - 4.6 Comparing and Contrasting Different Sources
- Unit 05    Introduction to Reflection**
  - 5.1 Meaning of reflection on **practice/educational issues**
  - 5.2 Significance of reflection for teacher
- Unit 06    Major Proponents of Reflective Practice**
  - 6.1 John Dewey
  - 6.2 L. Stanhouse
  - 6.3 D,Schon
- Unit 07    Process and Techniques of Reflection**
  - 7.1 Process of reflection
  - 7.2 Major techniques and strategies (critical incident analysis, keeping reflective journals, peer coaching, action research)
  - 7.3 Skills for reflection
- Unit 08    Application of skills and approaches to reflection**
  - 8.1 Systematic reflection throughout the coursework
  - 8.2 Identify key questions for their own role as novice teachers
  - 8.3 Understand the issues in becoming a reflective practitioner

**Recommended Books:**

- Ayoukarm, Govald (1989), *Modern Methods and Techniques of Teachings* Philadelphia. Open University press 1
- Baron, J. and Sternberg, R, (Eds.) (1987) *Teaching thinking skills: theory and practice*, New York: Freeman.
- Barrow, R. (1990) *Understanding Skills: Thinking, Feeling and Caring*. London, Ontario: Althouse.
- Beyer. B. K. (1987) *Practical strategies for the teaching of thinking*. Boston: Allyn and Bacon.
- Chipman, S., Segat, J. and Glaser, R, (1985) *Thinking and Learning Skills*, Volume 2. Research and Open Questions. HiNsdale, New Jersey: Eribaum.
- Costa, A.L. and Lowery, L.F. (1990) *Techniques for teaching thinking*, Melbourne: Hawker Brownlow.
- Finn, B. (1991) *Young People's Participation in Post-compulsory Education and Training*. Report of the Australian Education Council Review Committee. Canberra: Australian Government Publishing Service.

**Title of Course      Human Development and Learning**

**Credit Hours          3**

**Course Description**

This course focuses on developing effective secondary school teachers and head teachers. The aim of the course is to make prospective teachers well acquainted with the process of running schools in effective and efficient manner besides being well versed with the duties and responsibilities of the teachers. The course covers knowledge about school management; organization; function of head teachers, record keeping and school-community relations related issues and matters.

**Learning Outcomes**

After studying this course, students will be able to understand:

- Basic concepts in human development, growth and learning;
- Process of human development and its classroom application;
- Various aspects and stages of human development;
- Different approaches to human learning;
- Individual differences and their effect on teaching learning.



## **Course outline**

### **Unit 1 Introduction**

- 1.1. Definitions of Human Development and Growth
- 1.2. Difference between Growth and Development
- 1.3. General Principles of Human Development
- 1.4. Factors influencing Human Development
- 1.5. A Frame work for studying Human Development

### **Unit 2 Physical Development**

- 2.1. Concept and definition of individuals
- 2.2. Physical Development from Infancy to Adolescence
- 2.3. Physical Characteristics of Learners of:
- 2.4. Preschool and Kindergarten
- 2.5. Primary Level
- 2.6. Elementary Level
- 2.7. Secondary Level
- 2.8. Higher Secondary Level
- 2.9. Role of Teacher in Physical Development

### **Unit 3 Intellectual Development**

- 3.1. Intellectual Development from Infancy to Adolescence
- 3.2. Intellectual Characteristics of Learners of:
- 3.3. Preschool and Kindergarten
- 3.4. Primary Level
- 3.5. Elementary Level
- 3.6. Secondary Level
- 3.7. Higher Secondary Level
- 3.8. Role of Teacher in Intellectual Development

### **Unit 4 Social Development**

- 4.1. Social Development from Infancy to Adolescence
- 4.2. Social Characteristics of Learners of:
- 4.3. Preschool and Kindergarten
- 4.4. Primary Level
- 4.5. Elementary Level
- 4.6. Secondary Level
- 4.7. Higher Secondary Level
- 4.8. Role of Teacher in Social Development

### **Unit 5 Emotional Development**

- 5.1. Emotional Development from Infancy to Adolescence

- 5.2. Emotional Characteristics of Learners of:
- 5.3. Preschool and Kindergarten
- 5.4. Primary Level
- 5.5. Elementary Level
- 5.6. Secondary Level
- 5.7. Higher Secondary Level
- 5.8. Role of Teacher in Emotional Development

