

PROSPECTUS

M.Phil / P.hD PROGRAMMES

2016



IMPORTANT ACTIVITIES TO BE REMEMBERED

Activity	Spring Semester	Autumn Semester
Admissions	February - March	August – September
Mailing of Books	March – April	September – October
Study Period	May – September	November – March
Post Graduate Workshops	October – November	April – May
Final Examinations	December – January	June – July

Note: Contact concerned Regional office for exact schedule of activities. Continuing Students are sent information for all activities by post. Simultaneously information is placed on website (www.aiou.edu.pk), students can download if not received by post.

Most Important to remember is admission in next semester. Continuing admission form is sent to all students by post. If not received, download from website or use new admission form of Matric program as continuing form.

PROSPECTUS

MS/MPhil, PhD Programmes

SEMESTER: SPRING 2016



Allama Iqbal Open University, Islamabad

Price: Rs.500/-

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Semester Spring 2016

Quantity

Price..... Rs.500/-

Composed by..... M. Hameed Zahid

Printer..... Khalil Ahmad Rana

Publisher..... Allama Iqbal Open University, H-8, Islamabad.

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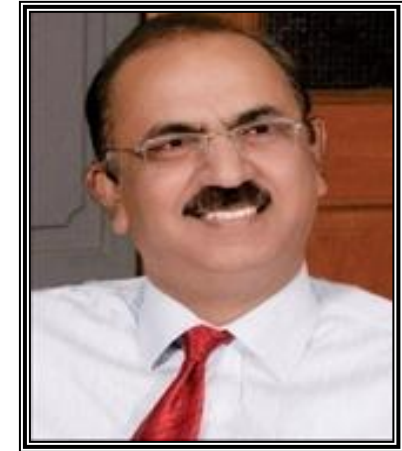
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Vice-Chancellor's Message

Dear Student,

السلام عليكم

Welcome to Allama Iqbal Open University, the First Distance Education University in South Asia, that caters to the educational needs of 1.3 million students to enable them to study at their own place, at their own pace and at their own convenience. The University goes to the doorsteps of the students, irrespective of the distance and location of students. One can become a student of this university at any age as we consider education a life-long and continuous process. The University has a vast menu of educational program at different levels, starting from basic literacy program to the PhD program. The courses are regularly revised in order to keep them contemporary, relevant, and internationally compatible. Self explanatory course material helps the students to comprehend the course concepts without physical presence of the teacher. The self-assessment activities, included in the books, help ensure the acquisition of learning outcomes. This university offers maximum number of specialization at post-graduate level through four faculties -- Faculty of Arabic and Islamic Studies, Faculty of Education, Faculty of Sciences, and Faculty of Social Sciences and Humanities. The faculty members at the university and a huge network of tutors, resource persons, specialists and experts make sure that the courses being offered in these programs enable the students to become independent learners and critical thinkers. Post-graduate level studies invite you to critically examine what has already been done in your field of interest and then research to offer innovations.



I welcome you to the postgraduate studies at AIOU and wish you a challenging yet successful journey ahead.

(Prof. Dr. Shahid Siddiqui)
Vice Chancellor, AIOU

1. ALLAMA IQBAL OPEN UNIVERSITY

The Allama Iqbal Open University, a Mega university was established in 1974 under an Act of Parliament. The main campus of the university is situated in sector H-8, Islamabad. It was the second open university of the world and the first of its kind in Asia and Africa. The aim of establishing AIOU was to provide affordable and accessible education through distance learning at the door-steps to those people who could not continue their education journey through formal system of education. The University (AIOU) operates on semester system and admits students in Autumn and Spring semesters. Under graduate admissions are offered in both the semesters where-as post graduates are offered once a year. The enrolled students are given course books specially prepared by the university on self instructional principles. However at post graduate level reprints of foreign books, allied material along with university prepared study guides help students to polish their skills.

At present, the AIOU is offering programs from Matric to PhD level in diverse disciplines comprises of four faculties. The university has established study centres across the

country, where distance education students are provided necessary guidance by their respective tutors. Moreover, the university has established full time study centres, wherein the students of MBA, BS (CS), BS Chemistry, BS Microbiology and BS Environmental Sciences etc. are being provided instruction, guidance and counselling through face-to-face education. AIOU is offering four year under graduate degrees.

Apart from curricular and extra-curricular activities during the academic year, the AIOU and its regional centres actively participate in the co-curricular activities by arranging educational and literary seminars, workshops and conferences, attended not only by the students and faculties of the university but also by the renowned dignitaries and scholars. For the science students and research scholars, a science complex has been built where they use the latest equipment of international standard for experiments and research. To meet the present day challenges internet facility is also available in the student's hostel and the Central Library where computers have been provided to enable students to access latest information available through open source databases.

2. FACULTY OF EDUCATION

The origin of the Faculty of Education pre-dates the university itself. The National Institute of Education was established in 1973 under the Federal Ministry of Education. It became part of the university in June, 1975 as Institute of Education in the then Faculty of Social Sciences. The progressively extending functions of the Institute brought the needs for structural change and in 1984 it got the status of Faculty of Education.

3. DEPARTMENTS OF THE FACULTY

Faculty of Education comprises of the following six departments:

1. Distance, Non-Formal and Continuing Education
2. Educational Planning, Policy Studies and Leadership
3. Early Childhood Education and Elementary Teacher Education
4. Secondary Teacher Education
5. Science Education
6. Special Education

4. PROGRAMMES OF FACULTY OF EDUCATION

The Faculty has developed and launched more than 275 courses (up to Spring, 2015 Semester) in various disciplines from SSC to PhD level programmes. It is now fully recognized by both the government of Pakistan and International agencies as the prime national provider of professional education and training at all levels.

The faculty is offering the following academic programmes.

- PhD Education (MPhil Based) Teacher Education Specialization
- PhD Education (MPhil Based) Special Education Specialization
- PhD Education (MPhil Based) Science Education
- MPhil (Education) Distance and Non Formal Education
- MPhil (Education) Educational Planning & Management
- MPhil (Education) Teacher Education
- MPhil (Education) Special Education
- MPhil (Education) Science Education
- MEd Distance and Non Formal Education
- MEd (Science Education)
- MEd (Special Education)
- MEd (Teacher Education)
- MA Distance and Non Formal Education
- MA (Educational Planning and Management)
- MA (Teacher Education)
- MA (Special Education)
- BEd (Bachelor of Education)
- PG (Diploma Educational Planning and Management)
- CT (Certificate of Teaching)
- Post Graduate Diploma in ECE
- SSC Level Courses Related to the Faculty
- HSSC Level Courses Related to the Faculty
- BA Level Courses Related to the Faculty
- Associate Degree in Education

All programmes of Faculty of Education are recognized by HEC and accreditation is under process with NACTE.

Professor Dr. Shahid Siddiqui
Dean, Faculty of Education / Vice-Chancellor
Ph: 051-9057702

5. DEPARTMENTS OFFERING MA EDUCATION/ MED/MPHIL AND PHD (MS/MPHIL BASED)

Distance, Non Formal Education and Continuing Education

The department was established in 1984 and was renamed as Distance, Non Formal and Continuing Education in 2008. It offers specialized degree programmes/courses in Distance Non-Formal and Continuing Education, Adult Education and Educational Technology at MA Education, MEd, MPhil and PhD (MS/MPhil Based) in Education. It also offers courses at BA level.

Educational Planning, Policy Studies and Leadership (EPPSL)

The department was established in 1976 was renamed as EPPSL in 2008. It offers programmes in educational planning and management. These programmes are aimed at producing a cadre of professionals for the educational institutions and organizations in the country. Programmes of EPPSL include Postgraduate Diploma, MA (EPM), MPhil and PhD (MS/MPhil Based) in Education. The courses of these programmes are attained to the field requirements of target personnel in the areas of educational planning and management.

Secondary Teacher Education

The Department of Teacher Education was established in 1985 and was bifurcated into Secondary and Elementary Teacher Education Departments in July 2003. Its programmes aim at imparting academic and professional knowledge and training to in-services and pre service teachers and scholars.

The programmes/courses of this department comprises MA and MEd Beside these professional degree programmes, the department also offers MPhil and PhD (MS/MPhil Based) in Education, which are aimed to prepare highly skilled leaderships in the field of education.

Early Childhood Education and Elementary Teacher Education

The Department of Elementary Teacher Education was established in 2003. In April 2008, the name of Elementary Teacher Education Department was changed as Early Childhood Education and Elementary Teacher Education Department. The Department offers PTC, CT, Associate Degree in Education, Post Graduate Diploma in ECE, BEd and MPhil program, it also offers “Education” as subject at Matric, Intermediate and Graduate level. The department is planning to launch BEd (Hon) Elementary, MEd, MA (Elementary Teacher Education) and PhD Programs. The department also planned to offer non credit research courses and postgraduate diploma for teacher in higher education.

Science Education

The Department of Science Education was established in 1988. The programmes and courses of the department are mainly focused on education and training of science and math’s teachers. Presently the department offers specialized courses in science education at PTC, CT, BEd level. Specialized courses provide conceptual framework and insight into the teaching of science. The department also offers MEd, MPhil and PhD programs in science education.

Special Education

The Department was established in 1985. The department imparts education and training to teachers for the special children in four specialization namely visual impairment, hearing impairment, physical disabilities and mental retardation with particular emphasis to facilitate mainstreaming of special children. Parents of the special children are also admitted to these programmes.

Present programmes/courses of this department comprised of Postgraduate Diploma, MEd, MA, MPhil and PhD (MS/MPhil Based) in Special Education.

6. MPhil EDUCATION PROGRAMME

Specializations:

- Distance and Non Formal Education
- Educational Planning and Management
- Teacher Education
- Special Education
- Science Education

6.1 Objectives of MPhil Education Programme

MPhil in Education programme is designed to:

1. Prepare scholars who have grasp of the discipline of Education. Establish a cadre of specialists and professionals in different fields of education who can provide effective leadership in guiding and conducting high level research in various fields of national life.
2. Produce core of professionals who can provide leadership in various disciplines.
3. Provide an opportunity of higher education and research in the discipline and to develop research potential and promote research activities among the professionals.

6.2 Admission Procedure for MPhil Education Programme

- i) Merit will be determined on the basis of educational qualification, experience, score of subject test and interview conducted by the department.
- ii) Selected candidates will be intimated by the Directorate of Admission with the advice to deposit fee according to the schedule.

Courses by continuing students may not be taken as mentioned in the prospectus. These should be taken only as and when communicated in the letter by the Admission Department for continuing student for each semester.

6.3 Procedure of Studies for MPhil Education

The university will provide study guide and allied material (in some cases CD's to the enrolled students). The medium of instruction is English.

Assignments

Assignments are compulsory component. For each 3 credit hours course students have to attempt two assignments. Passing marks in each assignment are 50%. The student has to submit his/her hand written assignments as per schedule before or on time. It is advised that students must send their assignments under registered cover and keep a photocopy for their own record.

Workshop

For each course there will be a compulsory workshop of one week duration at the main campus Islamabad. All expenditures including travelling, hostel charges etc. will be borne by the students themselves. The university will not bear any responsibility of TA/DA or provision of accommodation. Attendance in the workshops is compulsory. Only those students who have qualified in the assignment component can attend the workshop. Facility of University hostel is available at the approved rates, provided if the rooms are vacant.

Final Examination

To sit in the final examination, one has to qualify the assignment component and workshop separately.

Research Thesis

The student will be allowed to take research thesis after successful completion of 24 credit hours course work and qualifying other requirements.

6.3.1 MPhil Education Programme

(Specialization in Distance and Non-Formal Education)

i. Eligibility

Applicants for MPhil Education (Distance and Non-Formal Education) must possess the following qualification:

MA Education (at least 2nd division)

OR

MEd (at least 2nd division)

OR

M.S. Ed (at least 2nd division)

Admission will strictly be made on merit basis as per approved criteria.

ii. Programme Structure

MPhil Education with specialization in Distance, Non-Formal and Continuing Education programme comprises 24 credits hours course work and 12 credit hours thesis for MPhil.

Semester-1

a. Core Courses

12 Credit Hours

S. No.	Courses	Credit Hours
1.	Trends and Issues in Education (3701)	3
2.	Trends and Issues in Distance Education (3703)	3
3.	Computer Applications in Education (3705)	3
4.	Advanced Course on Educational Research and Statistics (3706)	3

Semester-2

b. Specialization

(Students can take any two clusters from the following)

12 Credit Hours

S. No.	Courses	Cluster	Credit Hours
1.	Non Formal Education-I (3726)	Cluster-A	3
	Non Formal Education-II (3727)		3
2.	Adult Education/Literacy-I (3728)	Cluster-B	3
	Adult Education/Literacy-II (3729)		3
3.	Educational Technology-I (3730)	Cluster-C	3
	Educational Technology-II (3731)		3
4.	Distance Education-I (3732)	Cluster-D	3
	Distance Education-II (3733)		3

c. Semester 3rd & 4th Research Thesis (3714) 12 credit hours

d. Fee Tariff

Details of dues for admission to programme are as under:

Registration fee	Rs.200 (at the time of first admission in the university).
Admission fee	Rs.1000 (at the time of first admission in the programme).
3 credit hours	Rs.2800/-
Research thesis (12 credit hours)	Rs.11200/-
Technology fee	Rs.100 (per student/semester)

For clarification about academic matters please contact on the following address:

Note: Admission form complete in all respect may be sent on the following address:

CHAIRMAN

Department of Distance, Non-Formal and Continuing Education
Faculty of Education, Block No.5, AIOU, H-8, Islamabad.

Ph: 051-9250055, E-mail: drajmal@aiou.edu.pk

6.3.2 MPhil Education (Specialization in Educational Planning and Management)

i. Eligibility

Applicants for MPhil Education in EPM must possess a MA (EPM) Degree at least with 2nd division.

Admission to MPhil Education in EPM will be granted on merit according to the approved criteria of AIOU.

ii. Programme Structure

MPhil Education with specialization in Educational Planning and Management comprises 24 credit hours course work and 12 credit hours research thesis. The detailed breakup of courses is as follows:

a. Core Course 12 Credit Hours

Semester-1

S. No.	Courses	Credit Hours
1.	Trends and Issues in Education (3701)	3
2.	Trends and Issues in EPM (3702)	3
3.	Computer Applications in Education (3705)	3
4.	Advanced Course on Educational Research and Statistics (3706)	3

b. Specialization Courses 12 Credit Hours

Semester-2

S. No.	Courses	Credit Hours
1.	Advance Course on Educational Planning-I (3707)	3
2.	Advance Course on Economic and Financing of Education (3708)	3

3.	Advanced Course on Educational Management-I (3734)	3
4.	Advanced Course on Educational Management-II (3735)	3

c. Semester 3rd & 4th Research Thesis (3715) 12 credit hours

d. Fee Tariff

Details of dues for admission to programme are as under:

Registration fee Rs.200 (at the time of first admission in the university).

Admission fee Rs.1000 (at the time of first admission in the programme).

3 credit hours Research thesis Rs.2800/-

(12 credit hours) Rs.11200/-

Technology fee Rs.100 (per student/semester)

Note: Only selected candidates will be intimated for depositing fee. No fee is required with admission form.

For clarification about academic matters please contact on the following address:

Note: Admission form complete in all respect may be sent on the following address:

CHAIRMAN

Department of Educational Planning

Policy Studies and Leadership

Faculty of Education, Block-5

Allama Iqbal Open University, Sector H-8, Islamabad

Ph: 051-9250059

**6.3.3 MPhil Education
(Specialization in Teacher Education)**

i. Eligibility

Applicant for MPhil Education in Teacher Education must possess a degree of MEd, MA Education or MS Ed at least with 2nd division.

Admission to MPhil Education (Secondary Teacher Education) will be granted on merit as per approved criteria.

ii. Programme Structure

MPhil Education specialization in Teacher Education programme comprises 24 credit hours course work and 12 credit hours thesis.

a. Semester-1: Core Courses 12 Credit Hours

S. No.	Courses	Credit hours
1.	Trends and Issues in Education (3701)	3
2.	Trends and Issues in Teacher Education (3704)	3
3.	Computer Application in Education (3705)	3
4.	Advanced Course on Educational Research and Statistic (3706)	3

b. Semester-2: Any two clusters from the following

1.	Advance Approaches to Curriculum Development I (3736)	3
	Advance Approaches to Curriculum Development II (3737)	3
2.	Teaching Strategies-I (3739)	3
	Teaching Strategies-II (3740)	3
3.	Measurement & Evaluation in Education-I (3742)	3
	Measurement & Evaluation in Education-II (3743)	3

c. Semester 3rd and 4th Research Thesis (3713) 12 Credit Hours

d. Fee Tariff

Details of dues for admission to programme are as under:

Registration fee Rs.200 (at the time of first admission in the university).

Admission fee Rs.1000 (at the time of first admission in the programme).

3 credit hours Research thesis
Rs.2800/-

(12 credit hours) Rs.11200/-

Technology fee Rs.100 (per student/semester)

For clarification about academic matters please contact on the following address:

Note: Admission form complete in all respect may be sent on the following address:

CHAIRPERSON

Department of Secondary Teacher Education
Faculty of Education,
Block-5, Allama Iqbal Open University,
Sector H-8 Islamabad
Ph: 051-9250057, 051-9057708

**6.3.4 MPhil Education
(Specialization in Special Education)**

i. Eligibility

Applicants for MPhil Education with Specialization in Special Education must possess a degree of MEd, MA Education or MS Ed at least with 2nd Division.

Admission to MPhil Education with specialization in Special Education will be made on merit as per approved criteria, the applicants having MA/MEd in Special Education be given priority.

ii. Programme Structure

Students enrolled in MPhil have to pass the make-up courses prescribed by the department if they are not MA/MEd in Special Education. MPhil Education specialization in Special Education programme is comprised of 24 credit hours course work and a Research Thesis of 12 credit hours.

a. Core Courses Semester-1 12 Credit Hours

S. No.	Courses	Credit Hours
1.	Trends and Issues in Education (3701)	3
2.	Computer Application in Education (3705)	3
3.	Advanced Course on Educational Research and Statistics (3706)	3
4.	Trends and Issues in Special Education (3709)	3

Makeup Courses (MA Level) for the students who are without MA/MEd Special Education Degree:

1.	672	Perspective of Special Education	3
2.	673	Handicapped Persons in the Community	3

b. Specialization Semester-2 12 Credit Hours

S. No.	Courses	Credit Hours
1.	Advanced Study on Exceptionalities-I (3716)	3
2.	Advanced Study on Exceptionalities-II (3717)	3
3.	Career Planning and Rehabilitation-I (3718)	3
4.	Career Planning and Rehabilitation-I (3719)	3

Makeup Courses (MA Level) for the students who are without MA/MEd Special Education Degree. 6 Credit Hours Courses from Any Specialization Area

a. Visual Impairment		
677	Independence Training for the Visually Handicapped	3
678	Special Education for Visually Handicapped	3

OR

b. Hearing Impairment		
680	General Introduction to the Hearing Impairment	3
681	Psychology of Deafness & Child Development	3

OR

c. Mental Retardation		
3603	Introduction & Assessment of Mentally Retarded Children-I	3
3604	Introduction & Assessment of Mentally Retarded Children-II	3

OR

d. Physical Disabilities		
3607	Physical Handicaps-I	3
3608	Physical Handicaps-II	3

c. Semester 3rd and 4th Research Thesis (3712) 12 credit hours

d. Fee Tariff

Details of dues for admission to programme are as under:

Registration fee	Rs.200 (at the time of first admission in the university).
Admission fee	Rs.1000 (at the time of first admission in the programme).
3 credit hours	Rs.2800/-
Research thesis (12 credit hours)	Rs.11200/-
Technology fee	Rs.100 (per student/semester)

For clarification about academic matters please contact on the following address:

Note: Admission form complete in all respect may be sent on the following address:

CHAIRPERSON

Department of Special Education
 Faculty of Education, Block 10, AIOU, Sector H-8, Islamabad
 Ph: 051-9250078, 051-9057853, 9057859
 Email: spedu@aiou.edu.pk

**6.3.5 MPhil Education
 (Specialization in Science Education)**

i. Eligibility

Applicants for MPhil Science Education must possess MEd/MS Ed/MA degree in Science education at least with 2nd division.

Admission to MPhil will be granted on merit basis (Test and Interview) according to the approved criteria of AIOU.

ii. Programme Structure

MPhil Education Specialization in Science Education comprises 24 credit hours course work and 12 credit hours Research thesis.

The detailed breakup of courses is as follows:

(a) Core Courses Semester-1 (12 Credit Hours)

S. No.	Courses	Credit Hours
1.	Trends and Issues in Education (3701)	3
2.	Advanced Course on Educational Research and Statistics (3706)	3
3.	Computers Application in Education. (3705)	3
4.	Trends and Issues in Science Education (6771)	3

b. Specialization Semester-2 (12 Credit Hours)

S. No.	Courses	Credit Hours
1.	ICTs in Science Education (6772)	3
2.	Teaching Models & Strategies in Science Education (6773)	3
3.	Assessment and Evaluation in Science Education (6774)	3
4.	Curriculum Development in Science Education (6775)	3

3rd and 4th Semester:

Thesis/Research Work (12 Credit Hours)

c. Semester 3rd and 4th Research Thesis 12 Credit Hours

d. Fee Tariff

Details of dues for admission to programme are as under:

Registration fee	Rs.200 (at the time of first admission in the university).
Admission fee	Rs.1000 (at the time of first admission in the programme).
3 credit hours Research thesis (12 credit hours)	Rs.2800/- Rs.11200/-
Technology fee	Rs.100 (per student/semester)

For clarification about academic matters please contact on the following address:

Note: Admission form complete in all respect may be sent on the following address:

Chairman
Department of Science Education
Block No. 10, 1st Floor,
Allama Iqbal Open University, H-8 Islamabad,
Phone No. 051-9250060, 051-9250080
E-mail: sed@yahoo.com

6.4 MPhil Education Coordinators

Specialization:

- 1. Distance, Non-Formal and Continuing Education**
Dr. Amtul Hafeez
051-9057706, Email: amtulhafeezch@aiou.edu.pk
- 2. Educational Planning, Policy Studies & Leadership**
Dr. Afshan Huma
051-9057714, 051-9250059
Email: afshan.huma@aiou.edu.pk
- 3. Secondary Teacher Education**
Dr. Munnaza Ambreen
051-9250057, 051-9057713
Email: munazzaambreen@yahoo.com
- 4. Special Education**
Dr. Tanzila Nabeel
051-9250078, 051-9057857
Email: spedu@aiou.edu.pk
- 5. Science Education**
Dr. Iqbal Shah
Asstt. Professor
051-9057852, Email: siabal@hotmail.com

7. PhD (MS/MPhil Based)

Specialization

- Distance and Non-formal Education
- Educational Planning and Management
- Science Education
- Teacher Education
- Special Education

7.1 PhD (MS/MPhil Based) Eligibility to Apply

- Graduate holding MS/MPhil in the relevant area or equivalent with GPA 3.00/Ist Division will be eligible for admission in PhD Programme.
- Test and Interview will be conducted by the department concerned.
- Candidate will apply for admission on prescribed form to the concerned chairman of the department. If the candidate wishes to apply in more than one specialization, he/she has to apply separately for each specialization.
- Admission will be strictly on merit and on approved criteria.

7.2 PhD (MS/MPhil Based): Distance and Non-Formal Education

a. Common Courses 9 Credit Hours

S. No.	Courses	Credit hours
1.	Comparative Education (4774)	3
2.	Instrumentation in Educational Research (4775)	3
3.	E-Learning (4778)	3

b. Specialization Course work (6 credit hours)

Specialization Courses: Student may take following specialization courses:

S. No.	Courses	Credit Hours
1.	Adult and Lifelong Education (4771)	3
2.	Human Resource Management in Distance Education (4773)	3

c. Collateral Area

Each student will take a course from this area equivalent to 3 credit hours.