**Unit 6 Moral Development**

- 6.1. Morality as Rooted in Human Nature
- 6.2. Morality as the Adoption of Social Norms
- 6.3. Moral Reasoning
- 6.4. Development of Morally Relevant Self-Control
- 6.5. Correlates of Moral Conduct

**Unit 7 Language Development**

- 7.1. What is Language?
- 7.2. Components of Language
- 7.3. The Sequence of Language Development
- 7.4. Biological and Environmental Influences on Language Development

**Unit 8 Human Learning**

- 8.1. Definition and Concept of Learning
- 8.2. Process of Learning
- 8.3. Factors Affecting Learning
- 8.4. Thorndike's Laws of Learning
- 8.5. Transfer of Learning

**Unit 9 Approaches to Learning**

- 9.1. Behavioral Approach
- 9.2. Cognitive Approach
- 9.3. Social Learning Approach
- 9.4. Humanistic Approach

**Unit 10 Individual Differences**

- 10.1. Sources and Types of Individual Differences
- 10.2. Dealing with Academic Ability Grouping
- 10.3. Differences in Learning and Thinking Styles
- 10.4. Effects of Individual Differences on Learning

**Recommended Books**

Arif, H. A. (2003) *Human Development and Learning*. Lahore: Majeed Book Depot.

Berk, L. E. (2006) *Child Development*. (7<sup>th</sup> Edition). Pearson Prentice Hall: Pearson Education, Inc.

Dembo, M.H. (1994) *Applying Educational Psychology* (5<sup>th</sup> Edition). New York: Longman.

Mehnaz Aziz (2007), *Assessing children's Development through observation*, Children's Global Network Pakistan.

Mehnaz Aziz (2007), *Individualized teaching in ECE*, Children's Global Network Pakistan.

Ormrod, J.E. (1998) *Educational Psychology Developing learners*. New Jersey: Prentice Hall.

Santrock, J.W. (2001) *Educational Psychology*. Boston: McGraw Hill.

Vander Zanden, J. W. (1997) *Human Development*. (6<sup>th</sup> Edition). New York: The Mc Graw-Hill Companies, Inc.

Woolfolk, A (2004) *Educational Psychology* (9<sup>th</sup> Ed.). Singapore: Pearson Education. Inc.

**Title of Course    Inclusive Education**

**Credit Hours        3**

**Course Description**

This course will equip prospective teachers with knowledge and skills to understand the concept of inclusive education. They will become familiar with the significance of it in education. They will get aware of the difference between special education and inclusive education. They will recognize methods to plan individualized lessons to cater the needs of children with special needs in classrooms. They will execute projects on case studies from actual classrooms. They will understand the vital role of community, family and institutions regarding inclusive education.

**Observation Learning Outcomes**

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

- Explain the definition of inclusive education.
- Recognize the nature of inclusion in education.
- Understand the difference between inclusive and special education.
- Develop individualized lessons along with learning aids to address special needs of children.
- Projects Examine the different models of inclusion used for enhancement of learning
- Apply variety of adaptations of curriculum teaching strategies in coping with learning disabilities
- Find out the role of community in establishing effective

- partnership with schools
- Highlight the root of inclusive education in Islam

### **Course Outline**

UNIT 1: An Overview of Child Development

UNIT 2: An Introduction to Special Needs

UNIT 3: Approaches to the Education of Children with Special Needs

UNIT 4: Assessing Children with Special Needs

UNIT 5: Curriculum Adaptations and Teaching Strategies

UNIT 6: Collaboration and Teamwork for School Improvement

### **Recommended Books:**

Allen, K E and Schwartz, I S (1996). *The Exception Child: Inclusion in Early Childhood Education*. Albany, New York: Delmar Pub. Co.

Friend, M and Bursuck, W (1996). *Including Students with Special Needs: A Practical Guide for Classroom Teachers*. Boston: Allyn and Bacon.

Mehnaz Aziz (2002), *Creating Inclusive Classrooms*, Islamabad: Children's Global Network Pakistan.

Mehnaz Aziz (2007), *School and Family Partnership*, Islamabad: Children's Global Network Pakistan.