S. No.	Courses	Credit Hours
1.	Discourse Analysis (4776)	3
2.	Emerging Trends in Pedagogy (4777)	3
3.	Inclusive Education (4779) Subject to offering	3
4.	Educational Leadership & Management (4783)	3

d. Comprehensive Examination

e. Publish research article in Higher Education Commission approved Journals.

f. Thesis (4786)

For clarification about academic matters please contact on the following address:

Note: Admission form complete in all respect may be sent on the following address:

CHAIRMAN

Department of Distance, Non-Formal and Continuing Education,
Faculty of Education, Block-05
Allama Iqbal Open University, Sector H – 8, Islamabad
Fax: 051-9250055
Email: drajmal@aiou.edu.pk

**7.3 Educational Planning and Management
PhD (MPhil Based)**

a. Common Courses 9 Credit Hours

S. No.	Courses	Credit Hours
1	Comparative Education (4774)	3
2	Instrumentation in Educational Research (4775)	3
3	E-Learning (4778)	3

b. Course Work (Specialization) 6 Credit hours

1.	Human Resource Management (4782)	3
2.	Educational Leadership and Management (4783)	3

**c. Any one collateral area course: 3 Credit hours
(Subject to offering)**

1.	Discourse Analysis (4776)	3
2.	Emerging Trends in Pedagogy (4777)	3
3.	Human Resource Management in Distance Education (4782)	3

- d.** Comprehensive Examination
- e.** Publish Research Article in Higher Education Commission approved Journal.
- f.** Thesis (4788)

For clarification about academic matters please contact on the following address:

Note: Admission form complete in all respect may be sent on the following address:

CHAIRMAN
Department of Educational Planning
Policy Studies and Leadership, Faculty of Education,
Block-5, AIOU, Sector H-8, Islamabad
Ph: 051-9250059

7.4 PhD (MS/MPhil Based): Science Education

PhD course work: 18 Credit Hours

a. Common Courses 9 Credit Hours

S. No.	Courses	Credit Hours
1.	Comparative Education (4774)	3
2.	Instrumentation in Educational Research (4775)	3
3.	E-Learning (4778)	3

b. Specialization Courses 6 Credit Hours

1.	Nature of Science in Science Education (6779)	3
2.	Professional Development of Science Teacher (6777)	3

c. Collateral Area Courses (any one from the following)

1.	Human Resources Management (4782)	3
2.	Educational Leadership & Management (4783)	3

- d.** Comprehensive Examination
- e.** Research article in Higher Education Commission approved Journal.
- f.** Thesis (4789)

For clarification about academic matters please contact on the following address:

Note: Admission form complete in all respect may be sent on the following address:

Chamirman
Department of Science Education, Block-10
Allama Iqbal Open University, Sector H-8 Islamabad
Ph: 051-9250060, 051-9057851,
Email: tanvir56@yahoo.com

7.5 PhD (MS/MPhil Based) Teacher Education

PhD Course Work 18 Credit Hours

a. Common Courses 9 Credit Hours

S. No.	Courses	Credit Hours
1.	Comparative Education (4774)	3
2.	Instrumentation in Educational Research (4775)	3
3.	E-Learning (4778)	3

b. Specialization Courses 6 Credit Hours

1.	Discourse Analysis (4776)	3
2.	Emerging Trends in Pedagogy (4777)	3

c. Collateral area Courses. The students can opt any one from the following:

1.	Human Resource Management (4782)	3
2.	Educational Leadership & Management (4783)	3

- d. Comprehensive Examination
- e. Publish research article in Higher Education Commission approved Journal.
- f. Thesis (4787)

For clarification about academic matters please contact on the following address:

Note: Admission form complete in all respect may be sent on the following address:

CHAIRPERSON

Department of Secondary Teacher Education
 Faculty of Education, Block No 5, AIOU, Sector H-8 Islamabad
 Ph: 051-9250057, 051-9057708
 Email: drnaveeda@gmail.com

7.6 PhD (MS/MPhil Based) Special Education

a. Common Courses 9 Credit Hours

S. No.	Courses	Credit Hours
1.	Comparative Education (4774)	3
2.	Instrumentation in Educational Research (4775)	3
3.	E-Learning (4778)	3

b. Specialization Courses 6 Credit Hours

1.	Planning and Programming for Exceptional Youth (4780)	3
2.	Emerging Trends in Special Education (4781)	3

c. Collateral Area

Each student will take a course (3 credit hour) from this area

1.	Discourse Analysis (4776)	3
2.	Emerging Trends in Pedagogy (4777)	3
3.	Educational Leadership & Management (4783)	3

- d. Comprehensive Examination
- e. Publish Research Article in Higher Education Commission approved journal.
- f. Thesis (4785)

For clarification about academic matters please contact on the following address:

Note: Admission form complete in all respect may be sent on the following address:

CHAIRPERSON

Department of Special Education,
 Block No.10, AIOU, H-8, Islamabad.
 Ph. 051-9250078, Email: spedu@aiou.edu.pk

7.7 PhD (MS/MPhil Based) Coordinators

1.	Prof. Dr. Tanveer uz Zaman	Science Education Department AIOU, Islamabad. Phone: 051-9250060, 9057852 & 54
2.	Muhammad Ajmal Ch.	DNFCE Department, Block 5, AIOU, Islamabad. Phone: 051-9057707 dnfe@yahoo.com
3.	Dr. Afshan Huma	EPPSL Department, Block 5, AIOU, Islamabad. Phone: 051-9250059, 9057714 afhsan.huma@aiou.edu.pk
4.	Dr. Naveed Sultana	Secondary Teacher Education Department, AIOU, Islamabad. Ph: 051-9250057, 9057705 drnaveeda@gmail.com
5.	Dr. Tanzila Nabeel	Special Education Department, AIOU, Islamabad. Phone: 051-9250078, 9057853, spedu@aiou.edu.pk

7.8 Fee Tariff for PhD (MPhil/MS Based) in Education

Details of dues for admission to programme are as under:

Registration Fee Rs.1000/-	(at the time of first admission in the university)
Admission Fee Rs.2000/-	(at the time of first admission) in the programme
- 3 credit hours course	Rs.3180.00
- Thesis	Rs.25230.00
- Technology Fee	Rs. 100/- (Per Student/Semester)

7.9 Thesis Requirements

1. Thesis must be a distinct contribution to knowledge and offer evidence to originality, shown either by the discovery of new facts or by the exercise of independent critical judgment.
2. A minor change rewording in the topic of the thesis, if needed without changing the main theme shall be approved by the Vice Chancellor on the recommendation of the Chairman/Director through the Dean.
3. The student shall be required to observe the guidelines regarding format, writing and referencing style, paper and other related matters. The guidelines can be obtained from the respective department on request.
4. The student will be required to submit five composed/typed spiral bound copies of thesis as prerequisite.
5. The final copies of the thesis will contain an abstract consisting up to 500 words.
6. The student shall pay the thesis evaluation fee and any outstanding dues at the time of submitting the thesis for evaluation and the department/faculty as well as the examination department will ensure that all dues have been paid and requirements have been met as per regulations before processing the thesis for external evaluation. The student will be informed accordingly.
7. The student will have to abide by all the rules and regulation framed in this regard or amended from time to time by the AIOU/HEC.

7.10 Evaluation of Thesis

The panel of eminent Foreign External Evaluators is approved by the BASR. The thesis will be sent for evaluation to three eminent foreign external evaluators from technologically and educationally advanced countries.

8. SPECIFIC INFORMATION

1. If a student is required to take course(s) of lower level, he will be allowed to do so but the credit of these courses will not be counted towards his PhD credits.
2. If a student has to remain absent for a period of one or more than one semesters in case of exigency or proceeding abroad, he may apply for the freezing of the period for thesis without violating the maximum period i.e. five years. The student will have to pay fee at the rate of six credit hours for the frozen period.
3. The student shall be allowed to pursue only one programme at a time at AIOU and shall not be allowed to enroll or appear in a programme of some other recognized institution during that period.
4. The copyright of the thesis will rest with the university however the student who completed the thesis will be allowed to publish it after written permission from the Vice Chancellor.
5. Fee structure of any course/thesis/seminars programme may be changed without prior information. Student has to deposit the required fee as intimated by the Admission Department.
6. At the end of each semester there will be compulsory workshop. Each and every session of the workshop is compulsory. Students who earn at least 50% marks in assignment component will be eligible for workshop. Only those students who qualify the assignments components and workshop will be eligible to take final examination.

FACULTY MEMBERS

Prof. Dr. Shahid Siddiqui

Dean/Vice-Chancellor

Ph: 9057702

▪ **Chairman/Persons of Departments**

1. Prof. Dr. Tanveer-uz-Zaman
Chairman
Science Education Department
Block-10, AIOU, Ph: 9250060, 9250080
2. Prof. Dr. Nasir Mahmood
Chairman
ECE & ETED
Block 5, Room 112
051-9057719, 9057718
Nasir.mahmood@aiou.edu.pk
3. Dr. Tanzeela Nabeel
Chairperson (Special Education)
Block-10, Room 110, Ph: 9057853, 9250078
Email: tanzilanabeel@gmail.com
4. Dr. Naveed Sultana
Chairperson (Secondary Teacher Education)
Block-5, Room 5, Ph: 9057705
Email: drnaveeda@gmail.com
5. Dr. Muhammad Ajmal
Head of Department (DNFCE)
Room No.10, Block No.5,
Email: drajmal@aiou.edu.pk

▪ **Assistant Professors**

1. **Dr. Iqbal Shah**
(Science Education) Block-10, Room 101,
Ph: 9057852, Email: siabal@hotmail.com
2. **Dr. Shaista Majid**
(Special Education) Block-10, Room 106,
Ph: 9057858, Email: adeeb_shaista@yahoo.com
3. **Mr. Zahid Majeed**
(Special Education) Block-5, Room 111,
Ph: 9057294, Email: zah_ent@yahoo.com
4. **Dr. Munazza Ambreen**
(Secondary Teacher Education) Block-5, Room 104,
Ph: 9057713, Email: munazza.ambreen@aiou.edu.pk
5. **Dr. Amtul Hafeez**
(DNFCE) Block-5, Room 6,
Ph: 9057706, Email: amtulhafeezch@yahoo.com
6. **Dr. Afshan Huma**
(EPPSL) Block No.5, Room No.110,
E.mail: afhsan.hum@aiou.edu.pk
7. **Dr. Muhammad Tanveer Afzal**
(Secondary Teacher Education)
Block-5, Room 11, Ph: 9057711,
Email:mtapk@hotmail.com, tanveer.afzal@aiou.edu.pk
8. **Dr. Fazal ur Rehman**
(ECE & ETED), Block 5, Room 9,
Ph: 9057268, E.mail: fazalaiou@yahoo.com
9. **Dr. Muhammad Athar Hussain**
Block 5, Room 107, Ph: 9057268
10. **Dr. Mumtaz Saadi**
EPPLS
Room 107

▪ **Lecturers**

1. **Mrs. Bushra Shaheen**
(Early Childhood Education and Elementary Education)
Block-5, Room 8, Ph: 9057703
2. **Mrs. Mamonah Ambreen**
(Distance, Non-Formal and Continuing Education)
Block-5, Room 13, Ph: 9057707
Email: mamonahambreen@yahoo.com
3. **Mrs. Naila Naseer**
(Distance, Non-Formal and Continuing Education)
Block-5, Room 1, Ph: 9057194
Email: naila.naseer@aiou.edu.pk
4. **Ms. Farkhunda Rasheed Ch.**
(Science Education)
Block-10, Room 104, Ph: 9057797
Email: farkhunda.rasheed@aiou.edu.pk,
farkhundarasheedch@hotmail.com
5. **Mr. Arshad Mehmood Qamar**
Block-5, Room 105, Ph: 9057168
arshad.mehmood@aiou.edu.pk
6. **Ms. Tahira Bibi**
(Educational Planning, Policy Studies and Leadership)
Block-5, Room 103, Ph: 9057715
Email: tahiralepm@gmail.com
7. **Ms. Sarwat Maqbool**
Block 5, Room 105, Ph: 9057704
E.mail: sarwatmaqbool@gmail.com
8. **Mr. Hamid Nadeem**
EPPSL
9. **Dr. Rehmatullah Bhatti**
ECE & ETED
Block 5, Room 107

FACULTY OF SCIENCES

Faculty of Sciences forms an important and integral part of the university. Since its establishment in 1982 with five teaching departments, it has undergone major development changes. It now comprises nine teaching and research departments which are offering courses at the undergraduate and postgraduate levels to more than ten thousands students. The Faculty operates under the basic guidelines of the University Act and on “Education for All as Convenient” basis so that maximum students get benefit from its academic programs and educational facilities. This principle has necessitated some structural changes in the non-formal mode, particularly at the postgraduate level, in the offering of theory courses and practical lab work. This conceptual adjustment has been quite successful and many in-service students are benefiting from the postgraduate study programs. Improvement in qualifications for a better life is a right of everyone and the Faculty’s programs meet this challenge by offering opportunities to all. In particular a significant number of beneficiaries are those who cannot afford education in formal institutions due to a variety of reasons.

Realizing the importance of science education and growing needs of the Faculty of Sciences, the University has completed a building, the Research Complex, at a cost of Rs 35 million. The Research Complex now accommodates departments of Agricultural Sciences, Biology, Chemistry, Environmental Sciences, Home & Health Sciences, Mathematics & Statistics and Physics. These departments are running a variety of postgraduate technical, scientific and professional programs successfully. The Research Complex also has a Computer Lab

with Internet and On-line Library Facility for literature survey, Seminar Room, Lecture Hall and Library. In addition, there are many labs for practical work, teaching and research, and instrumentation labs for analysis. The University is developing these labs through its own resources. The Faculty of Sciences is fortunate to have Prof. Dr. Shahid Siddiqui as the University’s Vice-chancellor, who has given personal attention to the development of the Faculty of Sciences by providing generous amount of funds and valuable guidance.

Two Model labs have been developed in the Research Complex with the assistance of the Higher Education Commission to meet the training needs of science teachers. This development is significant for training of teachers since under the new educational policy four-year BS program has started in undergraduate educational institutions.

More than fifty highly qualified full-time faculty members are on the roll of the Faculty of Sciences. Their role in the planning, designing and development of courses to meet students’ needs is vital. Faculty members also engage in teaching and research so that high standards are maintained. In addition highly qualified and experienced professors are also engaged on contractual basis or as part time instructors for postgraduate study programs. The Faculty is also offering academic positions under the tenure-track system to attract the best minds in scientific and technological fields.

Research is an integral part of the postgraduate study programs leading to MSc, MPhil, and PhD degrees in Agricultural Sciences, Chemistry, Computer Sciences, Home and Health Sciences,

Mathematics and Statistics and Physics. Rules and regulations governing the postgraduate study programs are those approved by the Higher Education Commission (HEC).

For MS and MPhil degree, 24 credit hours of course work and a minimum of one year of research work in a specialized area of the disciplines is required. A candidate for the PhD degree has to take additional 18 credit hours of specialized courses in the field of research. The dissertation will comprise original research on a topic in the discipline and shall be evaluated by three foreign referees who are expert in the field. At least one publication in international journal is also necessary before the degree is awarded.

The Faculty has launched BS program in Chemistry and Microbiology from semester Spring 2009. The four-year BS program is structured according to the recent policies of the Higher Education Commission for the improvement of the standard of education so as to bring it at par with the international standards.

DEPARTMENT OF AGRICULTURAL SCIENCES (DAS)

Introduction:

The Department of Agricultural Sciences (DAS) is making earnest efforts aiming at supplementing, supporting and re-enforcing extension services and offering agriculture related programs at different levels.

Agriculture progress in most developing countries has mainly involved an increase in the production of staple crops, the

introduction of industrial crops and development of livestock production.

At present, higher education in agriculture is imparted by four formal agricultural universities in Pakistan, which are not catering in-service personnel. AIOU conducted a survey to get an idea about the higher education in Agricultural Extension, Livestock Management, Forestry Extension & Rural Development and received a positive response from candidates who could not improve their qualification from formal Agricultural Universities for one or other reason and are now working in different governmental departments and NGOs.

Programs:

The DAS offers the following programs /courses at different level.

Programs at Postgraduate Level

1. PhD Agricultural Extension
2. MSc (Hons) Livestock Management
3. MSc (Hons) Agricultural Extension
4. MSc (Hons) Rural Development
5. MSc Forestry Extension

Besides Postgraduate programs the department also offers Higher Secondary School Certificate (HSSC), Secondary School Certificate (SSC) and Short Term Courses.

1. PhD Agricultural Extension

a) Introduction

Education is a continuous life long process. It is the most effective tool of creating a high productive manpower. Agricultural Education in Pakistan needs to integrate the goals of improving human, social and ethical attributes in the students, with specific requirements to produce graduate who can perform various tasks in the agricultural economy of the country, both in the public and private sectors.

For agricultural development in the country, strong linkages amongst institution, human resource development and technology transfer are very important. The technology transfer, being a continuous process, can be done in a well-organized way through an efficient agricultural extension system where integrated roles of the scientists, the extension agents and the farmers are all importantly interlinked. The scientist on their part develops better yielding varieties and breeds of crop and animals and the extension agent, on his part convince the farmers of the products utilitarian importance. The farmer when convinced will certainly adopt innovations for his own economic betterment.

Allama Iqbal Open University being concerned with the education part of the Agricultural Extension system has launched PhD degree level program in Agricultural Extension to prepare scholars who have grasp of the discipline in general and a command over the area of specialization in particular.

b) Objectives:

PhD Program in Agricultural Extension is designed to:-

- Prepare scholars who have grasp of the discipline in general and a command over the area of specialization in particular.
- Establish a cadre of specialists and professionals in the field of Agricultural Extension who can provide effective leadership in guiding and conducting quality research in Agricultural Extension.
- Provide opportunities of professional growth and development of scholars in general and in-service personnel in particular.

c) Admission Requirements

1. The minimum entry requirement for admission to PhD in Agricultural Extension shall be M. Sc (Hons) Agricultural Extension with first division or 3:00 GPA.

OR

MSc (Hons) Agriculture degree with first division with deficiency courses. The deficiency courses will be given by PhD admission committee to those candidates whose basic eligible degree is other than Agricultural Extension specialization from approved courses of MSc (Hons) Agricultural Extension Program.

2. Admission will be made as per HEC criteria.
3. All rules of BASR/AIOU regarding MS/MPhil/PhD will apply to PhD Agricultural Extension Program.

d) Courses of PhD Agricultural Extension

The following courses will be taught in PhD Agricultural Extension program and the total credit hours are 18, according to the HEC criteria.

S. #	Courses	Credit Hours
1.	Application of Extension Methods (1742)	3 (3-0)
2.	Communication Strategies in Agricultural Extension(2527)	3(3-0)
3.	Agricultural Extension in Developing Countries (2524)	3(3-0)
4.	Diffusion of Innovation (2505)	3(3-0)
5.	Community Development and Gender Issues (1743)	3(3-0)
6.	Special Topics (1744)	3(3-0)

e) Semester Wise Break Up of the Courses

1st Semester

1. Application of Extension Methods (1742)
2. Communication Strategies in Agricultural Extension (2527)
3. Agricultural Extension in Developing Countries (2524)

2nd Semester

1. Diffusion of Innovation (2505)
2. Community Development and Gender Issues (1743)
3. Special Topics (1744)

3rd Semester

Comprehensive examination written & oral/synopsis and research work. Research in the remaining semesters as per AIOU rules.

Important Note:

Rules regulations framed, enhanced and changed from time to time by the authorities/bodies of the University will be applicable to all students. The students will have to abide by all such rules and regulations.

2. M Sc (Hons) Livestock Management

a) Introduction:

Being a part of Agriculture, Livestock sector plays great role in the progress of country. One cannot deny the importance of livestock because it produces a huge quantity of food, such as beef, mutton, poultry meat, milk, yogurt and lot of other milk and animal by products. Millions of acres are still being cultivated with the help of farm animal in this mechanized era. Livestock and poultry yields can be further increased if people involved in this field are better and skillfully educated.

At present, higher education in livestock is imparted by formal agricultural and veterinary universities in Pakistan, which are not catering in-service personnel. However AIOU has its own character having varieties of educational methodologies within itself. The AIOU conducted a survey to get an idea about the higher education in Livestock Management and received a positive response from candidates who could not improve their qualification from formal institutes. After which the department of Agricultural Sciences (DAS) decided to offer MSc (Hons) Livestock Management through distance learning system, especially for those who could not enhance their qualification through formal system.

b) Objectives:

1. To develop human resource necessary for transferring subsistence scale of livestock farming into commercial livestock production.
2. To provide an opportunity for continued professional development to the scientist in the area of marketing.
3. To provide information on the concepts of livestock development, public health and their integration in livestock production practices.
4. To create awareness about the livestock farming production, practices which will in turn promote community based livestock development.

c) Eligibility:

Candidates possessing DVM degree or BSc (Hons) Animal Husbandry degree equivalent to second division in Annual System (not less than 2.5 CGP) in semester system will be eligible for admission.

d) Admission Procedure:

- (i) Candidates must have to qualify Subject Test being conducted by the Department.
- (ii) Selection of the candidates will be made strictly on the basis of merit, which will be determined by the departmental admission committee after scrutinizing the application of the students as per AIU MPhil admission rules.
- (iii) There will be departmental admission committee responsible to finalize the admission.
- (iv) For clarification about academic matters please contact on the following address:

CHAIRMAN

Department of Agricultural Sciences
Block No.6, 1st Floor,
Allama Iqbal Open University, H-8, Islamabad.
Ph: 051-9057749

Note: Admission form complete in all respect must be sent on the above address:

e) Scheme of Studies

***COURSES TITLE MSc (Hons) Livestock Management
SEMESTER WISE COURSE OFFERING***

Sr.#	Title of course	Code	Credit Hours
1st Semester			
1.	Biochemistry	780	3(2+1)
2.	Statistics	794	3(3+0)
3.	Meat Production	774	3(2+1)
4.	Rangeland Management in Pakistan	2501	3(3+0)
2nd Semester			
5.	Dairy Production	778	3(2+1)
6.	Livestock Management Practices	775	3(2+1)
7.	Small Ruminant Production	773	3(2+1)
8.	Livestock Industry	782	3(3+0)
3rd Semester			
1.	Thesis	797	12
4th Semester			
1.	Thesis	797	12

Total 48 Cr. Hrs.

f) Fee Tariff:

S.#	Item	Rates
1.	Admission fee	Rs.1000 once (at the time of 1 st admission)
2.	Registration fee	Rs.200 once (at the time of 1 st registration in the University)
3.	Each 3 Credit Hrs Course Fee	Rs.3050 per 3 credit hour course
4.	Laboratory fee/ workshop	Rs.2340/-
5.	Thesis fee	Rs.24400/- (24 credits)
6.	Thesis evaluation fee	Rs:4600/- (Payable at the time of submission of Thesis)
7.	Technology fee	Rs.100/- (per student per semester)

g) Instructional Methodology:

Laboratory Works:

The laboratory of local Animal husbandry/Veterinary Institutes/NARC universities or appropriate livestock farms will be engaged for this purpose and will be supervised by the tutors appointed by the university.

Practical:

The list of practical of following course codes as follows:-

1. Dairy production (778).

Dairy breed characteristics, selection on the basis of genotypic and phenotypic characteristics, Design and layout of modern dairy enterprise, practice of manual and machine adoption of hygienic measures at milking time, measurement of milk flow rate, least count ration formulation using computer Programs. Visit to dairy enterprises.

2. Meat Production (774)

Ante and post-mortem examination, slaughtering and flaying methods, determination of dressing percentage, meat grades and carcass evaluation, meat cuts, determining important physical and chemical properties of various meats. Organoleptic studies of meats, visit to slaughter house.

3. Small Ruminant Production (773)

Selection and judging of sheep and goats for wool, mutton and milk. Farm practices including identification, culling, dipping, deworming, trimming feet, farm visits, Preparation of feasibility reports, computerized record keeping.

Wool and hair sampling, microscopic structure of animal fibers, measurement of fiber length and diameter, detection of extractable matters, histological studies of follicles and fiber, handling, sorting, scoring, grading, packing, labeling and storage of animal fiber measurement of crimp, staple length, wool fat, suint and ash, visual grades of wool, visit to woollen mills and carpet industry and wool test house. Visit to animal fiber market.

4. Biochemistry (780)

Diffusion and osmosis process. Qualitative test for carbohydrate, fats and protein, Estimation of Ca and Mg in milk, urine and blood hemoglobin estimation.

5. Livestock Management Practices (775)

Methods of approaching, handling and restraining animals, regions and points of body, grooming and cleaning, identification of various breeds of farm animals. Methods of identification, preparing gestation charts, Determining weight of animals from body measurement, measuring physiological norms, preparing animals for shows, visit to livestock fairs.

Workshops:

The workshop for each course will be conducted at the end of each semester at the main campus of AIOU. Eminent subject experts in the relevant fields will deliver lectures in the workshop. Attendance in these course workshops is mandatory for each student. A student failing to attend any workshop is generally declared fail in final result.

h) Duration of Program:

The minimum duration of MSc (Hons) Livestock Management program shall be two years and maximum duration shall be five years. There will be two semester in each year.