Smith, T.E.C. et al. (1995). *Teaching Students with Special Needs in Inclusive Settings*. Boston: Allyn and Bacon.

UNESCO (1993), *Help in Classroom, Special Needs in the Classroom*. Teachers Education Resource Pack, Paris, UNESCO

Hutchinson, N. (2002). *Inclusion of Exceptional Learners in Canadian Schools: A Practical Handbook for Teachers*. Toronto, ON: Prentice Hall.

Weber, K., and Bennett, S. (1999) *Special Education in Ontario Schools*. Fourth Edition, Thornhill: Highland Press

Ontario Ministry of Education (2003). *Special Education Companion*. The Ontario Curriculum Unit Planner. Ministry of Education.

Ministry of Education (2001). *Special Education. A Guide for Educators*. P. Baber web. Page or

<http://www.edu.gov.on.ca/eng/general/elemsoc/speed/guide.html>

**Title of Course**    **Educational Management  
and Leadership**

**Credit Hours**     **3**

**Learning Outcomes**

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

1. Explain the concept of school organization, management and discipline and factors affecting school discipline
2. Organized school activities (curricular and co-curricular) affectively and manage available resources (material, human and time) efficiently.
3. Differentiate between the concept of leadership and management utilizing the major indicator of effective leadership management.
4. Maintain school record and activities according to the school mandate.
5. Explain the functions of basic rules of leave pay and allowances E & D, codes of ethics

**Course Outline**

**Unit 01 Introduction to Management**

- 1.1 Definitions of Management and Leadership.
- 1.2 Difference between leadership and management
- 1.3 Difference between general and educational management and Leadership.

**Unit 02 Process of Management**

- 2.1 Planning
- 2.2 Organizing
- 2.3 Staffing
- 2.4 Communicating
- 2.5 Controlling
- 2.6 Budgeting

**Unit 03 Resource Management**

- 3.1 Human resources
- 3.2 Physical resources
- 3.3 Financial resources
- 3.4 Information and learning resources (Library, AV Aids and instructional material)

#### **Unit 04 Rules and Regulations**

- 4.1 Rules regarding appointment, leaves, pay and allowances.
- 4.2 Efficiency & Discipline rules
- 4.3 Terms of reference of various personals in the school
- 4..4 Code of ethics

#### **Unit 05 Records in Educational Institutions**

- 5.1 Attendance register
- 5.2 Leave register
- 5.3 Stock register
- 5.4 Cash register (fee, different kind of funds)
- 5.5 Personal files of teachers and other staff
- 5.6 Other academic record (students result, staff meetings etc.)

#### **Unit 06 Theories of Leadership**

- 6.3 Trait Theories
- 6.4 Contingencies Theories

#### **Unit 07: Leadership Style**

- 7.1 Democratic
- 7.2 Autocratic
- 7.3 Lauzis-faire
- 7.4 Leadership style and Headship

#### **Recommended Books**

- Afridi, A. (1998). *School organization*: Ijaz Publishers.
- Bovee, C.L. et al. (1995). *Management*. International Edition. New York: McGraw Hill, Inc.
- Burden, R.P. (1995). *Classroom management and discipline: Methods to facilitate cooperation instruction*. New York: Longman.
- Bush, T.B. et al. (1999). *Educational management: Re-defining theory, policy and practice*. London: Longman.
- Farooq, R.A. (1994). *Education system in Pakistan*. Islamabad: Asia Society for the Promotion of Innovation and Reforms in Education.
- Lumicbry, R.P. (1995). *Classroom demonstration, administration, concepts and practice*. Third Edition. London: Wadsworth.
- (2004). *School and Family Partnership*. Islamabad: Children's Resources International.

**Title of Course: Supervised School visit / Observation**

**Credit Hours: 3**

**Description**

The purpose of this course/activity is to give the prospective teacher an opportunity to familiarize him/her with the day to day affairs, teaching and learning process, and overall school environment. This course also provides the guidelines for the supervisors of prospective teachers in scheduling, managing, recording and providing information on protocol and ethics for the purpose.