1. The minimum period of the 24 credit hours course work for MSc (Hons) Livestock Management shall be two semesters (One Year).
2. In case the student fails to complete the course/research work within the prescribed maximum period, she/he has to take a fresh admission in the program.

Thesis:

At the beginning of the third semester, a student will be required to submit research proposal (Synopsis) to the Department. The synopsis will be prepared in accordance with the guidelines approved by the Board of Advance Studies and Research (BASR). The Department will provide guidelines for developing synopsis in the synopsis orientation workshop.

Important Note:

Rules, regulations framed, enhanced and changed from time to time by the authorities/bodies of the University will be applicable to all the students. The students will have to abide by all such rules and regulations.

3. MSc (Hons) Agricultural Extension**a) Introduction:**

Agriculture is the principal occupation and source of livelihood of great majority of rural population of the country and it is the basic and largest component of our economy in terms of production, employment and export earnings. For agricultural development in a country like Pakistan, strong linkages amongst institution human resource development and technology transfer are very important. The technology transfer being a continuous process cannot possibly take place in a vacuum. It needs to be done in a well organized system of agricultural extension where role of the scientist, the extension agent, and the farmer are all too important. The scientist must develop better yielding varieties and breeds of crops and animals, the extension agent must, on his part, equip himself with better and effective methods to convince the farmer about the product's utilitarian importance. Once convinced, the farmer will certainly adopt innovations for his own economic betterment.

Allama Iqbal Open University being concerned with the educational part of the Agricultural Extension system has therefore decided to initiate master level courses in Agricultural Extension for enhancing the knowledge and skill of the extension agents/workers already working in the field.

MSc (Hons) Agricultural Extension Program is designed for those Agriculture Graduates who are unable to continue their studies after completing BSc (Hons) Agriculture, BSc Agriculture Engineering, BSc Animal Husbandry, D.V.M. from formal Agricultural Universities and are now working in different departments, organizations, and agencies who cannot enhance their education through formal system could benefit from AIOU offer.

b) Objectives:

Main objectives of the program are:

1. To improve the level of knowledge and skills of the prospective students.
2. To provide skills for improving diffusion and adoption of innovations among the farming community.
3. To improve the ability and self confidence of students of Agriculture Extension to critically analyze the Agriculture Extension service and technology transfer system with a view to identify difficulties, problems and issues in promoting applied research in farming systems research and extension.
4. To promote human resource development in agricultural extension and help to meet training needs of extension field staff and rural communities.

c) Eligibility:

Candidates possessing BSc (Hons) Agricultural Extension degree with 2nd division.

OR

Other related discipline like BSc (Hons) Agriculture, Rural Sociology, Animal Husbandry, DVM, BSc Agricultural Engineering Degree in second division are also eligible for admission in MSc (Hons) Agricultural Extension, but the Admission Committee may define deficiency courses for them, if necessary.

d) Admission Procedure:

- (i) Candidates must have to qualify subject test being conducted by the Department.
- (ii) Selection of the candidates will be made strictly on the basis of merit, which will be determined by the departmental admission committee after scrutinizing the application of the students as per AIOU MPhil admission rules.

- (iii) There will be a departmental admission committee responsible to finalize the admission.
- (iv) For clarification about academic matters please contact on the following address:

CHAIRMAN

Department of Agricultural Sciences
Allama Iqbal Open University, Sector H-8, Islamabad.

Note: Admission form complete in all respect must be sent on the above address:

e) Scheme of Studies: Agricultural Extension Courses

Sr. No.	Title of course	Code	Credit Hours
Semester 1			
1.	Agri. Extension Education	795	3(3+0)
2.	Extension Program Development	796	3(3+0)
3.	Evaluation Research	2525	3(3+0)
4.	Agricultural Extension Systems	2526	3(3+0)

Semester 2			
5.	Scientific and Technical Writing in Agri. Extension.	2518	3(3+0)
6.	Adult Learning & Rural Development	799	3(3+0)
7.	The Process and Strategies of Communication in Agri. Extension	2533	3(3+0)
8.	Human Resource Development	1793	3(3+0)

3rd and 4th Semester			
	Thesis (2536)	24	Cr Hr

Total 48 Cr. Hrs.

f) Fee Tariff:

Sr.#	Item	Rates
1.	Registration fee	Rs.200/- (Once at the time of first admission)
2.	Admission fee	Rs.1000/- (Once at the time of first admission)
3.	Each Course fee	Rs.3050/- per 3 credit hour
4.	Thesis fee	Rs.24400 /- (12+12 Credit Hour course)
5.	Thesis evaluation fee	Rs.4600/- (at the time of submission of the thesis)
6.	Technology fee	Rs.100/- (per student per semester)

Note: Only selected candidate will deposit the fee after receiving the intimation letter from the admission department.

g) Instructional Methodology:

Duration of program

The minimum duration of MSc (Hons) Agricultural Extension Programs shall be 4 semesters (two years) and maximum duration shall be 10 semesters (five years).

The minimum period of the 24 credit hours course work for MSc (Hons) Agricultural extension shall be two semesters (One Year).

In case the student fails to complete the course/research work within the prescribed maximum period, she/he has to take a fresh admission in the program.

Workshop:

The student will have a total of two chances to attend and pass the workshop of the course concerned. Passing the workshop will be pre-requisite for appearing in the final examination of the course. In exceptional circumstances a special chance may be allowed by the Vice-Chancellor on the recommendation of the Chairman.

Thesis:

At the beginning of the third semester, a student will be required to submit research proposal (synopsis) to the Department. The synopsis will be prepared in accordance with the guidelines approved by the Board of Advanced Studies and Research (BASR). The Department will provide guidelines for developing of synopsis in the synopsis orientation workshop.

Viva Voce:

If the thesis is approved by the external evaluators, student has to appear before viva voce committee to defend his/her thesis.

Important Note:

Rules, regulations framed, enhanced and changed from time to time by the authorities/bodies of the University will be applicable to all the students. The students will have to abide by all such rules and the regulations.

4. MSc (Hons) Rural Development

Introduction:

Despite the existence of large urban centers, Pakistan is still predominantly a rural society with approximately 70 percent of the population living in the rural areas. Rural development implies comprehensive and sustainable development for people and places in rural areas. It depends on several interrelated components including development appropriate production technology, dissemination of modern technology to the farming community, formulation of suitable policies for growth in the farm and rural non-farm economies, conservation and sustainable use of natural resources, and provision of infrastructure and social services. All countries in the world are subject to continual social and economic change, and the rural sectors of developing countries and countries in transition are pivotal in this process. It is recognized that in a context of increasing globalization and understanding of the underlying driving forces of this process and its consequences is critical.

Achieving rural development and responding to these global challenges will require trained professionals with a wide range of relevant expertise. These are needed to work in government agencies, non-governmental organization (NGOs) and in the private sector. Professionals are needed who can formulate appropriate policies, plans, design and implement development projects, disseminate appropriate technology and information to farmers and small-scale entrepreneurs and manage business and the efficient delivery of services in rural areas. Recognizing the growing needs and requirements for trained professionals in rural development AIOU has decided to initiate a Masters level program in Rural Development. This program provides

graduates with an interdisciplinary base from which to approach the diverse issue involved in rural change. It is designed for students interested in pursuing careers that are interactive with the potential and problems associated with the rural sector. The program is multidisciplinary in its course contents, and will provide an opportunity for in depth study of the key elements of rural development and relevant professional practice.

b) Objectives:

The program gives students the opportunities to develop:

- A critical awareness of the social, economic and management issues underlying socio-economic change.
- Conceptual and analytical skills relevant to the social and economic dimensions of agriculture and related industries.
- A set of potential skills pertinent to working in the public private or NGO domains.
- The ability to change with, and influence, rational debates concerning the optimal direction of rural sector change.
- Sufficient knowledge and understanding of the major problems socio-cultural and economic conditions of rural areas in Pakistan.

c) Eligibility:

BSc (Hons) Agriculture/D.V.M./Animal Husbandry/ Agriculture Engineering degree in 2nd division or MA/MSc in Social Work/Sociology/Rural Sociology/Anthropology/Forestry/ Forestry Extension/Developmental Studies/Environmental Sciences/Economics/HRD/NRM/Business Management degree with second division/ 2.5 CGPA.

d) Scheme of Studies:

Sr. #	Title of course	Code	Credit Hours
Semester 1			
1.	Sustainable Rural Development	1790	3(3+0)
2.	Regenerating Agriculture	1791	3(3+0)
3.	Rural Poverty Alleviation	1792	3(3+0)
4.	Human Resource Development	1793	3(3+0)
Semester 2			
5.	NGO Management	1794	3(3+0)
6.	Research for Development	1795	3(3+0)
7.	Natural Resources Management	1796	3(3+0)
8.	Managing Projects in Rural Development	1797	3(3+0)

Thesis in 3rd and 4th Semesters**e) Admission**

- i. Selection of the candidates will be made strictly on the basis of merit, which will be determined by the departmental admission committee after scrutinizing the application of the students as per AIOU M. Phil admission rules.
- ii. Rules, regulations final, enhanced and changed from time to time by the authorities/bodies of the University will be applicable to all the students. The students will have to abide by all such rules and the regulations.
- iii. For clarification about academic matters please contact on the following address:

CHAIRMAN

Department of Agricultural Sciences
AIOU, H-8, Islamabad Ph: 051-9250064

Note: Admission form complete in all respect must be sent on the above address:

f) Fee Tariff: MSc (Hons) Rural Development

Sr. #	Item	Rates
1.	Admission fee	Rs.1000/-
2.	Registration fee	Rs.200/-
3.	Course Fee	Rs.3050/- (per 3 credit hour Course)
4.	Thesis Fee	Rs.24400/-
5.	Thesis Evaluation fee	Rs.4600/-
6.	Technology fee	Rs.100/- (per student per semester)

Note: Only selected candidate will deposit the fee after securing the intimation letter from the admission department).

g) Instructional Methodology:**Workshop:**

The student will have a total of two chances to attend and pass the workshop of the course concerned. Passing the workshop will be pre-requisite for appearing in the final examination of the course. In exceptional circumstances a special chance may be allowed by the Vice-Chancellor on the recommendation of the Chairman.

Duration of Program

The minimum duration of MSc (Hons) Rural Development shall be two years and maximum duration shall be five years. There will be two semesters in each year.

The minimum period of the 24 credit hours course work for MSc (Hons) Rural Development shall be two semesters (One Year).

At the beginning of the third semester, a student will be required to submit research proposal (synopsis) to the Department. The synopsis will be prepared in accordance with the guidelines approved by the Board of Advanced Studies and Research (BASR). The Department will provide guidelines for developing the research proposal in the synopsis orientation workshop.

Viva Voce:

If the thesis is approved by the external evaluators, student has to appear before viva voce committee to defend his/her thesis.

5. FACULTY MEMBERS:

1. Prof. Dr. Nowshad Khan
Chairman, Department of Agriculture Sciences
Phone: +92-51-9250064, 9057750
2. Dr. Shafique Qadir Memon
Assistant Professor
Ph: 051-9057626,
Email: shafiq_qm@yahoo.com
3. Dr. Farhat Ullah Khan
Assistant Professor
Ph: 051-9057757,
Email: farhatkhan7@gmail.com
4. Dr. Chaman Lal
Lecturer
Ph: 051-9057286,
Email: drchaman75@yahoo.com
5. Ms. Fouzia Anjum
Lecturer
Ph: 051-9057753,
Email: fauziaanjum184@gmail.com
6. Dr. Muhammad Tarique
Lecturer/HEC Approved Supervisor
Ph: 051-9057286
Email: tarique_tunio@hotmail.com
7. Dr. Sabir Hussain Shah
Assistant Professor
Ph: 051-9057725
sabir.hussain@aiou.edu.pk

DEPARTMENT OF COMPUTER SCIENCE

Introduction:

The Department of Computer Science was established in the year 2000. The Department has received recognition nation-wide due to its quality education. The department had developed curricula of the academic programs at various levels to meet the national and international standards as defined by Higher Education Commission. The curricula include Ph. D (computer Science), MS (Computer Science), BS (Computer Science) and Postgraduate Diploma (PGD) in Computer Science.

The department is equipped with computing facilities and services including a digital class room and multimedia courseware development lab. The department has its own library in addition to central library of the university. The department practices the multi-method teaching methodology i.e. face-to-face regular classes for BS (Computer Science) and MS (Computer Science). The online methodology is practiced for PGD (Computer Science) and Foreign Language (French). The facilities of Video/Teleconferencing are also in use for lectures/consultations in research oriented degree of MS/PhD (Computer Science). In addition, the department also has a flavor of distance teaching in selected courses of BS (Computer Science) program like English, Pakistan Studies, and Islamic Studies etc.

Besides graduate and undergraduate teaching, the department is actively involved in research and development. For this purpose, Multimedia Centre and Open Learning Institute of Virtual Education (OLIVE) have been established under the umbrella of the department. The Multimedia center is equipped with technology related to Audio/Video production. It has

successfully developed multimedia courseware for more than 20 courses, whereas OLIVE provided a framework for electronic delivery of these courses in online mode. In addition to research activities in the area of software engineering communication, networking, and multimedia, the department focuses on the e-learning research in instruction design, communication, course management, e-assessment, mobile learning and web technologies integration.

The University has also developed linkages with San Jose' State University (SJSU) USA and Kent State University, USA. KSU is located in the heart of Silicon Valley and Kent State has strong education college with Technology Research Centers.

Aims and Objectives:

The principal aim of the Department of Computer Science is to produce graduates with a professional education and to undertake quality research in Computer Science and Related Information Technology areas. The specific objectives are to:

1. Maintain an excellent reputation and professional accreditation for its taught degree programs
2. Disseminate an appreciation of the current state and future directions of technological advances in the areas of Computer Science, Information Technology and e-learning.
3. Equip students with computer science knowledge and skills so as to cope with the social, economic, scientific, and technological challenges of the world outside.
4. Develop platform and systems for e-learning/mechanism for electronic delivery of courses to increase outreach to rural and remote areas.
5. Conduct research in areas of e-learning, multimedia instructional design; web based education, mobile learning

and related areas in software engineering, information technology, and computer science.

6. Assist other departments and individuals to implement modern ICT in educational delivery.
7. Provide a leadership support in ICT based education in Pakistan

1. MS (Computer Science)

a) Introduction:

The MS (Computer Science) program is offered at the Department of Computer Science at main campus Islamabad. It is a mix of courses and research degree. The program also meets requirement of the Higher Education Commission. It comprises of 24 credit hours course work, followed by 12 credit hours research work (Thesis). Therefore, a good mix of course work and research work will certainly add to professionalism among research students in the field of Computer Science. Many innovative research projects in education, CS and IT have been completed.

The Allama Iqbal Open University uses modern pedagogical methods for teaching. Keeping the requirements of MS (Computer Science) program courses, face-to-face classes are conducted at the Department of Computer Science, Main Campus, H-8, Islamabad. The online classes may also be conducted for selected courses, where faculty is teaching from abroad/other institutions in Pakistan. Additionally, video conferencing support is also available for online classes in live mode.

b) Objectives:

The objectives of the program are to:

- 1) Facilitate students to acquire knowledge, techniques and skills necessary to become practitioners in the field of Computer Science, Information Technology, Multimedia, and Software Engineering.
- 2) Guide students to appreciate and acquire research skills in related areas.
- 3) Facilitate students with indigenous research and development projects for better training and education.

c) Salient Features:

- 1) Regular classes at the main campus in the evening.
- 2) In-line with Higher Education Commission recommendations.
- 3) Focused research on interactive systems design for civic society.
- 4) Video conferencing facility and focused departmental library available at the department.
- 5) Course materials, reference books are provided by the university.

d) Eligibility:

A candidate is eligible to apply for MS (Computer Science) program having any of the following criteria from HEC recognized university/institute with minimum 60% marks:

- 1) Masters degree in Computer Science/Information Technology/ Software Engineering (16 years).
- 2) Four years bachelor degree in Computer Science/Information Technology/Software Engineering (16 years) with minimum 130 credit hours.

e) Selection Criteria:

Candidate must have to qualify subject test conducted by Department of Computer Science. The short listed candidates

will be interviewed by the Admission Committee for merit based final selection as per university rules.

f) Scheme of Studies:

Semester-1

Course Code	Title	Credit Hours
5700	Theory of Computation	3(3+0)
5701	Advanced Algorithm	3(3+0)
5703	Research Study	3(3+0)
	Elective-I	-

Semester-2

Course Code	Title	Credit Hours
	Elective-II	-
	Elective-III	-
	Elective-IV	-
	Elective-V	

Semester-3

5745	Thesis Part-I	6(0+6)
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Semester-4

5745	Thesis Part-II	6(0+6)
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1. Specialization:

Department of Computer Sciences is going to introduce several stream of specialization in the recent advance research areas. The optional course list is distributed in to the following major areas:

1) **Computer Science**

Course Code	Title	Credit Hours
5702	Distributed System	3(3+0)
5718	Case Tools & Applications	3(3+0)
5725	Web Based Education System	3(3+0)
5727	Measurement of Learning	3(3+0)
5728	Interactive Web Systems	3(3+0)
5729	Advanced Topics in Computer Science Edu.	3(3+0)

2) **Software Engineering & Quality Assurance**

5704	Object Oriented Software Engineering	3(2+1)
5705	Software Project Management	3(2+1)
5706	Software Quality Assurance	3(2+1)
5707	Software Engineering Laboratory	3(0+3)
5708	Advanced Topics in Software Engineering	3(3+0)

3) **Information Security Management**

5717	Information System Security	3(3+0)
5735	Internet Service Planning	3(2+1)
New	Advanced Computer Networks	3(3+0)
New	Data Security and Encryption	3(3+0)
New	Advanced Network Security	3(3+0)

4) **Information Technology**

5715	Distributed Database	3(3+0)
5716	Data Warehousing and Mining	3(3+0)
5719	Advanced Topics in DBMS	3(3+0)
5736	E-Commerce Application	3(3+0)
5737	Advanced Topics in ITM	3(3+0)

5) **General**

Code	Title	Cr. Hr.
5702	Distributed System	3(3+0)
5704	Object Oriented Software Engineering	3(2+1)
5705	Software Project Management	3(2+1)
5706	Software Quality Assurance	3(2+1)
5707	Software Engineering Laboratory	3(0+3)
5708	Advanced Topics in Software Engineering	3(3+0)
5715	Distributed Database	3(3+0)
5716	Data Warehousing and Mining	3(2+1)
5717	Information System Security	3(3+0)
5718	Case Tools & Applications	3(3+0)
5719	Advanced Topics in DBMS	3(3+0)
5725	Web Based Education System	3(3+0)
5726	Computer Aided Instructions	3(3+0)
5727	Measurement of Learning	3(3+0)
5728	Interactive Web Systems	3(3+0)
5729	Advanced Topics in Computer Science Edu.	3(3+0)
5735	Internet Service Planning	3(2+1)
5736	E-Commerce Application	3(3+0)
5737	Advanced Topics in ITM	3(3+0)
New	Advanced Computer Networks	3(3+0)
New	Data Security and Encryption	3(3+0)
New	Advanced Network Security	3(3+0)

Note:

1. The scheme of studies may be altered by the Chairman, Computer Science Department at the time of program offering for smooth running of the program and keeping in view the academic requirements. However new university rules will be applicable as and when approved.
2. The MS (CS) Program shall be completed within 5 years.
3. The student have to attend a compulsory workshop in 2nd/3rd semester to develop thesis proposal.

The Department of Computer Science reserves the right to offer or may not offer specializations/listed course(s) depending upon the available faculty/laboratory resources and viable student's enrollment.

Courses Offered in Spring 2016 (fresh admissions)

Code	Title	Credit Hours
5700	Theory of Computation	3(3+0)
5701	Advanced Algorithm	3(3+0)
5703	Research Study	3(3+0)
	Elective-I	3(3+0)

Elective-I course should be selected from the given specialization as mentioned earlier.

h) Instructional Methodology:

Face-to-Face/Online classes:

Regular classes will be conducted in the evening at the Department of Computer Science, main campus, Islamabad. Minimum 70% attendance is compulsory in each course during a semester. The online classes may also be conducted for selected courses, where faculty is teaching from abroad/other institutions in Pakistan. Additionally Video/Tele conferencing support is also available for online classes. Recommended reference materials where applicable for each registered course are provided to each student before commencement of the classes. Multimedia Courseware CDs are prepared by the Department of Computer Science, for selected courses will also be provided. The faculty members may suggest research articles and other reference material, which may be available on the digital library/internet. The students are required to pass 24 credit Hours course work within 2 years as per university rules.

MS Research Work:

The department gives significant importance to original research; therefore, it has developed necessary infrastructure to carry out research work at the campus. State of the art ICT laboratory facilities are available to conduct research in multimedia, instruction design, e-Learning, e-Assessment, ICT in education, Interactive internet based systems, and related areas of computer sciences. Fully equipped TV and radio studios are also available at the campus for research students.

Each MS student has to undertake (one year) 12 credit hours research work in the 3rd and 4th semester. A synopsis orientation workshop will be organized for the students to interact with experts and supervisors. In the workshop, those students will listen to new research ideas and interactively develop research proposals. The research topic, supervisor, and synopsis of the desired research shall be presented to departmental synopsis committee. The students are expected to complete their research work within one year. Students are encouraged to contact possible research supervisor well before the start of research to develop a good proposal.

i) Assessment:

Course work assessment

The following assessment criteria are applied to MS level course work:

Course Type	Continuous assessment during semester		Final
	Assignments	Mid-Term/ Presentation/Quiz	
Face-to-face	10%	20%	70%
Online	10%	20%	70%

Note: The pass percentage in each component (continuous and final) is 50%. However, student may seek to get 70% marks if they desire to take admission in PhD program later on.

Research Work Assessment:

Each MS (CS) student shall submit thesis on completion of the research work undertaken. The university will evaluate the thesis as per university rules by external experts in the subject area. After the recommendation of the external evaluators, the student needs to defend his/her thesis before the viva voce committee. The MS/M. Phil rules and regulations of the university will apply to MS (CS) students.

j) Applying/Admission Procedure:

The completely filled original admission form shall be submitted to following address on or before the closing date of admission without depositing fee.

CHAIRMAN

Department of Computer Sciences
 Prof. Dr. N. A. Sangi
 nazir_sangi@hotmail.com
Contact#: 051-9057782

For further information, you may contact the department e-mail dcs@aiou.edu.pk or by telephone 051-9057260, 9057402 or 051-9250093.

Important Note:

Rules, regulations framed, enhanced and changed from time to time by the university will be applicable to all students. The students will have to abide by all such rules and regulations.

g) Fee Tariff:

The fee structure for MS level courses is given below:

Description	Fee
Registration Fee (If not registered)	Rs.200 (once at the time of 1st admission in the university)
Admission Fee	Rs.1000 (once at the time of admission in the program)
Technology fee (per student per semester)	Rs.100/-
Course Fee without lab component	Rs.6180/- (per 3 credit hours course)
Course Fee with lab. component	Rs.7700/- (per 3 credit hours course)
Security (Refundable)	Rs.5,000 (payable once at the time of admission)
Library Membership	Rs.200 per semester
Research Registration of Thesis in Semester-3	Rs.12360/-
Research Registration of Thesis in Semester-4	Rs.12360/-

Thesis evaluation fee will be charged as per university rules payable at the time of submission of the thesis.