**Course Contents**

**Step 1 Briefing and orientation about the school visit**

- 1.1. School location
- 1.2. School history and detail
- 1.3. The purpose of the activity
- 1.4. Protocol of the visit
- 1.5. Ethics of the activity
- 1.6. Dress code
- 1.7. any other matter

**Step 2 Scheduling**

- 2.1. duration of each activity
- 2.2. Time table
- 2.3. Group formation

**Step 3 The school visit**

- 3.1. Observation checklists
- 3.2. What to bring in school visit
- 3.3. Staffing of the school visit
- 3.4. Arriving in school
- 3.5. Problem solving
- 3.6. Collecting the data
- 3.7. Taking leave

**Step 4: Data analysis and Reporting**

- 4.1. Reporting & De-briefing by prospective teacher
- 4.2. Supervisor's feedback and evaluation of the whole process

**Websites**

<http://www.ravolunteers.org/pdfs/SchoolObservationForm.pdf>

[sunzi.lib.hku.hk/hkjo/view/10/1000159.pdf](http://sunzi.lib.hku.hk/hkjo/view/10/1000159.pdf)

[secc.rti.org/display.cfm?t=m&i=Chapter\\_53\\_3](http://secc.rti.org/display.cfm?t=m&i=Chapter_53_3)

[www.meridianschool.edu/?page=observations](http://www.meridianschool.edu/?page=observations)



**M. Ed / MS Education**  
**Scheme of Studies**

| <b>I</b> | <b>Core Courses</b>                        | <b>Cr. Hr.</b> |
|----------|--|----------------|
| 1.       | Professional Development of Teachers       | 3              |
| 2.       | Educational Change and Development         | 3              |
| 3.       | Qualitative Research Methods in Education  | 3              |
| 4.       | Quantitative Research Methods in Education | 3              |
|          | TOTAL                                      | 12             |

II. Field of specialization (select a field of specialization and opt any 4 courses) 12 Cr. Hrs.

|                           |  |
|---------------------------|--|
| Curriculum studies        | <ol style="list-style-type: none"> <li>1. Curriculum Theories</li> <li>2. Curriculum Design and Process</li> <li>3. modern Research and trends in Curriculum</li> <li>4. Curriculum evaluation</li> <li>5. Curriculum and instruction</li> </ol>   |
| Education and development | <ol style="list-style-type: none"> <li>1. Gender and Population Education</li> <li>2. Education for sustainable development</li> <li>3. Right based education</li> <li>4. Poverty alleviation and education</li> <li>5. Peace education</li> </ol> |
| Monitoring and Evaluation | <ol style="list-style-type: none"> <li>1. Evaluation notions and practices</li> <li>2. Forms of monitoring and decision making</li> <li>3. Strategic planning and development</li> </ol>   |

|                                     |   |
|-------------------------------------|---|
| Educational testing and measurement | <ol style="list-style-type: none"> <li>1. examination system in Pakistan</li> <li>2. Construction, Administration and analysis of test items</li> <li>3. educational Statistics</li> </ol>            |
| Educational research                | <ol style="list-style-type: none"> <li>1. Educational Inquiry</li> <li>2. Data Management and analysis</li> <li>3. Report writing</li> </ol>  |
| Early childhood education           | <ol style="list-style-type: none"> <li>1. Child development</li> <li>2. Curriculum teaching and learning</li> <li>3. Research in early years of education</li> </ol>                                  |
| Education policy and planning       | <ol style="list-style-type: none"> <li>1. Policy studies</li> <li>Historical perspectives of educational policy making in Pakistan</li> <li>3. Role of policy making organizations (AEPAM)</li> </ol> |
| Education Technology                | <ol style="list-style-type: none"> <li>1. The new technologies in the 21<sup>st</sup> Century</li> <li>2. ICT in Education</li> <li>3. Technology in research</li> </ol>                              |
| Governance in Education             | <ol style="list-style-type: none"> <li>1. Issues in Educational governance</li> <li>2. Contemporary models of Governance</li> <li>3. Governance and Planning</li> </ol>                               |
| Teacher Education                   |   |
| Professional Education              |   |
| Secondary Education                 |   |
| Higher Education                    |   |
| Population Education                |   |
| Science Education                   |   |
| Early Childhood Education           |   |
| Elementary Education                |   |

University may suggest any other courses for specialization according to the available resources and expertise.

|      |                   |             |
|------|-------------------|-------------|
| III. | Research Project. | 06 Cr. Hrs. |
|      | Grand Total:      | 30 Cr. Hrs. |