First Semester Fee

S. #	Description	Fee (Rs.)
1	Registration Fee (If not registered)	200/-
2	Admission Fee (once at the time of Admission)	1000/-
3	Technology fee (per student per semester)	100/-
4	Course Fee @ Rs.6180 per course for 4 courses	24720/-
5	Security (Refundable)	5000/-
6	Library Membership	200/-
Total		31220/-

Faculty Members:

Contact Addresses (Academics)

1.	Prof. Dr. Naghmana Rashid Dean Faculty of Sciences Contact#: 051-9057729
2.	Prof. Dr. N. A. Sangi Chairman nazir_sangi@hotmail.com Contact#: 051-9057782
3.	Prof. Dr. Skiandar Hayat Khiyal Adjunct Professor m.sikandarhayat@yahoo.com
4.	Dr. Amjad Mehmood Adjunct Professor Department of Computer Science, University of Bahrain, State of Bahrain amahmood@itc.uob.bh
5.	Dr. Rahat Bukhari Adjunct Professor Ex-Director, Computer Center, Quid-e-Azam University, Islamabad Contact#: 051-9219894
6.	Dr. Mujahid Alam Adjunct Professor mujahidalam@hotmail.com
7.	Dr. Iftikhar Azeem Niaz Adjunct Professor ianiaz@yahoo.com

8.	Dr. M. Naveed Baqir Adjunct Professor Star Chief Information Officer, Star Group USA, mnbaqir@yahoo.com.
9.	Dr. Moiz Uddin Ahmed Siddiqui Assistant Professor, DCS, AIOU moiz_ahm@aiou.edu.pk Contact#: 015-9057259
10.	Mr. Mohammad Qasim Khan Assistant Professor, DCS, AIOU qasim@aiou.edu.pk Contact#: 015-9057258
11.	Dr. Muhammad Arshad Awan Lecturer, DCS, AIOU m_arshad@aiou.edu.pk Contact#: 015-9057780
12.	Mr. Ch. M. Shahbaz Anjum Lecturer, DCS, AIOU ch_shahbaz_anjum@hotmail.com Contact#: 051-9057780
13.	Dr. Muhammad Sheraz Assistant Professor FUU, Islamabad
14.	Dr. Ayaz Hussain Assistant Professor, IIU, Islamabad

DEPARTMENT OF STATISTICS

Introduction:

The Department was established in 1988. Initially, Computer Science and Mathematics were also its part, then in November, 1999, Computer Science was established as an independent Department. Similarly, in May, 2014, Mathematics was also announced as an independent Department. At the beginning, the Department introduced various programs of Computer Science along with a variety of Mathematics and Statistics courses.

The mission of Department of Statistics is to advance the frontiers of statistical science research in both theory and applications; to provide learning environments that produce well educated statisticians; to join with others in bringing the strengths of the statistical sciences to address the needs of the local and global society. The main objective of the Statistics Department is to disseminate the Statistical concepts all over the country at all academic levels. Presently, the Department is offering following academic programs:

- ❖ PhD Statistics
- ❖ MPhil Statistics
- ❖ MSc Statistics

In addition to these degree programs, the department is also offering courses at HSSC, Bachelor, Master, MPhil and PhD levels. The Department of Statistics is planning to offer BS Statistics program from autumn 2016 semester. These programs also cater the statistical needs in information technology and other allied disciplines. At present, the Department offers degree programs at main campus only. However in near future, the Department also intends to offer degree programs at regional headquarters.

The course outlines of all level courses have been designed and updated recently after consulting syllabi of national and international universities. It helps to strengthen the statistical concepts and the logical thinking to our students.

1. MPhil Statistics

a) Introduction:

The MPhil Statistic program is being offered in the Department of Statistics, Main Campus, AIOU, Islamabad since 2001. This program meets the challenging requirements of today's fast growing world demands. It also provides the experts not only in the field of statistics but also in other allied social and science disciplines.

The Department has its own computer laboratory enriched with high speed latest computers, multimedia, and latest statistical softwares. Furthermore, the Video Conference facility is also available.

Salient Features:

- Face to Face learning from highly qualified faculty.
- Two workshops each of duration 15 days are arranged at main campus to cover the contents of each course.
- Availability of high speed internet and enriched library facility at AIOU.
- Hostel facility is also available on nominal payment during the workshops.

b) Objectives:

The main objectives of M. Phil Statistics program are:

1. To enhance the qualification of those who could not continue their education after MSc Statistics.
2. To provide opportunity for in-service persons to improve their qualification and get promotion in their respective departments.
3. To get quality teachers/researchers of Statistics at all levels.

c) Eligibility:

The candidates must have MSc Statistics/BS Statistics (four years) degree from any HEC recognized university/institute with minimum 2.5 CGPA (in semester system) or 2nd Division (in annual system). Both in-service and fresh candidates can apply for admission.

d) Duration:

The minimum duration of M. Phil program is 4 semesters (two years) and maximum duration is 10 semesters (five years).

e) Scheme of Studies:

(i) The Semester Wise Course Offering (M. Phil)

Code	Title	Credit Hours
1st Semester (Spring)		
1732	Probability and Stochastic Processes	3(3+0)
1739	Advanced Econometrics	3(3+0)
-	Elective-I	3(3+0)
-	Elective-II	3(3+0)

Sub Total: 12(12+0)

2nd Semester (Autumn)

1735	Statistical Inference	3(3+0)
1736	Research Methods	3(3+0)
-	Elective-III	3(3+0)
-	Elective-IV	3(3+0)

Sub Total: 12(12+0)

3rd Semester (Spring)

1737	Research Thesis	12(12+0)
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Sub Total: 12(12+0)

4th Semester (Autumn)

1737	Research Thesis	12(12+0)
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Total Credit Hours: 48

Elective Courses:

Following is the list of elective courses for MPhil Statistics program:

Sr. No.	Course Title	Course Code	Credit Hours
1	Numerical Analysis	1733	3(3+0)
2	Linear Models	1738	3(3+0)
3	Multivariate Methods	1740	3(3+0)
4	Multivariate Analysis	1741	3(3+0)
5	Advanced Experimental Design	1801	3(3+0)
6	Categorical Data Analysis	1802	3(3+0)
7	Survey Sampling	1803	3(3+0)
8	Statistical Pattern Recognition	1804	3(3+0)

The Department of Statistics will offer elective courses from the above list depending upon the availability of faculty.

(ii) Synopsis/Research Work:

After completion of twenty four credit hours of course work, a student will embark upon research of 24 credit hours for two semesters. After the receipt of admission list of third semester, the department will hold two-weeks Synopsis Orientation Workshop (SOW). Only those students will be eligible to attend the synopsis orientation workshop who qualified/passed at least 12 credit hours course work including Research Methods (1736). The purpose of this workshop is to guide the MPhil scholars in finalizing their Synopsis/Research topics. Participation in the SOW will be mandatory. Research scholars are supposed to develop and present their synopsis before the Departmental Synopsis Committee (DSC). Finally, the recommended topic of synopsis/research by DSC will be forwarded to the competent authority for approval as per MPhil rules and regulations of AIOU, Islamabad.

f) Fee Tariff:

Tuition Fee	Fee @	Fee/Semester
	Rs.5860/- (3 Credit Hours)	Rs.23440/- (12 Credit Hours)
Registration fee (payable at the time of first admission only)	Rs.1,000/-	Rs.1,000/-
Technology fee (per student per semester)	Rs.100/-	Rs.100/-
Admission fee (payable at the time of first admission)	Rs. 1,000/-	Rs. 1,000/-
First Semester Fee		Rs.25,540/-

Semester wise fee Tariff (Rupees)				
1 st Semester	2 nd Semester	3 rd Semester	4 th Semester	Grand Total
Rs.25,540/-	Rs.23,540/-	Rs.23,540/-	Rs.23,540/-	Rs.96,160/-

Admission Procedure:

- A Departmental Admission Committee is responsible to finalize the admissions by conducting test and interview of the candidates.
- Admission in MPhil program will be made once a year i.e. Spring Semester.
- Admission in MPhil Statistics will be granted against limited seats strictly on the basis of merit as approved by the University. The University reserves the right not to start this program if viable group of students not formed.
- Only selected candidates, approved by the competent authority of AIOU, will be informed about their admission by the admission department.
- The prevailing University rules/regulations regarding M.Phil enforced from time to time shall strictly be followed for the M.Phil statistics program.

- As M. Phil statistics is a face to face program, 70% attendance in workshop/classes is compulsory otherwise the student will not be allowed to appear in sessional tests as well as in final examination.

Note:

- Successful candidates are supposed to deposit their fee as per procedure laid down by the university in the intimation letter.
- Fee can neither be refunded nor be adjusted for future admission after finalization of admission.
- It is the responsibility of the admitted student to remain in contact with the department regarding his/her program.

g) Instructional Methodology:

Study Material:

A book for each course will be provided to the students by the university. A list of recommended books will also be given for further reading.

Face to Face teaching (Tutorials):

For each course, approximately 45 hours face to face teaching support will be provided. The final schedule of the lectures will be distributed to the students in consultation with the teachers (resource persons). The classes will be supplemented by the computers where required. 70% attendance in face to face teaching would be compulsory.

Workshops:

The introductory workshop and end semester workshop will be arranged at the beginning and at the end of each semester.

Continuous Assessment:

- Two home-assignments for each course will be given to the students.
- Two sessional exams for each course will be conducted and 50% marks in sessional exam is mandatory to appear/qualify for final examination.
- 30% weightage will be given to the assignments/sessional tests.
- A student who fails in continuous assessment component is not eligible to appear in final exam but will be allowed to re-register for the same course at the next offering by the university, if eligible.

Final Examination:

Final Examination will be held at the end of each semester. 70% weightage will be given to the final examination.

Passing Marks:

Assignments/Sessionals	50%
Final Examination	50%
Aggregate	50%

Thesis:

In the 3rd Semester, student will be required to submit a research proposal (synopsis) to the department during the Synopsis Orientation Workshop. One month before the specified date for final submission of thesis for external evaluation, the student have to present his/her research work to the departmental committee.

Viva Voce:

After approval of the thesis by the external examiners, the student has to appear before a viva-voce committee to defend his/her thesis.

2. PhD Statistics

a) Introduction:

To meet the challenging requirements of today's fast growing world, we are in desperate need of experts in the field of Statistics. By realizing the shortage of experts in Statistics, the Department of Statistics has planned to offer PhD in Statistics. The expert statisticians are not only needed in the area of education, but also in industry and research. The curriculum of the program is designed in such a way that both the course work and the research components are covered thoroughly.

b) Objectives:

The main objectives of PhD Statistics program are:

1. To enhance the qualification of those who could not continue their education after MPhil Statistics.
2. To provide opportunity for in-service persons to improve their qualification and get promotion in their respective departments.
3. To prepare quality teachers/researchers of Statistics at all levels or in equivalent positions in industry or government.

c) Eligibility:

The candidates must have MS/MPhil Statistics with minimum 3.0 CGPA (in semester system) or First Division (in annual system). Departmental Admission Committee will finalize the admissions after conducting the test and interview as per AIOU rules.

d) Duration:

The minimum duration of PhD Statistics program is 3 years (6 semesters). Student has to complete 30 credit hours for the award of PhD Degree.

e) Scheme of Studies:

Code	Title	Credit Hours
1st Semester		
4769	Advanced Topics in Regression and Econometrics	3(3+0)
-	Elective-I	3(3+0)
-	Elective-II	3(3+0)

2nd Semester

4770	Advanced Topics in Statistical Inference	3(3+0)
-	Elective-III	3(3+0)
-	Elective-IV	3(3+0)

3rd Semester

4768	Research Thesis	12(12+0)
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4th Semester

4768	Research Thesis	12(12+0)
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5th Semester

4768	Research Thesis	12(12+0)
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6th Semester

4768	Research Thesis	12(12+0)
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Elective Courses:

Following is the list of elective courses for PhD Statistics program:

Sr. No.	Course Title	Course Code	Credit Hours
1	Survival Analysis	4761	3(3+0)
2	Bayesian Inferential Statistics	4762	3(3+0)

3	Stochastic Processes	4763	3(3+0)
4	Measure Theory	4765	3(3+0)
5	Response Surface Design	4766	3(3+0)
6	Recent Developments in Statistics	4767	3(3+0)
7	Actuarial Statistics	9751	3(3+0)
8	Statistical Theory for Extreme Events	9752	3(3+0)
9	Mixture Distributions	9753	3(3+0)
10	Applied Time Series Econometrics	9754	3(3+0)
11	Spatial Data Analysis	9755	3(3+0)
12	Generalized Logistic Regression	9756	3(3+0)
13	Repeated Measure Analysis	9757	3(3+0)
14	Multilevel Modeling	9758	3(3+0)
15	Mathematical Demography	9759	3(3+0)

The Department of Statistics will offer elective courses from the above list depending upon the availability of faculty.

f) Instructional Methodology:

Study Material:

A book for each course will be provided to the students by the university. A list of recommended books will also be given for further reading.

Face to Face teaching (Tutorials):

For each course, 45 hours face to face teaching support will be provided through workshops/weekend classes. The final schedule of the lectures will be distributed to the students in consultation with the teachers (resource persons). The classes will be supplemented by the computers where required. 70% attendance in face to face teaching would be compulsory.

Continuous Assessment:

- Two home-assignments for each course will be given to the students.
- Two sessional exams/presentations for each course will be conducted and 50% marks in sessional exams/presentations is mandatory to appear/qualify for final examination.
- 30% weightage will be given to the assignments/sessional tests/presentations.
- A student who fails in continuous assessment component is not eligible to appear in final exam but will be allowed to re-register for the same course at the next offering by the university, if eligible.

Final Examination:

Final Examination will be held at the end of each semester. 70% weightage will be given to the final examination.

Passing Marks:

Assignments/Sessionals	50%
Final Examination	50%
Aggregate	50%

Comprehensive Examination:

The students completing the PhD course work shall be allowed to appear in Comprehensive Examination arranged and conducted by the Department as per rules of the Higher Education Commission (HEC). Only those candidates who pass the comprehensive examination will be allowed to continue with their PhD research work and attend the two week synopsis workshop after depositing the required fee.

Thesis:

The student will be required to submit a research proposal (synopsis) to the department during the Synopsis Orientation Workshop. One month before the specified date for final submission of thesis for external evaluation, the student has to present his/her research work to the departmental committee.

Viva Voce:

After approval of the thesis by the external examiners, the student has to appear before a viva-voce committee to defend his/her thesis.

Note: Please send your admission form complete in all respect on the following address:

*Chairman, Department of Statistics,
First Floor, Research Complex, Sector H-8, AIOU, Islamabad
Ph. No. 051-9057266
Email: statistics@aiou.edu.pk*

For further clarification/guidance, please feel free to contact on the following contents.

FACULTY MEMBERS

1. **Prof. Dr. Irshad Ahmad Arshad**
Chairman
Ph: 051-9057163, 9250062
Email: irshad.ahmad@aiou.edu.pk
2. **Dr. Muhammad Zakria**
Associate Professor
Ph: 051-9057372
Email: zakria@aiou.edu.pk
3. **Dr. Tauqir Ahmed Mughal**
Lecturer
Ph: 051-9057209
Email: tauqirahmed1@outlook.com
4. **Mr. Muhammad Mushtaq**
Research Associate
Ph: 051-9057287
Email: muhammad.mushtaq@aiou.edu.pk
5. **Staff:** Phone: 051-9057266

DEPARTMENT OF PHYSICS

Introduction:

Realizing the need of technology and scientific education in Pakistan Department of Physics at AIOU began in 1998 with technological needs in areas like Energy, Energy Efficiency, Climate, Energy for Sustainable Development, Renewable energy, Hydrogen Energy, Environment, astronomy, nanotechnology, materials science, Plasma, Medical Physics, Cosmology, Geo Physics, Density Functional Theory (DFT), and nuclear fields. A major emphasis of current research activities are on promotion in renewable energy and related areas in which the Department have led to innovations.

The Department is presently running MSc, MPhil and PhD degree program with specialization in various disciplines. New fields of specialization and programme of studies are approved and be operational from the next academic year. Apart from capacity development activities Department of Physics has been involved in several international, national and regional research projects. Physics Department has developed research linkage with other National and International Universities and research organizations of repute to ensure two-way flow of knowledge.

➤ **Vision:**

The Department of Physics carries out Physics and provides teaching and research programmes that will contribute significantly to the development of human capacity, science and technology in Pakistan. Our vision is to see our graduates and post graduates to be equipped with

the fundamental knowledge of Physics, problem solving, life and communication skills. This will be achieved by reviewing and developing relevant academic programmes and research and research projects to address Pakistan technological needs in areas like Energy, Renewable energy, Hydrogen Energy, Environment, Astronomy, Nanotechnology, Materials science, Plasma, Medical Physics, Cosmology, Geo Physics, Density Functional Theory (DFT), and Nuclear Physics. Our vision is to be a locally and internationally recognized Physics Department that exposes its successes in public awareness campaign and through established knowledge dissemination channels.

➤ **Mission:**

The Department of Physics at AIOU becomes a nationally and internationally recognized research and educational unit. Our faculty strives to push the boundaries of our understanding in a wide variety of fundamental and applied Physics areas while providing the best research opportunities for our majors. The blending of classroom learning with training in XXI Century front-edge research facilities allows our graduates post graduates to become successful researchers, teachers and applied scientists in nowadays-competitive marketplace. At the same time, we are fully committed, as the physics department of the major research university in our border region, to contribute to the general public appreciation and respect for the scientific work and knowledge.

➤ **Core Values:**

To Perform to the highest levels of competence and professionalism in research and training, acting with utmost honesty and integrity To sensitivity to staff and student welfare while instituting measures that meet the need of all stake holders

Advance knowledge and technologies Generate, preserve and disseminate knowledge and be involved in the development of innovative products Cherish academic freedom, nurture and reward talent. The Department aspires to be an effective agent of change and a model for the other Department in the field of research so as to meet the grooming demands of the new millennium.

➤ **The focus on area of specialization in DOP at AIOU in on the following areas:**

Energy, Energy Efficiency, Energy Conservation, Energy for Sustainable Development, Electric power system Management, Energy Economics and Planning Renewable energy, Hydrogen Energy, Environment, Climate change, Astronomy, Nanotechnology, Materials science, Plasma, Medical Physics, Laser and Optics, Cosmology, Geo Physics, Density Functional Theory (DFT), Modeling and Simulation and Nuclear fields.

MPhil Physics Program:

1. DURATION OF THE PROGRAMME:

- a) The **minimum duration of MPhil program** shall be 04 semesters (two years) and maximum duration shall be 10 semesters (five years) Program.
- b) The **minimum period of the 24 credit hours course work** shall be 02 semesters (one year) and **minimum period to complete 12 credit hours research thesis** shall be two semesters (one year) after approval of the synopsis.
- c) **In case the student fails** to complete the course/research work within the prescribed maximum period of 10 semesters (five years), she or he will take a fresh admission in the program.

- d) After successful completion of 36 credit hours (24+12), a student will qualify for the award of MPhil Physics degree.
- e) After submitting the synopsis in the department, waiting period spent for approval of synopsis by the RPC and time consumed in thesis evaluation shall not be counted towards maximum period of MPhil Program.
The language of instruction, examination and thesis for all disciplines will be according to the approved scheme of studies of each department

2. ELIGIBILITY AND ADMISSION CRITERIA:

Candidates holding MSc / equivalent Physics degree with at least second division are eligible to apply for admission. The admission will be made strictly on merit. Qualifying the **Departmental Test & Interviews** is mandatory for admission. A research Superior’s letter is mandatory.

3. SCHEME OF STUDIES:

Approved Course Offering:

Course work during 1st year or 1st & 2nd Semester	24 Credit Hours
Thesis/Project/Dissertation during 2nd year or 3rd or 4th Semester	12 Credit Hours
Total Credit Hours required for completion	36 Credit Hours

Semester I (Core Courses)

S. No.	Title	Course Code	Credit Hours
1	Mathematical Physics	1701	3+0
2	Electrodynamics	1703	3+0
3	Solid State Physics	1722	3+0
4	Research Methodology	7791	3+0

Semester 2 (Core Courses)

(Four courses will be offered depending on the needs and availability of the experts)

S.No.	Title	Code	Credit Hours
1	Computational Physics	1704	3+0
2	Laser Physics	1710	3+0
3	Quantum Optics	1711	3+0
4	Plasma Physics	1712	3+0
5	Nuclear Physics	1716	3+0
6	Experimental Techniques	1718	3+0
7	Semiconductor Physics	1720	3+0
8	Advanced Quantum Mechanics	1702	3+0
9	Quantum Field Theory	1721	3+0
10	Non Crystalline Materials	1729	3+0
11	Renewable Energy Sources	1730	3+0
12	Physics of Solar Cells	1727	3+0
13	Physics of Metals & Alloy	1728	3+0
14	Crystallography	1724	3+0
15	Physics of Glasses	1726	3+0
16	Atomic & Molecular Physics	1705	3+0
17	Environmental Physics	7792	3+0
18	Antenna Theory	7793	3+0
19	E.M. Field Analysis	7794	3+0
20	Microelectronics	7795	3+0
21	High Frequency Electrodynamics	7796	3+0
22	Quantum Information Theory	7797	3+0
23	Electron Microscopy	7798	3+0

Semester 3 (Research)

1.	Thesis	7790	6+0
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Semester 4 (Research)

1.	Thesis	7790	6+0
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4. METHOD OF INSTRUCTION:

Allama Iqbal Open University employs media mix as methodology of instruction in which printed material, audiovisual support, and face-to-face tutorial support are mixed in accordance with the requirement of the discipline and the level of the course. Medium of instruction for this programme is English. In view of special requirements of post-graduate studies in Physics the following methodology of instruction will be followed.

i) **Study Material**

The University will provide reprinted and compiled course books.

ii) **Assignments**

Two assignments for each 03 credit hrs course will be given. Students will complete the assignments and send to the tutors within the scheduled time. The tutor will return the same to them after marking and providing necessary academic guidance or feedback. The marks obtained in these assignments contribute to the final course result. For successful completion of the course it is imperative to obtain a minimum of 50% marks in each assignment. Students failing in the continuous assessment will not be eligible to appear in the final examination.

iii) Tutorial Support

Tutorial support will be provided in the form of lectures by resource persons at the Campus. A minimum of 45 hours of face-to-face teaching/guidance for each 03 credit hour course (AIOU Description), will be provided in these tutorials. Attendance in these sessions is compulsory. Students failing to attain 70% attendance will not be eligible to appear in the final examination. AIOU will not bear any cost regarding TA/DA or boarding/ lodging facilities during these classes.

v) Thesis (Research Work)

MPhil student will be required to perform research work for one year at any relevant scientific institution located near to the residence or place of appointment under the supervision of a scientist of the concerned institution. The selection of the project and the supervisor will be at the discretion of AIOU and the institution where research is being carried out. Each student will submit quarterly report duly signed by the thesis supervisor on the research work performed to the coordinator. The student of MPhil Physics Program will submit one research paper (accepted or published) in any conference or research journal and deliver at least one seminar during his research work in the presence of external examiner, as mandatory to their completion of their research degree.

v) Final Examination/ Continuous Assessment

At the end of each semester, the University will arrange final three hours written examination in each course for the MPhil program. It is imperative to obtain 50% marks in the final examination to pass in each course. The roll number slips and other relevant information related to examination centre will be provided to the students before the examination.

The distribution of continuous assessment and final examination will be as follows:

Assignments	30%
Final Examination	70%
Aggregate	50%

vi) Approval of Thesis

On completion of research work, the student will have to submit thesis to the Department for evaluation and defense as per format of the University. Minimum period for completion the thesis after successful completion of course work will be two semesters (one year) for M. Phil Program. For experimental research work, the period to be spent for conducting experiments in the laboratory will be decided by the supervisor.

5. GRADING

The Grade for MPhil Physics will be determined as follows:

Grade-A	80% or above
Grade-B	65% to 79%
Grade-C	50% to 64%
Fail	Below 50%

6. FEE TARRIF:

1st semester

Course fee	Rs.19,020/-@Rs.4,755/-per 3 credit hour course (Four 03 credit hours courses) (Inclusive of books & students activity funds)
Registration fee	Rs. 200/- (at the time of 1st admission)
Admission + Degree Fee	Rs.1000/- (at the time of 1st enrolment)
Technology Fee	Rs.100/-
Total fee	Rs.20,320/-

2nd semester

Course fee	Rs.19,020/-@Rs.4755/-per 3 credit hour course (Four 03 credit hours courses)
admission form	Rs. 15/-
Technology Fee	Rs.100/-
Total fee	Rs.19,135/-

3rd semester

Thesis fee (06 credit hours)	Rs.9,510/-@Rs.1585/-per credit hour
admission form	Rs.15/-
Technology Fee	Rs.100/-
Total fee	Rs.9,625/-

4th semester

Thesis fee (06 credit hours)	Rs.9510/-@Rs.1585/-per credit hour
Thesis evaluation fee	Rs. 20,400/-
Cost of admission form	Rs.15/-
Technology Fee	Rs.100/-
Total fee	Rs.30,025/-

Note: Per credit fee is Rs.1, 585/-

7. HOW TO PAY THE FEE:

The admission in this programme is purely on merit basis. No fee is to be paid unless intimated by the university. The fee is to be deposited through **Challan Form** (only) in the specified branches of Banks all over Pakistan after receipt of the intimation letter for admission. The candidate will write his name (in block letters) full address and MPhil Physics Programme and semester on the Challan Form attached. Please keep a photocopy of the form for record. **This selection Performa will be sent only to the selected candidates by the admission office along with the intimation letter for admission and fee schedule.**

8. TRAVELING & BOARDING/LODGING EXPENSES:

The AIOU does not have lodging and boarding facilities at the moment except at main campus Islamabad. If required, students will have to arrange lodging and transport by themselves. AIOU will not bear any cost in this regard. The fee does not include charges for boarding lodging and transport. Hence the University does not have any liability in this regard.

9. HOSTEL FACILITIES:

The student coming from other cities can avail the hostel facility on reasonable rates (other than fee)

10. FINANCIAL ASSISTANCE:

Limited financial assistance is available to deserving students who shall apply on the prescribed AIOU forms supported with justifiable documentary proofs available after admission during the 1st semester. Financial assistance will be considered from the 2nd semester.

For any kind of assistance, kindly contact on the following:

Prof. Dr. Syed Zafar Ilyas,
Chairman, Department of Physics,
Science Block, 1st Floor, AIOU, Sector - H-8, Islamabad.
Email: szilyas@aiou.edu.pk

Complete Admission forms in all respect may be sent on the following address.

Department of Physics,
Science Block, 1st Floor,
AIOU, Sector - H-8, Islamabad.

PhD Physics Program

1. DURATION OF THE PROGRAMME:

The minimum duration for the Direct PhD programme shall be six semester (03 years) and maximum duration of the programme shall be ten semesters (05 years). Student will to take complete course work in first two semesters & then carry out research work in last four semesters. Students have to complete 18 credit hours course work and 24 credit hours research work. Minimum period for the completion of course work shall be two semesters (one year) and maximum four semesters (two years).

2. ADMISSIONS PREREQUISITES:

This is for the information of all concerned, that the degrees awarded by the universities/Degree awarding institutions must meet the following minimum criteria for the recognition by the HEC.

- For admission into PhD, minimum **CGPA 3.0** (out of 4.0 in the semester system) or **First Division** (in the annual system) in MPhil Physics/MS/Equivalent degree is required.
- Admission will be made as per HEC criteria.
- All rules of BASR/AIOU regarding PhD will be applied.
- Qualifying **Departmental Test** and **Interview** is mandatory for PhD Admission.
- Two reference letters and research proposal is mandatory for admission.

3. COURSE OFFERING:

3 compulsory courses (each of 3 credit hours) will be offered in the 1st semester and the remaining 3 optional courses will be opted by the students in the 2nd semester from the list given below. Each course is of 03 credit hours. Any of the following

optional courses of 03-credit hours will be offered according to the availability of qualified teachers and research facilities.

Course work = 18 credit hours

Research / Thesis = 24 credit hours

Semester 1 (Compulsory)

S.#.	Title	Course Code	Credit Hours
1.	Advanced Mathematical Physics	9701	03
2.	Experimental Techniques in Physics	9702	03
3.	Renewable Energy Resources	9706	03

Semester 1 (Compulsory)

S.#.	Title	Course Code	Credit Hours
1.	Advanced Mathematical Physics	9701	03
2.	Experimental Techniques in Physics	9702	03
3.	Renewable Energy Resources	9706	03

Semester 2 (Optional)

(Courses will be offered depending on the needs and availability of the experts, out of which the student will opt only three)

S.#.	Title	Course Code	Credit Hours
1.	Advanced Semiconductor Physics	9703	3+0
2.	Statistical Physics	9704	3+0
3.	Environmental Physics	9705	3+0
4.	Hydrogen Energy Technology	9707	3+0
5.	Energy Audit and Thermal Energy Conservation	9708	3+0
6.	Energy Resources and Technologies	9709	3+0

Semester 3(Research)

1. Thesis 9700 6+0

Semester 4(Research)

1. Thesis 9700 6+0

Semester 5(Research)

1. Thesis 9700 6+0

Semester 6(Research)

1. Thesis 9700 6+0

4. METHOD OF INSTRUCTION:

Allama Iqbal Open University employs media mix as methodology of instruction in which printed material, audio-visual support, and face-to-face tutorial support are mixed in accordance with the requirement of the discipline and the level of the course. Medium of instruction for this program is English. In view of special requirements of post-graduate studies in Physics the following methodology of instruction will be followed.

i) Study Material

The University will provide reprinted and compiled course books.

ii) Final Examination/ Continuous Assessment

Two assignments for each course will be given. Students will complete the assignments and submit within the scheduled time. The marks obtained in these assignments contribute to the final course result. For successful completion of the course it is imperative to obtain a minimum of 50% marks in each assignment. Students failing in the continuous assessment will not be eligible to appear in the final examination.

The distribution of assessment of 03 credit hour course will be as follow:

Assessment

- **Continuous assessment:**

Continuous assessment will be based on assignments and class tests and course work attendance i.e. 20% for assignments or tests and 10% for attendance. The

weightage of this component in the final result will be 30% and pass percentage will be 50%.

- **Final Examination:**

Final examination of 100 marks for each 03 credit hour theory course will be conducted at the end of semester. The pass percentage in final examination will be 50% and its weightage in the final result will be 70%.

iii) Course Work

Tutorial support will be provided in the form of lectures by resource persons at the campus. A minimum of 45 hours of face-to-face teaching for each three credit hours will be provided in these lectures. Attendance in these sessions is compulsory.

iv) Thesis (Research Work)

PhD students will carry out research work for two years at any relevant scientific institution located near to the residence or place of appointment under the supervision of a scientist of the concerned institution. The selection of the project and the supervisor will be at the discretion of AIOU and the institution where research is being carried out. Each student will submit quarterly report duly signed by the thesis supervisor on the research work performed to the coordinator.

v) Comprehensive Examination:

The students completing the PhD course work shall be allowed to appear in the comprehensive examination arranged and conducted by the concerned department as per rules of HEC. The pass percentage in comprehensive examination shall be 50%. No grade will be awarded to the student, only pass or fail will be reflected in the result Performa.

vi) Synopsis Orientation Workshop:

Duration of synopsis orientation workshop shall be of two weeks. Synopsis of only those students will be presented in research proposal committee meeting for final approvals who have attended the synopsis orientation workshop.

vii) Research Paper during Research Period:

The student of PhD Physics Program will present at least two presentations in Seminars during his research work in the presence of external examiner, as mandatory to their completion of their research degree.

viii) Approval of Thesis:

On completion of research work, the student will have to submit thesis to the Department for evaluation and defense as per format of the University. Minimum period for completion the thesis after successful completion of course work will be two semesters (one year) for Ph. D. Physics Program. For experimental research work, the period to be spent for conducting experiments in the laboratory will be decided by the supervisor.

5. GRADING:

The Grade for PhD Physics will be determined as follows:

Grade-A	80% or above
Grade-B	65% to 79%
Grade-C	50% to 64%
Fail	Below 50%

6. FEE TARRIF:

- i) **Admission fee** Rs. **2000/-**
(Once at the time of Admission)
- ii) **Registration fee** **Rs. 2000/-**
(Once at the time of Admission)
- iii) **Fee for each 03**

- iv) **Credit Hours course** **Rs.5100/- @ Rs.1700/-**
Thesis fee **Rs. 40,800/- @ 1700/-**
(Per credit hr (24 credit hrs)
- v) **Thesis Evaluation fee** **Rs.20, 400/-**
- vi) **Technology fee** **Rs. 100/-**
(Per student per semester)

7. HOW TO PAY THE FEE:

The admission in this programme is purely on merit basis. No fee is to be paid unless intimated by the university. The fee is to be deposited through Bank Challan Form in favour of Treasurer AIOU Islamabad after receipt of the intimation letter for admission. The candidate will write his name (in block letters) full address and PhD Physics Programme and semester on the back side of the draft. Please keep a photocopy of the draft for record and immediately post another photocopy of the draft (both sides) to the Chairman/Programme Coordinator, Physics Department, Science block-1st floor. AIOU, H-8 Islamabad. The original bank draft is to be sent to the Assistant Registrar (ACII) Postgraduate Admission Section, AIOU, H-8, Islamabad along with the Performa to be filled by the selected candidate. **This Performa will be sent only to the selected candidates by the admission office along with the intimation letter for admission.**

8. TRAVELING & BOARDING/LODGING EXPENSES :

The AIOU does not have lodging and boarding facilities at the moment except at main campus Islamabad. Hostel facility is available in the main campus .If required, students will have to arrange lodging and transport by themselves. AIOU will not bear any cost in this regard. The fee does not include charges for boarding lodging and transport. Hence the University does not have any liability in this regard.

9. FINANCIAL ASSISTANCE:

Limited financial assistance is available to deserving students who shall apply on the prescribed AIOU forms supported with justifiable documentary proofs available after admission during the 1st semester. Financial assistance will be considered from the 2nd semester

**10. INFORMATION REGARDING
ADMISSION/GENERAL INSTRUCTIONS:**

1. Announcement for admission will be made in the leading newspaper of the country.
2. The prospectus including admission form can be obtained from the regional offices or admission department of AIOU. The candidates are required to send complete admission forms along with the attested copies of all educational certificates at the following address, before closing date mentioned in the advertisement

Prof. Dr. Syed Zafar Ilyas,
Chairman/Coordinator,
Department of Physics,

Science Block, 1st Floor, AIOU, Sector-H-8, Islamabad.
Email: szilyas@aiou.edu.pk

3. Only the prescribed printed admission forms will be entertained. Photocopy of the forms will not be accepted. Incomplete forms will not be entertained in any case.
4. Admission in Ph. D Physics will be granted against limited seats strictly on the basis of merit and as per criteria laid down by the department. The University reserves its right not to start this Program if a viable group of students is not formed.

**11. ADDRESSES:
Faculty Members.**

1. **Prof. Dr. Syed Zafar Ilyas,**
Chairman, Department of Physics, Science Block,
1st Floor, Science Block,
AIOU, H-8, Islamabad.
Phone # 051-9057830, 051-9250066.
2. **Mr. Ather Hassan**
Assistant Professor, Department of Physics,
Science Block, 1st Floor,
AIOU, H-8, Islamabad.
Phone # 051-9057214.
3. **Dr. Surayya Mukhtar**
Lecturer, Department of Physics,
Science Block, 1st Floor, AIOU, H-8, Islamabad.
Phone # 051-9057184.
4. **Ms. Hareem Mufti**
Lecturer, Department of Physics,
Science Block, 1st Floor,
AIOU, H-8, Islamabad.
Phone # 051-9057727.
5. **Mr. Abdul Jalil**
Lecturer, Department of Physics,
Science Block, 1st Floor,
AIOU, H-8, Islamabad.
Phone # 051-9057214.

DEPARTMENT OF HOME AND HEALTH SCIENCES

Introduction

Pakistan is a developing country and it is need of the hour to improve standard of education in all the disciplines especially in Science and Technology in order to face the challenges of the 21st century. The Department was established in 1981. During last 34 years the Department has developed a range of professional programs in Health, Nutrition, Environmental Design and Home Economics. The teaching/research laboratories for the Environmental Design and Food and Nutrition programs are now operational to provide a comprehensive environment for imparting practical training at the main campus.

Aims and Objectives

- i. To prepare learners for the career related disciplines considering the professional interests of individuals in the areas of Environmental Design, Health, Home Economics, Nutrition, and Dietetics etc.
- ii. To prepare the individuals/professionals for the development and up gradation of community & environment.
- iii. To enable the individual to integrate and apply knowledge and skills of Environmental Design. Food and Nutrition & Home Economics, for future studies.

Currently the department is offering the following programs:

- i. MS./PGD Environmental Design (for Built Environment Professionals)
- ii. PGD / PGD leading to MS Environmental Design (for Built Environmental Professionals)

- iii. MPhil Food & Nutrition and PhD Food & Nutrition (**for continuing students**)
- iv. MS Community Health & Nutrition/PGD Dietetics/ Nutrition
- v. HSSC Clusters in Home Economics
- vi. SSC Cluster in Health/Home Economics
- vii. Functional Courses (First Aid, Garment Making, Health & Sanitation)

1. Environmental Design

- **MS Environmental Design (Minimum two years)**
- **Post Graduate Diploma in Environmental Design (One year)**

a) Introduction:

The word environment has become a popular catchphrase in the global and national context. In Urban Design and Architecture, the environmental revolution manifests itself as sustainable design and planning. This program aims to take a holistic view of 'environment' examining both the physical and psychological aspects. It takes an interdisciplinary approach, fusing technical and scientific knowledge with philosophical and ethical issues. It is only through the sensitive consideration of the design of our cities and landscapes that we will create places that respond to both the spiritual/psychological and health/physical needs of all sectors of humanity. Good environmental design can generate economic development and embrace the best of technological innovation while recognizing and respecting the importance of cultural heritage and the obligation to address the ecological agenda.

The built environment is of major economic and social importance. Construction alone is one of the largest discrete industries in Pakistan and a major provider of employment. The built environment makes a vital contribution to the quality of life of all members of society. This program offers research based value added degree to upgrade professional practice of engineers, planners and designers and to provide better job prospects home and abroad.

Note: Pakistan Engineering Council has endorsed the MSc/MS degree of Environmental Design as value added professional qualification for Engineers which may be considered for CPD credit points for PEC registered engineers.

b) Objectives:

The new emerging concept of environmental design (in developing/under developed countries) concentrates on promoting:

- Balance between built environment and ecosystem (soil, air, and water).
- Environmental up gradation in housing, health care and building infrastructure
- Conservation of resources (building materials, energy supply, etc.).
- Specification of environment friendly building materials and products to minimize the health hazards.
- Optimum use of natural and sustainable materials.
- Harmony between building design and user needs. (Including activity based behavioural needs).

Salient features:

Development of this program is facilitated by British Council under the DFID Higher Education Link Scheme. Experts from a foreign university (Roland Ashcroft, Jeanette Paul, University of Dundee) and local Engineering Universities (UET, Lahore, NED University, UET Taxila, MUET, Jamshoro) have participated in curriculum designing. Research based degree is offered to address local issues and to evolve local theories.

c) Eligibility for MS Environmental Design

Candidates have to pass one year Diploma in Environmental Design which is the pre-requisite for MS Environmental Design. The eligibility will be as follows:

- i. Sixteen years of schooling or 4 years of education (130) credit hours) after HSSC/FA/FSC/Grade 12 equivalent will be required for admission in the MS Programme.
- ii. Professionals with PGD Environmental Design holding B.E. Civil, Electrical, Mechanical Engineering, BE Chemical, Transportation, Industrial and Environmental Engineering, B. Arch, Bachelor in Town Planning, Interior design, MSc Home Economics (Housing, Interior Design), Bachelor of Urban Engineering, Architecture Engineering, Interior Architecture, Art and Architecture with at least 2nd class are eligible for admission to MS in Environmental Design.
- iii. B. Tech Civil, Architecture, Mechanical, Electrical (Hons.) and BS Geology, BS Environmental Engineering and BS Home Economics (Interior and environmental Design) will also be given chance to continue for MS after PGD Environmental Design.

d) Applying for Admission

Fresh Candidates:

University offers admission twice a year i.e. Autumn and Spring, but admission to new students of this discipline is advertised only once a year i.e. in Spring Semester.

- i. Fresh candidates will be admitted in PGD Environmental Design.
- ii. A student will be generally allowed to register for a maximum of 18 credit hour courses to be offered in each semester. (See semester wise course offering for PGDs and MS Environmental Design.
- iii. Students will have to submit their admission form either online or through registered post to the parent department at the given address.
- iv. Admission forms prescribed for the programme are entertained only.
- v. Incomplete admission forms will not be entertained in any case. Selection of candidates in the programme will be made strictly on basis of merit against a limited number of seats.
- vi. Only those candidates who qualify admission criteria will be informed about their selection.
- vii. On receipt of admission offer a candidate is allowed to pay dues (as detailed in fee section) within due date as per procedure mentioned in the intimation letter.
- viii. The study material inclusive of textbooks, assignments, tutorial schedule and reference material is mailed to the students.
- ix. For clarification about academic matters please contact on the following address:

Prof. Dr. Nomana Anjum
Chairperson/Programme Coordinator
Department of Home and Health Sciences
Block-6, Allama Iqbal Open University,
Sector H-8, Islamabad
051-9057742, 051-9250063, 051-9057744-45
Email: anjums41@hotmail.com

Note: Candidates are required to send complete admission forms along with attested copies of all academic certificates, testimonials at the above address before closing date mentioned in the advertisement.

For Continuing Students of Environmental Design

The admission for the semester Spring and Autumn are offered in the months of February and August respectively. The continuing students are sent computerized admission forms. However, if for any reason a student does not receive the computerized form, he/she may continue the Programme by submitting fresh admission form. Continue admission form can also be downloaded from university's website (www.aiou.edu.pk). The rest of the prevalent terms and conditions are applicable to all fresh and continuing students.

e) Scheme of Studies & Course Contents **Post Graduate Diploma in Environmental Design**

Duration: Minimum Two Semesters (one year)

Total No. of Credit Hours: 30 Credit Hours for diploma

MS Environmental Design

Duration: Minimum Four Semesters (two year)

Credit Hours Requirement: 36 Credit Hours

Course Work : 24 Credit Hours

Research / Thesis: 12 Credit Hours

After the completion of course work, the students will be allowed to undertake research work. Minimum duration for submission of thesis is two Semester (one year). Post Graduate Diploma in Environmental Design is expected to earn a total of 30 credit hours. The semester wise offering of the courses in Diploma is given as under:

f) Offering

Post-Graduate Diploma in Environmental Design

1st Semester

Sr. No.	Semester/Courses (*C compulsory courses)	Credit Hours
1	Introduction to Environmental Design (1575)	4 (3+1)
2	Environmental Planning & Practice (1576)	4 (3+1)
3	Environmental Psychology (1577)	3 (3+0)
4	Research Methods (7773) / 1578	4 (3+1)

2nd Semester

Sr. No.	Semester/Courses (*C compulsory courses)	Credit Hours
1	Evaluation of Built Environment for Physical Sustainability (1579)	3 (3+0)
2	Environmental Aesthetics (1580)	3 (3+0)
3	Women and Environment (1581)	3 (3+0)
4	Appropriate Technologies (1582)	3 (3+0)
5	Environmental Impact Assessment (1584)	3 (3+0)
	Total Credit Hours	30

MS Environmental Design (Minimum two years)

Sr. No.	Semester/Courses (*C compulsory courses)	Credit Hours
1st Semester		
1	Ecological Design: Cities, Transport and Landscape *C 1585 / 7771	4 (3+1)
2	Elective I	
3	Elective II	
2nd Semester		
1	Statistical Methods (1594/7772)*C	4 (3+1)
2	Elective I	
3	Elective II	
3rd & 4th Semester		
1	Research Thesis (7790)	12

Candidate will select elective courses equivalent to total of 24 credit hours in semester I and II. Research work will be of 12 credit hours and will be completed in Semester III and IV.

List of Elective Courses

Sr. No.	Courses and Code	Theory/ Practical	Credit Hours
1	Building Evaluation Techniques(7774)	3+1	4
2	Environmental Issues in Workplace Design (7775)	3+1	4
3	Health Care Design (7776)	3+1	4
4	Environmental Considerations in Housing Design (7777)	3+0	3

5	Design for Children (7778)	2+1	3
6	Sustaining Culture and Design (7779)	2+0	2
7	Environmental Law (7780)	3+1	4
8	Environmental Construction Management (7781)	3+0	3
9	Ethics in the Built Environment(7782)	3+1	4
10	Computer based Environmental Assessment of Buildings (7783)	2+0	2
11	Energy and Environment in Architecture (7785)	3+1	4
12	Architectural Engineering Design(7786)	3+1	4
13	Research Thesis (7790)	12	12

Note: Student failing to opt any course in any particular semester amongst the courses offered in that semester will have to wait for at least one semester in order to get admission in that particular course since all the courses are being offered on alternate basis.

g) Instructional Methodology:

Allama Iqbal Open University employs media mix or blended mode of learning as methodology of instruction in which study material in the form of practical books/notes/study manuals is supported with non-broadcast audio-visual programs and face to face lecture sessions. The total contact hours are 36.

Course Books: The University provides especially written/compiled/reprinted course books.

PGD Environmental Design

(Face to Face Lecture Sessions/ Course Workshops)

Twenty seven hours face to face lecture sessions for each 03-04 credit hour course are arranged in the afternoon at local teaching institutions. 60% attendance is compulsory.

Three days workshops are conducted for each course towards the end of each semester before the commencement of final examinations. Workshops comprise lectures from eminent scholars and presentations of research projects by the students.

MS Environmental Design

(Course workshops)

Workshops at MS level will be conducted at the main campus. There will be two workshops of face to face teaching/ research work of fifteen days in each semester. Attendance in these workshops is compulsory. **In case a viable group of 20 to 30 students is not formed of diploma in any region, the students are normally merged in the student groups of nearby region.**

A student failing to attend any workshop is generally declared fail in final result. However, any student who could not manage to attend the workshop may appear in the final examination and may cover the missed workshop component in the later semesters. The students will have three chances in total to complete the workshop component but they will have to deposit the workshop fee at the start of the semester in which it is offered (in case they avail another chance). AIU does not bear any cost incurring on boarding/lodging or T.A./D.A. during the commencement of workshops. The university provides hostel facility on nominal charges for the course/thesis workshop held in the main campus, Islamabad. However, university is not responsible to provide accommodation for the workshops that are conducted in the regions.

Practical Work:

1. Lab/field based practical will be offered with 04 credit hour courses in first and third semester.
2. Field visits will be conducted during the workshops to boost the practical knowledge of the students.

Research Work/Thesis:

During the third and fourth semesters a student is required to carry out research work under the supervision of a research supervisor. The research could be designed based, experimental or survey. The department according to the respective field of interest of the student will assign the research supervisor. Both the research work and writing of thesis will be done under the close supervision of an advisor/supervisor. On completion of research and thesis, the student is required to submit two copies of the thesis in spiral binding duly signed by the advisor/supervisor to the department.

The student will be required to arrange progress report from the advisor every two months and submit to the department/institute. The maximum period allowed to complete research thesis successfully shall be three years after successful completion of course work or approval of topic whichever is later.

Viva Voce:

After evaluation of the thesis by external evaluator, the student has to appear for Viva-Voce examination before the Viva Voce Committee. (Rules and regulations as approved by AIOU statutory bodies are to be followed for procedural details). In case the thesis submitted by the student is found to be a plagiarized version of another thesis, research work/text, etc. published or unpublished, his candidature for MS. shall be cancelled and the student shall be debarred for ever for admission to any program of the University.

h) Assessment System:

During the semester the students are required to submit two assignments for each 03 credit hour course and these assignments not only help the students to go through the course contents completely but also are a preparation for the final examination.

- i. Assignment 1 is the theoretical assignment based on units 1–7 of your course.
- ii. Assignment 2 is research-based and includes a research activity followed by the submission of a research report and a presentation OR an observational visit/ survey followed by the submission of a report. This assignment is designed to judge the understanding of the students in the specific areas and to assess its application.
- iii. Final Examination (A three hour written examination will take place at the end of the semester for each course) and compulsory workshops for each course.
- iv. For working out the final course grade the marks of continuous assessment and final examination are calculated in the ratio of 30:70 for both the programs.
- v. Student failing in the continuous assessment (assignments, practical and field project) will not be eligible to sit in the final examination.
- vi. Only those students will be allowed to take final examination who have passed the assignments and the practicals. The student failing in the continuous assessment (Assignments, practical and field project) will not be eligible to sit in the final examination. The minimum qualifying marks for each component are as follow:

- (i) A minimum of 50% in continuous assessment.
- (ii) A minimum of 50% in the final examination.
- (iii) As aggregate of 50% in the two components i.e. continuous assessment (practical and theory assignments) and final examination.

i) Fee Tariff:

Registration Fee	Rs.200 (at the time of 1st admission)
Admission Fee	Rs.1000/- (at the time of 1st admission)
Technology Fee	Rs.100/- (per semester per student)
Course Fee	Rs.3050/-(for each 03 credit course)
Fee for Lab based practical	Rs.2340/-
Thesis Fee (3rd & 4th Semester)	Rs.12200 (each semester)
Thesis Evaluation Fee	Rs.25200/-

Semester-wise Payment to be made by the student on the basis of above-mentioned Fee Tariff for diploma (PGD)

1st Semester

Registration fee	Rs.200/-
Admission Fee	Rs.1000/-
Technology fee/- (per semester per student)	Rs.100/-
Fee for one Credit Hour Rs.1020/-	
Fee for 12 Credit Hours	12 x 1020 = Rs.12240/-
Field visit	Rs.2340/-
Fee for three (One credit practical) 3x 2340 =	Rs.7020/-
Total:	Rs.22900/-

2nd Semester

Fee for 12 Credit hours theory	12x1020 = Rs.12240/-
Fee for practical /allied material	Rs.2340/-
Technology fee (per semester per student)	Rs.100/-
Total:	Rs.14680/-

1st Semester

Fee for 12 credit hours theory 12x1020	Rs.12240/-
Fee for Four (One credit practical) 4x2340=	Rs.9360/-
Field visit	Rs.2340/-
Continue Admission Form Fee	Rs.15/-
Technology fee (per semester per student)	Rs.100/-
	Rs.24055/-

2nd Semester

Fee for 12 credit hours theory 12x1020	Rs.12240/-
Fee for Four (One credit practical) 4x2340=	Rs.9360/-
Continue Admission Form Fee	Rs.15/-
Technology fee (per semester per student)	Rs.100/-
	Rs. 21715/-

3rd Semester

Thesis Fee (for 4 credit hours theory 4x3050/-	Rs.12200/-
Thesis Evaluation Fee	Rs.12600/-
Continue Admission Form Fee	Rs.15/-
Technology fee (per semester per student)	Rs.100/-
	Rs.24915/

4th Semester

Thesis Fee (for 4 credit hours theory 4x3050)	Rs.12200/-
Thesis Evaluation Fee	Rs.12600/-
Continue Admission Form Fee	Rs.15/-
Technology fee (per semester per student)	Rs.100/-
	Rs.24915/

Attainment of Certificate/Degree

On successful completion of the programme the student will have to apply to the Controller of Examination for the issuance of Diploma/Degree.

FACULTY MEMBERS:

Contact Addresses (Academics):

1. Prof. Dr. Nomana Anjum, Chairperson
Professor (Environmental Design)
Ph. # 051-9250063, 051-9057742
E-mail: anjums41@hotmail.com
2. Mrs. Hajra Ahmad
Assistant Professor
Ph. #051-9057743
E-mail: hajra5@hotmail.com
3. Dr. Zaheer Ahmad
Assistant Professor
Ph. # 051-9057265
E-mail: zaheer_863@yahoo.com
4. Mrs. Mahpara Safdar
Assistant Professor
Ph: # 051-9057748
E-mail: mahpara.jadoon@aiou.edu.pk
5. Syed Shahzad Shah
Lecturer
Ph. #051-9057748
E-mail: shahzad-68@hotmail.com,
6. Ms. Asma Afreen
Lecturer
Ph # 051-9057741
E-mail: asma.ibd@hotmail.com
7. Mrs. Rabeea Zafar
Lecturer
Ph. # 051-9057746
E-mail: rabeea.zafar@aiou.edu.pk
8. Ar. Nazia Iftakhar
Research Associate (Architecture/Urban Planning)
Urban Open Spaces
Ph. #051-9057744, E-mail: nazia07arch@yahoo.com

Adjunct Faculty Members:

1. Dr. Attaullah Shah
Project Director,
AIOU (Environmental Design)
2. Engr. Hafiz Ehsan-ul-Haq Qazi
Director, CDA (Urban Planning)
3. Engr. Muhammad Abid
Head Technical Services Group, PPAF
(Civil Engineering)
4. Dr. Riffat Haq
Chairperson,
Dept. of Women Studies,
AIOU (Gender & Environment)
5. Engr. Muhammad Sohail
Pir Mehr Ali Shah Arid Agricultural University,
Rawalpindi (Environmental Design)
6. Ghazala Naheed
Assistant Professor
IMCG F-7/2, Islamabad
(Environmental Psychology)
7. Dr. Naeem Ejaz
UET Taxila
(Civil & Environmental Engineering)
8. Dr. Tabassum Zahidi
Associate Professor (Retd)
Urban Planning, IMCG, F-7/2, Islamabad

DEPARTMENT OF MATHEMATICS

Introduction:

The Department of Mathematics has been established in June 2014. Initially Statistics was also its part and then in June 2014, both the Departments (Mathematics & Statistics) have been bifurcated as two independent Departments. The newly established Department of Mathematics has been shifted from Research Complex, Science Block to Block No.07 and has started functioning over there. Presently the Department is offering courses of Mathematics at Secondary School Certificate (SSC), Higher Secondary School Certificate (HSSC) and Bachelor levels. The Department is also running two years master degree program, MSc Mathematics. In future the Department intends to start BS Mathematics programs.

MPhil Mathematics has been designed after consulting syllabi of national and international universities. It will strengthen the mathematical concepts of the candidates and will enhance their logical thinking. This program will also cater the needs of Information Technology and other sciences disciplines.

MPhil Mathematics Program

Introduction:

To meet the challenging requirements of today's fast growing world, we are in desperate need of experts in the field of Mathematics, like in computer or any other field. By realizing the shortage of experts in Mathematics, AIOU has planned to offer MPhil in Mathematics. We need expert mathematicians not

only in the area of education, but also in industry and research. At present very few Pakistani universities are offering MPhil (Mathematics) program, which caters to a small group of students. Due to its unique feature, AIOU can produce a number of experts throughout the country in a shorter spell of time.

The curriculum of these programs is designed in such a way that both the course work and the research components are covered thoroughly. The expertises of distinguished mathematicians from all over Pakistan are hired to teach the AIOU students of MPhil Mathematics Program.

Objectives:

- To enhance the qualification of those who could not continue their education after MSc Mathematics through formal universities.
- To provide an opportunity to in service persons to improve their qualification and get promotion in their respective departments.
- To produce quality teacher/researchers of Mathematics at all levels.

Summary of the Program:

Total Credit Hours	36 Credit Hours	Course Work	24 Credit Hours
		Research Work	12 Credit Hours
Minimum Duration	04 Semesters (02 Years)		
Areas of Specialization	i. Pure Mathematics ii. Applied Mathematics		

Duration:

The minimum period for completion of course work is two semesters (one year). The minimum period for completing research work is two semesters (one year). The maximum time period to complete the degree is 5 years.

Eligibility:

Candidates having BS/MA/MSc in Mathematics with minimum CGPA 2.5/4 or 45% marks in annual system from any HEC recognized university.

Admission Procedure:

- Admission in MPhil Mathematics will be granted against limited seats strictly on the basis of merit as approved by the university.
- There shall be departmental test and interview.
- There shall be a departmental admission committee responsible to finalize the admissions.
- A face to face teaching component is introduced in this program. 70% attendance in lectures would be compulsory.

Evaluation Procedure:

Continuous Assessment	30%
(Two assignments and two sessional tests for each course)	
Final Examination	70%
Students have to obtain minimum	50%
marks in Continuous Assessment and	50%
marks in final examination and aggregate of	50%
marks after combining Continuous Assessment and final examination.	

Mode of Teaching:

Each course will be of (3+0) credit hours. It is proposed to hold two workshops one in the beginning and the second at the end of the semester. The Introductory Workshop will be about 20 days and the End of Semester Workshop will be about 20 days. There will be at least 45 hours face to face teaching for each course

Places of Offering:

Main Campus AIOU , Islamabad only.

Note: A minimum group of twenty students is required to start classes.

Scheme of Studies:**Semester-I:**

Code	Course Title	Credit Hours
7753	Probability and Stochastic Processes	3(3+0)
7732	Theory of Fluids	3(3+0)
	Optional-I	3(3+0)
	Optional-II	3(3+0)

Semester-II:

Code	Course Title	Credit Hours
7741	Advanced Ring Theory	3(3+0)
7744	Computational Fluid Dynamics	3(3+0)
	Optional-III	3(3+0)
	Optional-IV	3(3+0)

**Semester-III & IV:
Thesis: 12 Credit Hours**

List of Optional Courses

Course Title	Code	Credit Hours
1. Theory of Group Actions	7731	3(3+0)
2. Mathematical Techniques for Boundary Value Problems	7733	3(3+0)
3. Theory of Semirings-I	7734	3(3+0)
4. Fixed Point Theory	7735	3(3+0)
5. Advanced Analytical Dynamics-I	7736	3(3+0)
6. Numerical Analysis of Spectral Methods	7737	3(3+0)
7. Group Methods for Differential Equations	7738	3(3+0)
8. Banach Algebra	7739	3(3+0)
9. Theory Semirings	7740	3(3+0)
10. Theory of Group Graphs	7742	3(3+0)
11. Numerical Solutions of Partial Differential Equations	7743	3(3+0)
12. C* - Algebra	7745	3(3+0)
13. General Relativity	7746	3(3+0)
14. Theory of Semirings-II	7747	3(3+0)
15. Advanced Partial Differential Equations	7748	3(3+0)
16. Theory of LA-Semigroups	7749	3(3+0)
17. Stochastic Differential Equations	7751	3(3+0)
18. Cellular Automata and Groups	7752	3(3+0)

Synopsis/Research Work:

After the completion of 24 credit hours of course work a student will embark upon research of 12 credit hours for two semesters. After the receipt of admission list of third semester, the department will hold two-weeks Synopsis Orientation Workshop (SOW) and only those students will be eligible to attend the

synopsis orientation workshop who have qualified at least 12 credit hours mathematics courses. The purpose of the SOW is to guide the MPhil Scholars/Researchers in finalizing their topics of Synopsis/Research. Participation in the SOW will be mandatory. Researchers are supposed to develop and present their synopsis before the Departmental Synopsis Committee. Finally, topic of synopsis/research will be forwarded to the concerned body for approval as per MPhil rules and regulations of the university.

Fee Tariff:

Tuition Fee	Fee @	Fee/Semester
	Rs.5860/- (3 Credit Hours)	Rs.23440/- (12 Credit Hours)
Registration fee (payable at the time of first admission only)	Rs.1000/-	Rs.1000/-
Technology fee (per student per semester)	Rs.100/-	Rs.100/-
Admission fee (payable at the time of first admission)	Rs. 1,000/-	Rs. 1,000/-
First Semester Fee		Rs.25,540/-

Semester wise fee Tariff (Rupees)				
1 st Semester	2 nd Semester	3 rd Semester	4 th Semester	Grand Total
Rs.25,540/-	Rs.23,540/-	Rs.23,540/-	Rs.23,540/-	Rs.95,360/-

Please send complete admission form along with the attested copies of testimonials at the following address:

Department of Mathematics
Block # 07, Room No.102, AIOU, Sector H-8, Islamabad.
Ph# 051-9057734, 051-9250056

FACULTY MEMBERS

1. Prof. Dr. Muhammad Naeem Qureshi
Professor/Registrar
Phone: 051-9057102
2. Dr. Nasir Rehman
Incharge/Assistant Professor
Phone: 051-9250056 051-9057191
3. Mr. Naqeeb-ur-Rehman
Lecturer (on study leave)
4. Mr. Muhammad Faisal Iqbal
Lecturer
Phone: 051-9057734
5. Mr. Muhammad Aatif
Lecturer
Phone: 051-9057197
6. Staff: Phone: 051-9057734

Visiting Faculty Members:

1. Dr. Yasir Ali
NUST, Islamabad
2. Dr. Muhammad Hanif
ARID University, Rawalpindi
3. Dr. Mazhar Hussain Tiwana
Gordon College, Rawalpindi
4. Dr. Rashid Mahmood
Air University, Islamabad
5. Dr. Saima Mustafa
ARID University, Rawalpindi
6. Dr. Abdul Qayum
Federal Urdu University.
7. Dr. Nayyer Mahmood
IIU Islamabad
8. Dr. Saleem Ullah
Federal Directorate of Education, Islamabad
9. Dr. Muhammad Ishaq
NUST Islamabad

DEPARTMENT OF CHEMISTRY

The department of chemistry was established in March 1998. Its faculty consists of one Professor, one Associate Professor, three Assistant Professors and two Lecturers. The department has most modern equipments/ instrumentation in its teaching and research labs in the Science Block at AIOU main campus. These equipments/ instrumentation include CHNS Analyzer, Thermal Analyzer, UV-Visible, Fluorescence and FTIR Spectrophotometer, GC-MS, HPLC, Atomic Absorption spectrometer and Electrochemical System etc.

The department has developed all the courses for undergraduate, graduate, postgraduate and PhD level in accordance with the guideline provided by the Higher Education Commission (HEC). These courses are reviewed from time to time through Committee of Courses to incorporate emerging modern trends in the subject. The Committee of Courses of the department has distinguished Professors and Scientists of the country as members besides departmental faculty. Department has also signed MOU with university of Rostock, Germany. By this MOU, our PhD students get opportunity to do research work in Germany. Moreover department has also signed MOU with University of Kebangsaan Malaysia. This collaboration will be very useful for our MPhil and PhD students.

At present, department of chemistry is offering and coordinating the following programmes:

1. Chemistry Courses for FSc Students
2. BS Chemistry
3. MSc Chemistry
4. MPhil Chemistry
5. PhD Chemistry

In Spring 2016 semester, department is offering BS, MSc & PhD programmes.

PhD (Chemistry)

1. Introduction

The Department of Chemistry is offering PhD programme in Spring 2016 Semester. Currently specialization is being offered in the field of Organic Chemistry. Later on, the specializations in other branches of Chemistry will be offered.

2. Objectives

The aim of this programme is to provide an opportunity to the in-service personnels to get specialized in the field of chemistry and to improve the qualification of those who could not continue their education through formal system. Maintaining the high standards of teaching and research, the department also wants to attract fresh students. The main objective is to uplift the standard of education and research specially in the field of chemistry in the country.

3. Target Groups

PhD Chemistry programme is particularly designed for the following:

- i. College teachers who want to improve their qualification.
- ii. Scientists working in different laboratories and research organizations desirous of improving their knowledge and qualification.
- iii. Fresh students having special aptitude for research.

4. Eligibility (for Admission in PhD Chemistry)

Candidates holding MS/M. Phil or equivalent in Chemistry with CGPA 3.0 (or 60% marks) is eligible to apply for PhD Programme. The Department will conduct written test for admission. The candidate who will pass the written test will be called for interview.

5. Admission Procedure

- i. The Prescribed Admission Form (duly filled) alongwith the attested copies of required documents be sent to Chairperson, Department of Chemistry.
- ii. Written test and Interview of the eligible candidates will be conducted by the Departmental Admission Committee and the merit will be determined on the basis of qualification, research and professional experience, test and interview, etc.
- iii. Selected candidates will be informed by the Directorate of Admission with the directions to deposit fee according to the schedule.

Since admission in PhD programme is strictly on merit, **the fee should NOT be submitted before the confirmation of your admission**, only selected candidates will be informed and asked to deposit the prescribed fee, on or before the last date for fee deposition. In case of non-compliance, it would be assumed that the student is not interested in getting admission. The department may invite a candidate in waiting list for admission against the vacant seat.

For clarification about academic matters please contact on the phone numbers given below:

051-9057754, 051-9057818, 051-9250081

Note: Admission form complete in all respect must be sent on the following address:

The Chairperson

Department of Chemistry

Science Block, AIOU, Islamabad.

Tel: 051-9057754, 051-9057818, 051-9250081

6. Scheme of Studies for PhD Chemistry

- i. Initially, the student is required to complete 18 credit hours of PhD course work. After this period, he/she has to pass comprehensive Examination.
- ii. Besides completion of PhD course work and other requirements, a candidate has to complete research work and thesis as per AIOU rules.
- iii. For PhD, the student has to complete all other formalities, prescribed by the Higher Education Commission.

Description of PhD Chemistry Theory Courses

Semester	Course Code	Course Title	Credit Hours
I & II	1756	Organic Photochemistry	3
	1757	Pericyclic Chemistry	3
	1758	Reaction Mechanism	3
	1762	Quantum Organic Chemistry	3
	1765	Advanced Nuclear Magnetic Resonance (NMR) spectroscopy	3
	1766	Special Topics in Chemistry	3
	1767	Mass Spectrometry	3
	1768	Special Techniques in Organic Synthesis	3
	1769	Theoretical Aspects of Spectroscopy	3
	1799	Instrumental Methods of Analysis	3

Description of PhD Chemistry Research Work & Thesis

Semester	Course Code	Course Title	Credit Hours
III	1764	Research Work and Thesis	12
IV	1764	Research Work and Thesis	12
V	1764	Research Work and Thesis	12
VI	1764	Research Work and Thesis	12

Note: Any three courses out of the above mentioned theory courses will be offered in I semester. In II semester any three courses from the remaining list will be offered, subject to the availability of expertise

7. Offering

At present this programme is being offered at the university main campus in Islamabad. In future, it will be opened for the entire country subject to the availability of laboratories and appropriate tutorial support.

8. Assessment

Continuous Assessment

Continuous assessment will be based on assignments and class tests. The pass percentage in assignments and class tests will be 50%. The weightage of this component in the final result will be 30%

Final Examination

Final examination of 100 marks for each three credit theory course will be conducted at the end of semester. The pass percentage in final examination will be 50% and its weightage in the final result 70%.

The student will have to pass in each component independently to be declared successful in the course.

Assessment of Research Thesis

After the completion of course work the candidate will undertake a research thesis under the guidance of a supervisor. Both the research project and name of supervisor will be approved by the Board of Advanced Studies and Research (BASR), AIOU. PhD thesis will be evaluated by foreign professors. The research report must be supported by at least one publication in International Journal as per HEC rules.

9. Attendance

This programme is based on face to face teaching and research work. At least 70 % attendance is compulsory to qualify for appearing in final examination.

10. * Fee Structure

	Item	Rates
1.	Tuition Fee (for 09 Credit Hours)	Rs.6510/- per semester
2.	Admission Fee	2000/-
3.	Registration Fee	2400/- (if not already registered)
4.	Library	Rs.700/- per semester
5.	Laboratory / Computer charges	Rs.2000/-per semester
6.	Technology Fee	Rs.100/-
7.	Student ID Card Fee	Rs.100/-
8.	Library security	2500/- refundable
9.	Caution money	2000/- refundable
10.	Research Fee	13400/- per semester

*Only applicable after confirmation of admission in PhD, by the university.

Thesis evaluation fee and any other charges will be as per AIOU rules.

The University reserves the right to change the fee tariff in the coming semesters. This can be done without any prior notice as deemed fit for the expected expenditure which is to be incurred on the semester based academic and operational activities of the programme.

Important Addresses and Telephone Numbers

CONTACT ADDRESSES (ACADEMICS)

1.	Prof. Dr. Naghmana Rashid Dean/Chairperson naghmana.rashid@aiou.edu.pk Tel: 051-9057818, 051-9250081
2.	Dr. Uzma Yunus Associate Professor uzma_yunus@yahoo.com Tel: 051-9057755
3.	Dr. Moazzam Hussain Bhatti Assistant Professor moazzamhussain_b@yahoo.com Tel: 051-9057262
4.	Dr. Muhammad Sher Assistant Professor sherqau@yahoo.com Tel: 051-9057198
5.	Dr. Nasima Arshad Assistant Professor nasimaa2006@yahoo.com Tel: 051-9057756
6.	Mr. Muhammad Zaman Ashraf Lecturer mzchem@yahoo.com Tel: 051-9057182
7.	Ms. Mehwash Zia Lecturer m_ehzia@hotmail.com , Tel: 9057252

FACULTY OF SOCIAL SCIENCES AND HUMANITIES

First established in 1981 with five departments, the Faculty of Social Sciences and Humanities has, over the years, flourished to become, by far, the largest Faculty of the University. It, today, consists of fourteen departments offering masters programmes in major areas of Social Sciences and Humanities like, Business Administration, Economics, Mass Communication, Sociology, Gender and Women Studies, Urdu, Library & Information Sciences, History, Pakistan Studies, and Teaching of English as a foreign Language (TEFL). Additionally, efforts are afoot to plan and launch post-graduate programmes in Pakistani Languages and Law. The Commonwealth-collaborated masters programmes in the areas of Business and Public Administration, which are specially tailored for the modern day busy executives, were launched in Spring 2002 semester.

In tune with the government's policy of promoting and strengthening a culture of higher education and research in the country, the AIOU's Faculty of Social Sciences and Humanities has shown a lot of dynamism over the past few years. It has launched MPhil/PhD programmes in Iqbaliat, Urdu, Mass Communication Economics, History and MS in Business Administration while preparations are being made to launch PhD in Business Administration, Applied Linguistics and Pakistan Studies.

The Faculty of Social Sciences & Humanities also offers several bachelors' level programmes in such professional areas like Bachelors in Library & Information Sciences (BLIS), BS-Business

Administration, BS-Commerce and Mass communication. Thousands of students comprising all demographic groups from all over the country, enroll each year in these bachelor's level programmes.

The Faculty has expanded vitally and its programmes have gained a high popularity as is clear from rapidly rising trend of enrolment during the past decade. During the period under report, the Faculty accorded high priority towards quality improvements and to modify its programmes in accordance with the current challenges of 21st century.

The Faculty proposed to launch Post-Graduate programmes in the disciplines of Political Science and International Relations, Psychology, Public Administration and Social Work.

DEPARTMENT OF ECONOMICS

Introduction

The Department of Economics is one of the fourteen departments within the Faculty of Social Sciences and Humanities at Allama Iqbal Open University. It was established in 1986 with few introductory courses at intermediate and bachelor's level. The department has, over the years, established itself as a reputable academic department in the country for higher studies and research in Economics. At present, the department offers MSc and MPhil programmes in different field of economics. The department currently has well qualified teaching faculty possessing PhD degree from foreign as well as local well reputed institutions. Further, the department continuously collaborates with economists, academicians and researchers of other academic institutions for student supervision, resource persons and as part-time teaching to the students at all levels.

Objectives

The main objective of the department is to provide the students a broad based understanding of the subject, solid grasp of economic theory, analytical tools, applied economics and statistical techniques. The MPhil program emphasizes advanced methods of theoretical and quantitative analysis. The goal of the program is enable the students to pursue academically based research careers in economics and to equip them with other emerging needs in economics.

Programmes

The main programmes offered by the department are:

- MSc Economics (Offered in Autumn Semester).
- MPhil Economics (Offered in Spring Semester).

MPhil Economics

a) Introduction

Economics is a study to know how individuals and societies choose to use the scarce resources, the nature and previous generation have provided. Economics explains how we can achieve a high level of growth and employment, price stability, efficiency, an equitable distribution of income, reduction in pollution, economic freedom, sustainable development, macroeconomic stability and reduction in poverty. All these goals can be achieved if we understand the theoretical concepts on one hand and their applications on the other. There is a positive correlation between research and development. Research is the collection and use of data to test economic theories.

b) Objectives

- To prepare professionals who have a grasp of the discipline in general and a command over the area of specialization in particular.

- To establish a cadre of specialists and professionals in different fields of economics, who could provide effective leadership in guiding and conducting high level research in various fields.
- To provide opportunities to the professionals' growth and development regarding upgrading their knowledge and research.
- To provide opportunities for higher education and research in a discipline and to develop research potential and promote research activities among the professionals.
- To enhance the professional capacity of working teachers in the area of economics.

c) Eligibility

The candidates having Second Class Master Degree in Economics will be eligible to apply for admission in MPhil Economics.

d) Duration

The minimum period required for its completion will be two years (four semesters) while maximum period will be five years (ten semesters):

- The minimum period for the completion of coursework (24 credit hours) shall be one year (two semesters).
- The minimum period for the completion of research work shall be one year (two semesters).
- In case the student fails to complete the course/research work within the prescribed maximum period of (ten semesters) five years. She/he has to take a fresh admission in the program.

e) Medium of Instruction

The medium of instruction and examination is English.

f) Scheme of Studies

The MPhil programme will be of 36 credit hours in total: 24 credit hours course work and 12 credit hours of research work. Semester wise offering of courses will be as under:

1st Semester: Spring 2015

Sr. No.	Course	Code	Credit Hours
1	Advanced Microeconomics	2700	3
2	Advanced Macroeconomics	2701	3
3	Development Economics	2704	3
4	International Trade Theory & Policy	2705	3

2nd Semester: Autumn 2015

Sr. No.	Course	Code	Credit Hours
1	Research Methods	2702	3
2	Applied Econometrics	2703	3
3	Environmental Economics	2706	3
4	Monetary Economics	2708	3

3rd and 4th Semester (Research Work)

1.	Research Work/Thesis	2710	12
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After the completion of twenty four credit hours of course work a student will embark upon research of 12 credit hours. After the receipt of admission list in the 3rd semester, the department will hold two-weeks Synopsis Orientation Workshop (SOW). The purpose of the SOW is to guide the researchers in finalizing their topics of research/synopses. Participation in the SOW will be mandatory. Researchers are supposed to develop and present their synopses before the Departmental Synopsis Committee. Finally, topic of research/synopsis will be forwarded to the concerned body for approval as per MPhil rules and regulations of the university.

g) Admission Procedure

- There shall be a departmental admission committee responsible to finalize the admission.
- Admission in MPhil programme will be made once a year (i.e. Spring Semester). Applications will be invited through the daily newspapers/AIOU website.
- Preliminary selection of the candidates will be made strictly on the basis of merit/criteria laid down by the Department/University.
- Subject based test/interview will be essential for admission to this programme conducted by the Department of Economics.
- Only selected candidates will be informed about their admission and for depositing the fee. Fee depositing procedure will be mentioned in the intimation letter.
- The prevailing University rules/regulations regarding MPhil enforced from time to time shall strictly be followed for the MPhil programme in Economics.

- **Admission Form complete in all respect must be sent on the following address:**

Chairman
Department of Economics, Block No. 9
Allama Iqbal Open University
Sector H-8, Islamabad.

Note: *Only eligible candidates will be called for the said test/interview. The test will be held at the main campus, Islamabad only. Test and Interview will be based on the contents like Advanced Microeconomics, Advanced Macroeconomics, Mathematical Economics, Econometrics, Statistics, Issues in Pakistan Economy, etc. For further information please contact the faculty members academic staff of the department.*

h) Methods of Instruction

The following methodology will be adopted for running the MPhil programme in Economics. The outline of courses along with the required reading material and assignments will be provided to the students.

i) Assignments

Assignments are those written exercises which students complete while being at their homes and places of work after studying their reading material after attending the course workshop organized by the department. These are designed in a way that students are able to relate their readings with their own objective judgments. The students will send two compulsory assignments for each 3 credit hours course to their tutors who return the same after marking and providing necessary academic guidance.

j) Workshop

MPhil Economics is a face to face programme within the mode of distance learning system. However, in lieu of tutorials, workshop component (equivalent to 48 credit hours) is adopted in this programme. MPhil workshop is conducted into two phases. First phase (for 16 days) is conducted in the beginning of the semester and Second phase (16 days) well before the examination. The workshop is arranged only at the main campus AIOU, Islamabad. The participation of the students in the workshop is compulsory. No relaxation on any ground can be provided to the students in this regard. The workshops (classes) are organized in order to provide the students proper guidance in course contents through intensive lectures, group discussion, etc. The programme of the workshop is chalked out by the department and intimated to the students well in time. Hostel facility at the Main Campus, AIOU Islamabad is available on payment if desired.

k) Assessment

Assessment will be done as under:

- Assignments (continuous assessment). Two assignments are compulsory for each 3 Credit Hours Course.
- Final Examination (three hours written examination will take place at the end of the semester). The weightage of each component is as follows.
- | | |
|------------------------|-----|
| i. Assignments | 20% |
| ii. Course Workshop | 10% |
| iii. Final Examination | 70% |
- For successful completion of each course the student will be required to qualify in each component.

- To take final examination the student has to pass in assignments and 75% attendance in the workshops.
- The conditions to qualify each component are given below:
 - i. A minimum of 50% passing marks in each assignment.
 - ii. A minimum of 50% passing marks in the final written examination.
 - iii. 75% attendance in the workshops.

Fee Tariff

Registration Fee:	Rs.1000/- (Payable once at the time of admission)
Admission Fee:	Rs.1000/- (Payable once at the time of admission)
Technology Fee:	Rs.100/- (Per student per semester)
Course Fee:	Rs.5860/- (per 3 credit hour course)
First Semester Fee:	Rs.25,540/-
Thesis Fee:	46745/-

This programme is merit based, therefore no fee/dues are required to be deposited until you receive the offer letter from Admission Department of the University.

FACULTY MEMBERS

For clarification about academic matters please contact the following faculty members of Department of Economics:

1. **Prof. Dr. Rashid A. Naeem**
Chairman
Phone: 051-9250075 – 9057838
E-mail: Rashid.Naeem@aiou.edu.pk
2. **Dr. Muhammad Ilyas**
Assistant Professor
Phone: 051-9057199
E-mail: Muhhammad.Ilyas@aiou.edu.pk
3. **Ms. Fouzia Jamshaid**
Assistant Professor
Phone: 051-9057228
E-mail: fouzia.jamshaid@aiou.edu.pk
4. **Mr. Rizwan Ahmed Satti**
Lecturer
Phone: 051-9057200
E-mail: rizwan.ahmed@aiou.edu.pk
5. **Staff**
Phone: 051-9057838

DEPARTMENT OF BUSINESS ADMINISTRATION

a) Introduction

The Department of Business Administration was established in 1986 with the objective to impart managerial education and skills in the discipline of Business Administration. Since its inception, the Department has made tremendous progress towards achieving its ultimate goal of becoming a centre of excellence in Business Management education and research in Pakistan. The Department has assembled outstanding teaching faculty and developed extensive teaching material for the improvement of education in Pakistan. The University first time launched MBA program in 1986, MBA-IT in 2001 and MBA-Banking & Finance in Spring 2005 semester. Presently, the Department is offering MBA (3½ Years), MBA 2½ years, MBA Rural Management, PGD-HRM and MS (Management Sciences) programs with different specializations. These programs would contribute significantly to the national goals by developing the professionals equipped with modern business techniques. These programs are designed to enable the professionals to upgrade their skills and enhance business qualifications. Further, it is hoped that the graduates from this university would have recognition in the human resource market and enjoy a respectable status in public and private sector organizations, operating in Pakistan and abroad. The Department has well qualified faculty members including MPhil/MS and PhDs both from national and foreign universities.

MS (MANAGEMENT SCIENCES)

b) Objectives

- i. To strengthen the applied and basic research capabilities of scholars.
- ii. To deepen the theoretical knowledge of different domains of Management Sciences.
- iii. To provide an opportunity to test the theory practically by undertaking rigorous research activities.
- iv. To equip the research scholars to respond to current national and global crisis.

c) Duration

As per HEC guidelines, MS (Management Sciences) program will spread over 3 semesters covering 08 courses and a Thesis. It will be offered with two specializations: Human Resource Management (HRM) and Banking & Finance (B&F). The programme consists of 36 credit hours. The minimum period required for its completion will be 1½ year while maximum period would be 05 years.

d) Eligibility Criteria

Applicants having 16 years of business education (Old MBA/MPA/M.Com/ACMA/ACA/4-Years B.Com/4-Years BBA) from any HEC recognized institution with minimum 50% marks or equivalent CGPA would be eligible to apply.

e) Admission Procedure

- i. There shall be an admission committee responsible to finalize the admission.

- ii. Admission in MS (Management Sciences) will be made once or twice a year as decided by the Competent Authority. Applications will be invited through the daily news papers/AIOU website as per AIOU policy.
- iii. Preliminary selection of the candidates will be made strictly on the basis of criteria laid down by the Department/ University.
- iv. AIOU subject based test/interview will be essential for admission to this program, conducted by the Department of Business Administration.
- v. Only selected candidates will be informed about their admission and to deposit the fee. The candidate will be informed about the deposit of fee by the Directorate of Admissions confirming the admission of the candidate.
- vi. The prevailing University rules and regulations regarding MS/MPhil program enforced from time to time shall strictly be followed for the program.
- vii. The MS (Management Sciences) program will be merit based, therefore, no fees/dues will be required to be deposited until applicant receives the admission letter from the AIOU Directorate of Admissions.
- viii. Candidates will be required to send complete admission forms along with the attested copies of all certificates and marks sheets at the following address before the closing date.
- ix. **For clarification about academic matters please contact on the following address:**

CHAIRMAN
 Department of Business Administration
 Block No.13, AIOU, H-8, Islamabad.
 Ph: 051-9057722-23, 9250089
mba@aiou.edu.pk

f) Scheme of Studies

The MS (Management Sciences) program will be offered with two specializations, i.e., HRM and B&F. The detail of courses and tentative semester wise offering of courses is as under:

Sr. No.	Course Title	Course Code	Credit Hours
First Semester			
1	Advanced Research Methods	8701	3
2	International Business & Finance	8702	3
3	Strategic Marketing	8703	3
4	Strategic Human Resource Management	8704	3
Second Semester			
5	Elective-I	—	3
6	Elective-II	—	3
7	Elective-III	—	3
8	Elective-IV	—	3
Third Semester			
9	Thesis	8720	12
Total Credit Hours		24+12	36

Note: However, the department reserves the right to change its offering any time if desired so.

**Elective Courses for MS
(Management Sciences) Program:**

For selection of specialization courses in MS program, students would select elective courses from only one of the following specializations:

Elective Courses of Human Resource Management			
1	Strategic Human Resource Development	8709	3
2	Organisational Theory & Design	8710	3
3	International Human Resource Management	8711	3
4	Human Resource Change Management	8712	3
Elective Courses of Banking & Finance			
1	Islamic Banking	8718	3
2	Credit Management	8714	3
3	Investment & Securities Management	8715	3
4	Risk Management & Insurance	8716	3

Thesis

After the completion of 24 credit hours course work, a student will undertake research work of 12 credits. After the receipt of admission list of the 3rd semester, the Department will hold two-weeks Synopsis Orientation Workshop (SOW). The purpose of the SOW will be to guide the researchers in finalizing their topics of thesis/synopsis. The topic must be according to the specialization already selected by the researcher. Participation in the SOW will be mandatory. Researchers are supposed to develop

and present their synopsis before the Departmental Synopsis Committee. Finally, topic of thesis/synopsis will be forwarded to the competent authority for approval as per MS/MPhil rules and regulations of the university.

Medium of Instruction

The medium of instruction and examination will be English.

Methods of Instruction

The following methodology will be adopted for running MS (Management Sciences) program. The outline of courses along with the required reading material and assignments will be provided to the students.

g) Assignments

The students will send two compulsory assignments for each 03 credit hours course to their tutors who return the same after marking and providing necessary academic guidance.

h) Workshop

MS (Management Sciences) is a face to face program within the mode of distance learning system. However, in lieu of tutorials, workshop component (equivalent to 48 hours in each course) is adopted in this program. MS workshops will be conducted in two phases. First phase (for 16 days) will be conducted in the beginning of the semester and second phase (for 16 days) well before the examination. The workshops will be arranged only at the Main Campus, AIOU, H-8, Islamabad. The participation of the students in the workshops will be compulsory. No relaxation on any ground will be provided to the students in this regard. The workshops (classes) will be organized in order to provide the students proper guidance in course contents through intensive

lectures, group discussions, etc. The program of the workshops will be chalked out by the Department and intimated to students well in time. Hostel facility at the Main Campus, AIOU Islamabad will be available on payment, if desired.

i) Evaluation Scheme

Assessment will be done as under:

Assessment Component	Weightage in the aggregate result
Assignments	20%
Workshops/Classes	10%
Final Examination	70%
Total	100%

- i. For Successful completion of each course the student will be required to qualify in each component.
- ii. To take final examination, the student has to pass in assignments and 75% attendance in the workshops.
- iii. The conditions to qualify each component are given below:
 - a. A minimum of 50% marks in assignments (aggregate).
 - b. A minimum of 50% marks in the final written examination.
 - c. 75% attendance in the workshops.

j) Degree Requirements

Following are the requirements for award of MS (Management Sciences) degree:

- i. Successful completion of 08 courses (24 Credit Hours).
- ii. Thesis: After completion of 24 Credit Hours course work, the students will be eligible to register for the Thesis (12 Credit Hours). The students will be required to complete their Thesis as per AIOU rules, and submit to the Department in line with

the approved format etc., that would be evaluated on the guidelines given by HEC and adopted by the AIOU.

- iii. Viva voce examination: Viva voce examination shall be held according to AIOU rules and regulations, if the student meets the criteria of the evaluation of thesis.

k) Fee Structure

i.	Registration Fee:	Rs.1000/- (At the time of first admission)
ii.	Admission Fee:	Rs.5000/- (At the time of first admission)
iii.	Course Fee:	Rs.8430/- per course
iv.	Thesis Fee:	Rs.46740/-
v.	Thesis Evaluation Fee:	Rs.5280/- (Once at the time of admission in Thesis)
vi.	Degree Fee	Rs. 1000/- (At the time of first admission)
vii.	Technology Fee	Rs.100/- (per student per semester)

Note: In case of extension in Thesis up to maximum period (05 years), student will have to pay fee equivalent to 02 Credit Hours per semester.

Rules and Regulations

Rules and regulations, in line with the HEC guidelines as well as applicable in AIOU (amended from time to time) at the MS/MPhil level, will be adopted for the program. However, format and procedure of Thesis will be given by the Department and students are informed during the Synopsis Orientation Workshop, to be conducted in the Third Semester.

FACULTY MEMBERS

1. Prof. Dr. Syed Hassan Raza
Chairman
Ph: 051-9057722
hassan_raza@aiou.edu.pk
2. Mr. Muhammad Ayub Shaikh
Assistant Professor
Ph: 051-9057815
ayub.shaikh@aiou.edu.pk
3. Dr. Muhammad Majid Mahmood Bagram
Assistant Professor
Ph: 051-9057406
majid_mahmood@aiou.edu.pk
4. Dr. Adnan Riaz
Assistant Professor (on adhoc basis)
Ph: 051-9057272
adnan_riaz@aiou.edu.pk
5. Mr. Mahmood-ul-Hassan
Lecturer
Ph: 051-9057855
mehmood_ul_hassan@aiou.edu.pk
6. Mr. Salman Ali Qureshi
Lecturer
Ph: 051-9057840
Salman_qureshi@aiou.edu.pk
7. Mr. Sadar Ayub Khan
Lecturer
Ph: 051-9057416
Sadar_ayub@aiou.edu.pk
8. Mrs. Mobashira Hamid Alvi
Lecturer
Ph: 051-9057186
Mobashira.alvi@aiou.edu.pk
9. Syeda Attiya Rahat,
Lecturer,
Ph: 051-9057250
10. Mr. Ahmed Hassan Jamal
Lecturer
Ph: 051-9057186
11. Mrs Saira Awan
Lecturer (on deputation)
Ph: 051-9057250
saira.awan@aiou.edu.pk

DEPARTMENT OF HISTORY

Introduction

The Department of History was established in 1995 as part of the Faculty of Social Sciences & Humanities. Since inception, the Department has been running academic programmes at Intermediate, Graduate and Post-graduate level. Presently, MPhil History is being launched in Spring 2015. This aims to cater the needs of faculty members working at higher educational institutions and general Public.

MPHIL HISTORY

Objectives

- i. The major objective of the program is to inculcate the sense of History and Historiography through research on local, regional and international History.
- ii. The evolution stemming from British India (colonial India) will be highlighted through specialized study courses consisted of Muslim Arab and international political studies.
- iii. The endeavors of Muslim leaders during freedom struggle will be focused.

Duration

- The minimum period required for completing MPhil in History will be two years (four semesters) while maximum period will be five years (ten semesters).

- The minimum period for the completion of coursework (24 credit hours) shall be one year (two semesters). The minimum period for the completion of research work will be one year (two semesters).
- In case the student fails to complete the course/research work within the prescribed maximum period of (ten semesters) five years. She/he has to take a fresh admission in the program.

Eligibility for Admission

The students are eligible to apply for admission to M Phil History with the following educational background:

- i. At least 2nd class Master Degree in History, Pakistan Studies and Political Science.
- ii. No 3rd division in BA
- iii. Two third division in academic career are in-eligible.
- iv. Candidates with published articles will be preferred.
- v. All other rules and instructions applied by Allama Iqbal Open University from time to time.
- vi. Test and interview will be conducted by the Admission Committee, Department of History AIOU, Islamabad

Medium of Instruction

The medium of instruction and examination is English.

Scheme of Studies

The MPhil in History Programme will be of 36 credit hours in total: 24 credit hours course work and 12 credit hours of research work. Semester wise offering of courses will be as under:

1st Semester: Spring

Sr. No.	Course	Code	Credit Hours
1	British India (1857-1947)-I	2731	3
2	British India (1857-1947)-II	2732	3
3	Historiography	2733	3
4	Research Methodology	2734	3

2nd Semester: Autumn

Sr. No.	Course	Code	Credit Hours
1	History of Modern World since 1945-I	2735	3
2	History of Modern World since 1945-II	2736	3
3	History of Pakistan (1947-88)-I	2737	3
4	History of Pakistan (1947-88)-II	2738	3

3rd and 4th Semester (Research Work)

1.	Synopsis Workshop (compulsory) Research Work/Thesis	2739	12
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Synopsis Workshop (compulsory)

After the completion of twenty four credit hours of course work a student will undertake research of 12 credit hours. After the receipt of admission list in the 3rd semester, the Department will hold two-week Synopsis Orientation Workshop for MPhil Thesis. The purpose of the workshop would be to guide the

researchers in finalizing their topics of research/ synopses. Participation in the Synopsis Orientation Workshop will be mandatory. Researchers are supposed to develop and present their synopses before the Departmental Synopsis Committee. Finally, topic of research/ synopsis will be forwarded to the concerned body for approval as per MPhil in History rules and regulations of the university.

Admission Procedure

- There shall be a Departmental Admission Committee responsible to finalize the admission.
- Admission in MPhil in History Programme will be made once a year (i.e. Spring Semester). Applications will be invited through the daily newspapers/AIOU website.
- Preliminary selection of the candidates will be made strictly on the basis of merit/criteria laid down by the Department/ University.
- AIOU written test equivalent subject based test/interview will be essential for admission to this programme.
- Only selected candidates will be informed about their admission and for depositing the fee. Fee depositing procedure will be mentioned in the intimation letter.
- The prevailing University rules/regulations regarding MPhil enforced from time to time shall strictly be followed for the MPhil programme in History.

Methods of Instruction

The following methodology will be adopted for running the MPhil Programme in History. The outline of courses along with the required reading material and assignments will be provided to the students by the Department.

Assignments

Assignments are those written exercises which students complete while being at their homes and places of work after studying their reading material and attending the course workshop organized by the Department. These are designed in a way that students are able to relate their readings with their own objective judgments. The students will send two compulsory assignments for each 3 credit hours course to their tutors who return the same after marking and providing necessary academic guidance.

Workshop

MPhil History would be launched in the mode of distance learning system. However, in lieu of tutorials, workshop component (48 hours for each 3 credit hours course) is adopted in this programme. MPhil workshop is conducted by the Department before the examination. Workshop would be arranged only at the main campus AIOU, Islamabad. The participation of the students in the workshop is compulsory. No relaxation on any ground can be provided to the students in this regard. The workshops (classes) are organized in order to provide the students proper guidance in course contents through intensive lectures, group discussion, etc. The programme of the workshop, chalked out by the Department will be intimated to the students well in time. Hostel facility at the Main Campus, AIOU Islamabad is available on payment by the students, if desired. A student who fails in continuous assessment component is not eligible to reappear but will be allowed to re-register for the same course at its next offering by the university.

Whereas for workshops that is compulsory component of assessment, two additional consecutive chances would be given to students who fail to attend workshop activities on the payment of Reappear Workshop fee and permission from the Chairperson of the Department concerned, the offering of courses would be as per the AIOU policy.

Assessment

Assessment will be done as under:

- (1) Assignments (continuous assessment). Two assignments are compulsory for each 3 Credit Hours Course.
- (2) Final Examination (three hours written examination will take place at the end of the semester). The weightage of each component is as follows.

a. Assignments	20%
b. Course Workshop	10%
c. Final Examination	70%
- (3) For successful completion of each course the student will be required to qualify in each component.
- (4) To take final examination the student has to pass in assignments and 75% attendance in the workshops.
- (5) The conditions to qualify each component are given below:
 - i. A minimum of 50% passing marks in each assignment.
 - ii. A minimum of 50% passing marks in the final written examination.
 - iii. 75% attendance in the workshops.

Fee Tariff

i.	Registration Fee:	Rs.1000/- (Payable once at the time of admission)
ii.	Admission Fee:	Rs.1,000/- (Payable once at the time of admission)
iii.	Technology Fee	Rs.100/- (per student per semester)
iv.	Course Fee:	Rs.2800/- (per 3 credit hour course)
v.	Thesis Fee:	Rs.22,200/-

Admission Procedure

This programme is merit based, therefore, no fee/ dues should be deposited until you receive the offer letter from Admission Department of the University. For clarification about academic matters please contact on the following address:

Prof. Dr. Samina Awan

CHAIRPERSON
Department of History, Block No. 9
Allama Iqbal Open University
Sector H-8, Islamabad.
Phone: 051-9250073,051-9057827

Note: Admission form complete in all respect must be sent on the above address

Faculty Members:

For guidance, student may contact the following faculty members of the Department of History, Block-9, AIOU Main Campus, Sector H-8, Islamabad.

S. #	Name & Designation	E-Mail Address	Contact No.
1	Dr. Samina Awan Chairperson/ Professor	samina.awan @aiou.edu.pk	051- 9250073 9257827
2	Dr. Kishwar Sultana Associate Professor	kishwar.sultana @aiou.edu.pk	051- 9057837
3	Mr. Abdul Basit Mujahid Assistant Professor	basit.mujahid @aiou.edu.pk	051- 9057822
4	Dr. Kausar Parveen Assistant Professor	kausar.parveen @aiou.edu.pk	051- 9057825
5	Ms. Sadia Aziz Lecturer	sadia.aziz @aiou.edu.pk	051- 9057686
6	Ms. Fozia Umar Lecturer	fozia.umar @aiou.edu.pk	051- 9057686
7	Office		051- 9057821

M Phil Pakistan Studies

The Department of Pakistan Studies was separated from its parent department, the Department of Social Sciences and Humanities, and was established as an independent Department in the Faculty of Social Sciences and Humanities. Since its inception, the Department has developed and offered several courses of Pakistan Studies ranging from Matriculation (Secondary School Certificate) to M Phil level. The M Sc Pakistan Studies was first offered in 1985. Since then, it has produced a large number of graduates who are serving the nation in various capacities and bringing pride to the Department of Pakistan Studies. It has been a long standing demand of our students holding M Sc degrees to launch M Phil Pakistan Studies programme. Now the department is launching M. Phil Pakistan Studies with the view to cater to the demand of the students particularly and the relevant people generally. The courses of the programme are based on the latest revised scheme of studies of Higher Education Commission (HEC). Instead an effort has been made to improve upon the scheme of HEC.

1. Introduction

For the pragmatic understanding of the socio-political and economic institutions of any country, it is inevitable to study the Geography, History, Politics, Economics and Culture of that particular country in an integrated manner. The purpose of offering M Phil Pakistan Studies is to promote investigative approach, in Social Sciences paradigms, to study Pakistani Society and Culture, Political and Economic Institutions, History and Geography in an integrated and interdisciplinary ways.

2. Objectives

The main objective of M Phil Pakistan Studies programme is to produce social scientists who can embark on the task of carrying out scientific research in the fields of Pakistan's history, politics, economics, society and culture. We hope, this approach will be helpful to understand the complexities and problems associated with the socio-political and economic development of the country.

3. Eligibility

The candidates having Master's degree (at least in 2nd division) in Pakistan Studies and other disciplines of Social Sciences will be eligible to apply for the admission in M Phil Pakistan Studies. Department will annually enroll not more than 20 research scholars in the M Phil Pakistan Study programme. The applicant requires to qualify entry test arranged by the Department of Pakistan Studies.

4. Duration

The minimum period for completion of the programme is two years while maximum period will be Five years. The minimum period for completion of course work is two semesters (one year) and the maximum period is four semesters (two years). The minimum period for completing research work is two semester (one year) and the maximum period is four semesters (two years) provided the condition of five years shall not be affected.

5. Medium of Instruction

The medium of instructions and examinations will be English. However, the scholars who choose the research topics related to Pakistani languages and literature would be allowed to write their theses in Pakistani languages.

6. Scheme of Studies

M Phil Pakistan Studies programme comprises of 24 Credit Hours (C.H.) of course work and 6 C.H. of research project. The admission in M Phil would be advertised once in a year (Spring Semester).

Semester wise break-up of the courses:

6.1 First Semester

Course Code	Course Title	Credit hours
	Research Methods in Social Sciences	3
	Civil-Military Relations in Pakistan	3
	Federalism, Identity and State-building in Pakistan	3
	Historiography in Pakistan	3
		12

6.2 Second Semester

Course Code	Course Title	Credit hours
	Social Transformation in Pakistan	3
	Political Economy of Pakistan	3
	Electoral Politics, Governance and Sustainable Development in Pakistan	3
	Seminar on Literature and Politics	3
		12

6.3 Third and Fourth Semesters

Course Code	Course Title	Credit Hours
	Research Project/Thesis	12

7. Fee Tariff

As per University rules

Faculty Members

For academic assistance, please contact the following faculty members of the Department of Pakistan Studies, AIOU, Block, No. 09, H-8, Islamabad.

Name and Designation

1. Prof. Dr Syed Abdul Siraj

Dean / Chairman

Ph: 051-9250074, 051-9057172

2. Dr. Badshah Sardar

Associate Professor

Ph: 051-9057226

3. Dr. Samina Yasmeen

Associate Professor

Ph: 051-9057836

4. Mrs. Samina Aman

Assistant Professor

Ph: 051-9057227

5. Mr. Malik Akhtar Hussain

Assistant Professor

Ph: 051-9057751

**For further information
please contact:
Department of Pakistan Studies
Block No.9 Main Campus, Sector H-8,
Allama Iqbal Open University, Islamabad
E-mail: pakstudy@aiou.edu.pk Ph: 9250074**

GENERAL INFORMATION

- i. The certificates/degrees of AIOU are equivalent to any other recognized Board/University.
- ii. A candidate is required to send complete admission form along with attested copies of all educational and experience certificates to Department as mentioned in the prospectus before or on the closing date.
- iii. If an applicant of post-graduate/research level programme does not receive any information regarding admission even after three months of submission of application, he/she should presume himself/herself non-selected.
- iv. The student cannot change the specialization at post-graduate research level during the programme after once being admitted to a specific field.
- v. A course taken by any student cannot be change during the semester.
- vi. The address of a student will not be changed during the semester. However in real hardship cases change of courses will be allowed within fifteen days after receipt of books and deposit of prescribed fee.
- vii. Admission to courses for both the Spring and Autumn semesters are generally offered in the months of February and August, respectively, where as examinations commenced in November and May respectively. The continuing students are sent computerized admission forms. However if for any reason, the student could not get the said form, he/she may purchase admission form from any Regional Office of the university or download from AIOU website and send it to the University within due date.
- viii. Fee cannot be refunded once paid for admission nor can it be adjusted for any other programme
- ix. On payment of the registration fee, each student will be issued a registration number. This number must be quoted in all the future correspondence along with the roll number, course(s), code numbers and semester.
- x. Study material shall be mailed to the students at their given addresses.
- xi. After receipt of the study package, students are usually intimated by the part time tutors appointed for each course for tutorial guidance, within fifteen days. If you do not get information about tutors, you are required to send your assignment by registered post to the concerned Regional Director, Assistant Regional Director without delay; you are also required to retain a photocopy of all your assignments.
- xii. Rules and regulations framed, enhanced and changed from time to time by the authorities, bodies of the university

will be effective as deemed necessary. The student will have to abide by all such rules and regulations from the date of their implementation.

- xiii. A student who fails in continuous assessment component is not eligible to reappear but will be allowed to re-register for the same course at its next offering semester by the university.
- xiv. It is the responsibility of the student to remain in touch with the department regarding the selected programme.
- xv. A student already admitted to a programme or a specialization of a programme shall not be allowed to transfer or to get admission to another programme unless he/she formally postpones it till the completion of the new programme or withdraws from the previous programme.
- xvi. After completion of a programme successfully, a student has to apply to Controller of Examinations for issuance of certificate/degree.
- xvii. The university reserves the right to change the contents of this prospectus without any prior notice as per university policy.
- xviii. The student must inform the Admission Department in writing within the period of 15 days after receipt of study material parcel. *If found any wrong/short of material/ books which is not according to the admission form/ check*

list or mistake in name and address. No request for any change will be entertained after the stipulated period.

- xix. Check the books and tally with the course codes mentioned on the address label pasted on the registered packet. If there is any discrepancy, write immediately to Admission Department for correction/ supply of requisite books.
- xx. Admission forms incomplete in any respect will not be entertained and will be returned after close of semester to the students indicating the deficiency in clear terms with advise to request for refund of fee.
- xxi. Admission form received without prescribed fee less fee or fee deposited after due date will not be considered.
- xxii. In case of discrepancies in the name of student/ Father's name of the student or difference in name mentioned in his/her other educational certificates, the name on the Matric certificate of the student will be considered as correct name. The Examination Department shall also issue certificate/degree on the said name.
- xxiii. In case provision of forged documents for admission, not only the admission will be refused to the applicant but the fee deposited by him/her will also be forfeited. The university may proceed further in the matter.

REGULATIONS FOR REFUND OF ADMISSION FEE

Admission fee once deposited by the candidates/ students in the university account will neither be refunded nor converted/adjusted as a matter of right. However fee paid by the candidates/students will be settled in the following cases:

- i) The candidates/ students who deposit the fee for a programme and later on change their mind to apply in another programme and communicate their decision in black and white to the admission section before dispatch of study material in such cases, fee will be refunded to them after deduction of 10% of the total amount deposited.
- ii) The candidates/ students who discontinue the programme/ courses(s) after dispatch of books, neither their admission will be cancelled nor fee will be refunded to them.
- iii) The candidates/ students who are not allowed admission to a programme offered by the university due to less enrolment/ non formation of viable group/ non offering of courses, full fee will be refunded to them.
- iv) The candidates/ students who know that they are ineligible for admission to a programme, and even then they deposit the fee, in such cases, the fee will be refunded after the deduction of 5% as services charges from the total amount.
- v) The amount deposited by the candidates/ student in excess (more than the prescribed fee) will be refunded/ adjusted within a year.
- vi) Cases of refund of admission fee will be processed after finalization/completion of admission of the semester and only on the production of original Bank Challan/Receipt No. 3 & 4.
- vii) If candidates/students deceive the university and get admission in two different programmes simultaneously in a semester admission will be cancelled in both the programmes and the fee deposited for both the programmes will be forfeited.

IMPORTANT TELEPHONE NUMBERS

Sr. No.	Name	Telephone Nos.
1.	Director Admissions	051-9250043 051-9250162 (Fax)
2.	Assistant Registrar (Mailing)	051-9250185
3.	Controller of Examinations	051-9250012
4.	Director Students Affairs	051-9250174
5.	Assistant Registrar (Postgraduate)	051-9057422
6.	Directorate of BASR	051-9057794 051-9057689

شعبہ پاکستانی زبانیں

تعارف:

شعبہ پاکستانی زبانیں 1998ء میں قائم ہوا۔ علامہ اقبال اوپن یونیورسٹی ملک کی واحد یونیورسٹی ہے جس میں پاکستان میں بولی جانے والی تمام زبانوں کے فروغ اور تدریس کے لیے شعبہ پاکستانی زبانیں کا قیام عمل میں لایا گیا جو پاکستانی زبانوں کے تدریسی کورس پیش کرتا ہے۔ یہ کورس میٹرک، انٹرمیڈیٹ اور بی اے کی سطح کے ہیں۔ مزید برآں پاکستانی زبانوں اور ان کے ادب سے متعلق کتب کی اشاعت اور پاکستانی زبانوں کے کلاسیکی شعرا پر سیسی ناز کا اہتمام بھی شعبہ پاکستانی زبانیں کی سرگرمیوں میں شامل ہے۔ پاکستان کے مختلف علاقوں میں بولی جانے والی زبانیں مستحکم حیثیت کی حامل ہونے کے ساتھ ساتھ کئی مشترک عناصر بھی رکھتی ہیں۔ قومی یک جہتی کے فروغ میں کسی ایسے پروگرام کی ضرورت کافی عرصہ سے محسوس کی جا رہی تھی جس میں پاکستانی زبانوں کا تقابلی مطالعہ، ادبیات پاکستان کا تقابلی مطالعہ اور ان زبانوں کے منفرد اور مشترک ادبی رجحانات کا احاطہ کیا گیا ہو۔ وقت کے اس تقاضے کے پیش نظر علامہ اقبال اوپن یونیورسٹی کے شعبہ پاکستانی زبانیں نے سمسٹر بہار 2004ء میں ایم فل کی سطح کا ایک پروگرام متعارف کرانے کا اہتمام کیا جس کے چیدہ چیدہ مقاصد درج ذیل ہیں۔

- 1- قومی یک جہتی اور ملی ہم آہنگی کے فروغ کے لئے طلبہ و طالبات کو پاکستانی زبانوں کے مشترک نقوش، بین اللسانی روابط اور مشترک ادبی رجحانات سے روشناس کرانا۔
- 2- طلبہ اور طالبات کو پاکستانی زبانوں اور ان کے ادب کے بارے میں مطالعاتی اور تحقیقی بنیادیں فراہم کرنا۔
- 3- پاکستان میں کثیر لسانی ماہرین کی کمی کو کسی حد تک پورا کرنے میں مدد دینا۔

4- پاکستانی زبانوں (پشتو، سندھی، بلوچی، براہوئی، پنجابی، سرائیکی) کے اساتذہ کی پیشہ ورانہ مہارت میں اضافہ کرنا۔

5- جو طلبہ اور طالبات اپنے حالات کی بنا پر یونیورسٹیوں میں باقاعدہ طالب علم بن کر اپنی مادری زبان (جس میں انہوں نے ایم اے کیا ہو) میں ایم فل نہیں کر سکتے لیکن ایم فل کرنے کے آرزو مند ہیں انہیں فاصلاتی نظام کے تحت ایم فل پاکستانی زبانیں و ادب (اپنی مادری زبان کی تخصیص کے ساتھ) کرنے کی سہولت مہیا کرنا۔

مطالعاتی سکیم

ایم فل پاکستانی زبانیں و ادب پروگرام:

- 1- ایم فل (پاکستانی زبانیں و ادب) پروگرام 24 کریڈٹ آرز کے کورس ورک اور 12 کریڈٹ آرز کے ریسرچ ورک پر مشتمل ہے۔
- 2- طلبہ ایک سمسٹر میں زیادہ سے زیادہ تین تین کریڈٹ آرز کے چار کورسوں میں داخلہ لے سکتے ہیں۔

ایم فل پاکستانی زبانیں و ادب

علامہ اقبال اوپن یونیورسٹی میں رسمی تدریس کے عام طریقے استعمال نہیں کیے جاسکتے کیوں کہ اس یونیورسٹی کے طلبہ پورے ملک میں پھیلے ہوئے ہیں اس لیے انہیں فاصلاتی تعلیم (Distance Learning) کے اصول کے مطابق تعلیم دی جاتی ہے۔

کورسوں کی تفصیل

پہلا سمسٹر بہار 2015ء

کورس کوڈ	کورس کا نام	کریڈٹ آورز
2721	پاکستانی زبانوں کا تقابلی مطالعہ، ادبیات پاکستان کا تقابلی مطالعہ، اردو زبان و ادب	3
2722	بلوچی، براہوئی: زبان و ادب	3
2723	پشتو، ہندکو، توروالی، گاؤری: زبان و ادب	3
2724	پنجابی، پہاڑی، گوجری: زبان و ادب	3

دوسرا سمسٹر خزاں 2015ء

کورس کوڈ	کورس کا نام	کریڈٹ آورز
2725	سندھی، سرانیکی کشمیری: زبان و ادب	3
2726	شمالی علاقہ جات کی زبانیں و ادب (ہلمی، شنا، کھوار، بروشسکی، ونی)	3
5765	اصول تحقیق (زبان و ادبیات) I	3
5766	اصول تحقیق (زبان و ادبیات) II	3

تیسرا اور چوتھا سمسٹر (ریسرچ ورک)

کورس کوڈ	کورس کا نام	کریڈٹ آورز
2728	تحقیقی مقالہ (Thesis)	12

داخلے کے متعلق مزید معلومات کے لئے مندرجہ ذیل پتہ پر رابطہ کریں:
ہر لحاظ سے مکمل داخلہ فارم مع تصدیق شدہ اسناد مندرجہ ذیل پتہ پر روانہ کریں:

پروفیسر ڈاکٹر محسنہ نقوی

چئیر پرسن، شعبہ پاکستانی زبانیں،

بلاک نمبر 8، علامہ اقبال اوپن یونیورسٹی

H-8، اسلام آباد، فون: 051-9250071

ایم فل پاکستانی زبانیں و ادب میں داخلے کے قواعد و ضوابط

- ☆ امیدوار کا کسی بھی تسلیم شدہ یونیورسٹی سے ایم اے پنجابی/پشتو/بلوچی/براہوئی/سندھی/سرانیکی میں درجہ دوم یا اس کے مساوی قابلیت کا حامل ہونا لازمی ہے۔
- ☆ ایم فل میں داخلے کے لیے امیدوار کا شعبے میں متعلقہ مضمون کا سبجیکٹ ٹیسٹ لیا جائے گا۔
- ☆ کامیاب امیدوار ہی انٹرویو کے اہل ہوں گے۔

شرح فیس

1-	رجسٹریشن فیس	1000/- روپے (پہلی بار داخلہ کے وقت صرف ایک مرتبہ جمع کرانی ہوگی)
2-	داخلہ فیس	1000/- روپے (صرف پہلے سمسٹر کی فیس کے ساتھ)
3-	کورس فیس (فی 3 کریڈٹ آورز)	2800/- روپے
4-	آئی ٹی فیس	100/- روپے (ہر سمسٹر کی فیس کے ساتھ)

نوٹ: داخلے کی منظوری کی اطلاع ملنے پر فیس جمع کرانی جائے بصورت دیگر فیس واپس نہیں ہوگی۔

ذریعہ تعلیم

کورس ورک اُردو زبان میں ہوگا جبکہ ریسرچ ورک یعنی تحقیقی مقالہ اپنی مادری زبان (جس میں طالب علم نے ایم اے کیا ہو) کے علاوہ اُردو اور انگریزی میں بھی لکھنے کی اجازت ہے۔

ورکشاپ

☆ ہر سمسٹر میں پیش ہونے والے کورسوں کی ورکشاپ کا انعقاد ایم فل پروگرام کا لازمی حصہ ہے جو ہفت روزہ فی کورس کے دورانیے پر مشتمل ہوگی۔ اس کی بدولت طلبہ کو روایتی تعلیم کی طرز پر بالمشافہ (Face to Face) تعلیم کا موقع میسر آئے گا اور تعلیمی و تحقیقی مسائل اور ان کے امکانات بھی زیر بحث لائے جائیں گے۔

ورکشاپ کا انعقاد صرف مرکزی کیمپس اسلام آباد میں ہوگا۔ ورکشاپ کا حتمی نظام الاوقات شعبے کی طرف سے طے کیا جائے گا اور اس بابت طلبہ کو بروقت آگاہ کر دیا جائے گا۔

☆ کورس ورک کی کامیاب تکمیل کے بعد خاکہ سازی کی ورکشاپ منعقد کی جائے گی جس میں تحقیقی موضوعات کی تیاری کے سلسلے میں تربیت فراہم کی جائے گی۔ اس ورکشاپ میں شرکت کرنے والے طلبہ کے موضوعات کے خاکے ایم فل کے یونیورسٹی قواعد کے تحت منظوری کے لیے پیش کیے جائیں گے۔

جانچ پڑتال کا طریقہ

جانچ پڑتال تین طریقوں سے کی جائے گی۔

(i) امتحانی مشقیں

(ii) کورس ورکشاپ

(iii) آخری امتحان

ان تینوں میں سے طلبہ کو درج ذیل تناسب سے نمبر حاصل کرنا ہوں گے:

20% امتحانی مشقیں

10% ورکشاپ

70% آخری امتحان

☆ ہر کورس کی کامیاب تکمیل کے لیے طلبہ کا امتحانی مشقوں، کورس ورکشاپ اور آخری

امتحان میں کامیاب ہونا لازمی ہے۔

☆ امتحانی مشقوں میں کامیابی کے لیے کم از کم 50% نمبر حاصل کرنا ہوں گے۔

☆ آخری امتحان میں کامیابی کے لیے کم از کم 50% نمبر حاصل کرنا ہوں گے۔

گریڈ کی تقسیم کا طریقہ کار

80 فی صد اور اس سے زائد A+ گریڈ

70 فی صد سے 79 فی صد تک A گریڈ

60 فی صد سے 69 فی صد تک B گریڈ

کمرہ نمبر 110، بلاک نمبر 08، AIOU
051-9057776

7. زیب النساء
لیکچرار

50 فی صد سے 59 فی صد تک C گریڈ
50 فی صد سے کم فیل

- ☆ تاخیر سے موصول ہونے والے داخلہ فارم پر کوئی کارروائی نہیں ہوگی۔
- ☆ صرف میرٹ پر منتخب ہونے والے طلبہ کو فیس جمع کرانے کے لئے بذریعہ ڈاک اطلاع کردی جائے گی۔

شعبے کے اساتذہ کے نام، پتے اور فون نمبر

نمبر شمار	نام وعہدہ	پتہ اور فون نمبر
1.	پروفیسر ڈاکٹر محسنہ نقوی	کمرہ نمبر 102، بلاک نمبر 08، AIOU 051-9250071 , 9057770
2.	ڈاکٹر عبداللہ جان عابد	کمرہ نمبر 110، بلاک نمبر 08، AIOU 051-9057776
3.	ڈاکٹر حاکم علی برڑو	کمرہ نمبر 109، بلاک نمبر 08، AIOU 051-9057778
4.	ڈاکٹر عبدالواجد	کمرہ نمبر 107، بلاک نمبر 07، AIOU 051-9057893
5.	ضیاء الرحمن بلوچ	کمرہ نمبر 108، بلاک نمبر 08، AIOU 051-9057779
6.	محمد صدیق ملک	کمرہ نمبر 109، بلاک نمبر 08، AIOU 051-9057778

4. شعبہ اردو

ایم فل (اردو)

علامہ اقبال اوپن یونیورسٹی میں رسمی تدریس کے عام طریقے استعمال نہیں کیے جاسکتے۔ چونکہ اس یونیورسٹی کے طلبہ پورے ملک میں پھیلے ہوئے ہیں، اس لیے انہیں فاصلاتی تعلیم (Distance Learning) کے اصول کے مطابق تعلیم دی جاتی ہے۔

بہار پہلا سمسٹر 2015ء

کورس کوڈ	کورس	کریڈٹ آورز
5771	اردو ادب کا سیاسی و ثقافتی پس منظر I	3
5772	اردو ادب کا سیاسی و ثقافتی پس منظر II	3
5773	اردو ادب کی تحریکات اور تنقیدی نظریات I	3
5774	اردو ادب کی تحریکات اور تنقیدی نظریات II	3

خزاں دوسرا سمسٹر 2015ء

کورس کوڈ	کورس	کریڈٹ آورز
5775	تدریس ادب I	3
5776	تدریس ادب II	3
5777	اصول تحقیق I	3
5778	اصول تحقیق II	3

تعارف:

شعبہ اردو کا قیام 1974ء میں علامہ اقبال اوپن یونیورسٹی کے قیام کے ساتھ ہی عمل میں آیا۔ یہ شعبہ اب تک اردو زبان و ادب کی تدریس کے حوالے سے مختلف امور کی انجام دہی خصوصاً قومی زبان کو بہ طور لازمی مضمون متعارف کروانے میں، فعال کردار ادا کر رہا ہے۔ اس وقت شعبہ اردو کی طرف سے میٹرک، انٹرمیڈیٹ اور بی اے کے علاوہ ایم اے، ایم فل اور پی ایچ ڈی (اردو) کے پروگرام پیش کیے جا رہے ہیں۔

ایم فل اردو پروگرام کے مقاصد

- 1- طلبہ کی علمی استعداد میں اضافہ کرنا۔
- 2- طلبہ کو اردو ادب کے قدیم اور جدید رجحانات سے آگاہ کرنا۔
- 3- اردو کے اساتذہ کی پیشہ ورانہ مہارت میں اضافہ کرنا۔
- 4- ایم فل کرنے والے طلبہ کی تحقیقی صلاحیتوں کو ابھارنا۔

مطالعاتی سکیم

- 1- ایم فل (اردو) پروگرام 24 کریڈٹ آورز کے کورس ورک اور 12 کریڈٹ آورز کے ریسرچ ورک پر مشتمل ہے۔
- 2- طلبہ ایک سمسٹر میں زیادہ سے زیادہ تین تین کریڈٹ آورز کے چار کورسوں میں داخلہ لے سکتے ہیں۔

تیسرا اور چوتھا سمسٹر (ریسرچ ورک)

کورس کوڈ	کورس کا نام	کریڈٹ آورز
726	تحقیقی مقالہ (Thesis)	12

ایم فل اردو میں داخلے کے قواعد و ضوابط

- ☆ ایم فل میں داخلے کے لیے امیدوار کا ایم اے اردو میں کم از کم درجہ دوم یا اس کے مساوی قابلیت کا حامل ہونا لازمی ہے۔
- ☆ داخلہ میرٹ کی بنیاد پر ہوگا۔
- ☆ امیدوار کا سبجیکٹ ٹیسٹ اور انٹرویو بھی لیا جائے گا۔ ٹیسٹ میں پاس ہونا لازمی ہے۔

شرح فیس:

- 1- رجسٹریشن فیس 1000/- روپے (پہلی بار داخلہ لیتے وقت صرف ایک مرتبہ جمع کروانی ہوگی)
- 2- کورس ٹیوشن فیس 2800/- روپے (فی 3 کریڈٹ آورز)
- 3- داخلہ فیس 1000/- روپے (پہلے سمسٹر کی فیس کے ساتھ)
- 4- آئی ٹی فیس 100/- روپے (ہر سمسٹر کی فیس کے ساتھ)

نوٹ: داخلے کی منظوری کی اطلاع ملنے کے بعد فیس جمع کرائی جائے گی۔ بصورت دیگر فیس واپس نہیں ہوگی۔ نیز ریسرچ پراجیکٹ سے متعلقہ فیس کے متعلق معلومات بعد میں جاری کی جائیں گی۔

ذریعہ تعلیم

اردو زبان

ورکشاپ

☆ ورکشاپ ایم فل پروگرام کا لازمی حصہ ہے جو ہر سمسٹر میں 28 دنوں پر مشتمل ہوگی۔ ورکشاپ کی بدولت طلبہ کو روایتی تعلیم کی طرز پر بالمشافہ (Face to Face) تعلیم کا موقع میسر آئے گا اور تعلیمی و تحقیقی مسائل اور ان کے امکانات بھی زیر بحث لائے جائیں گے۔ ورکشاپ کا انعقاد صرف مرکزی کیمپس اسلام آباد میں ہوگا۔ ورکشاپ کا حتمی نظام الاوقات شعبے کی طرف سے طے کیا جائے گا اور اس بابت طلبہ کو بروقت آگاہ کر دیا جائے گا۔

☆ کورس ورک کی کامیاب تکمیل کے بعد خاکہ سازی کے لئے ورکشاپ منعقد کی جائے گی جس میں تحقیقی موضوعات کی تیاری کے سلسلے میں تربیت فراہم کی جائے گی۔ اس ورکشاپ میں شرکت کرنے والے طلبہ کے موضوعات ایم فل کے متعلقہ قوانین کے تحت منظوری کے لیے پیش کیے جائیں گے۔

جانچ پڑتال کا طریقہ:

جانچ پڑتال تین طریقوں سے کی جائے گی۔

(i) امتحانی مشقیں

تحقیقی مقالہ

- (1) مقالے کے موضوع کی منظوری کے لیے مجوزہ موضوع پر خاکہ اور کتابیات اصول تحقیق کے معین اصولوں کی روشنی میں تیار کر کے متعلقہ شعبے کو پیش کیے جائیں گے۔ موضوع تحقیق، قطعی، واضح اور طبع زاد (Original) ہونا چاہیے۔
- (2) مجوزہ موضوع کی منظوری کے بعد طالب علم اپنے نگران مقالہ کی رہنمائی میں اپنی تحقیق مکمل کرے گا۔ نگران کی تعلیمی اہلیت کے پیش نظر اس کا تقرر کیا جائے گا۔
- (3) ایم فل کے نگران مقالہ کا پی ایچ ڈی ہونا ضروری ہے۔
- (4) مقالے کی تکمیل پر طالب علم اپنے مقالے کی چار کاپیاں مع خلاصہ اپنے نگران کے تصدیقی مراسلے کے ہمراہ شعبہ اردو میں جمع کرائے گا اور ایک اضافی کاپی اپنے نگران تحقیق کو بھی پیش کرے گا۔

(الف) ممتحنین کا تقرر

مقالے کی تکمیل کے بعد متعلقہ شعبے کی طرف سے بھیجے گئے پینل میں سے ممتحنین کا تقرر کیا جاتا ہے۔ ممتحنین مقالے کا جائزہ لے کر اپنا رزلٹ کنٹرولر امتحانات کو بھیجتے ہیں۔

(ب) زبانی امتحان

اگر مقالے کے بارے میں دونوں ممتحن مثبت رائے کا اظہار کریں تو پھر اس پر زبانی امتحان کا انعقاد ہوتا ہے۔

(ii) کورس ورکشاپ

(iii) آخری امتحان

ان تینوں میں طلبہ کو درج ذیل تناسب سے نمبر حاصل کرنا ہوں گے۔

امتحانی مشقیں 20%

ورکشاپ 10%

آخری امتحان 70%

☆ ہر کورس کی کامیاب تکمیل کے لیے طلبہ کا امتحانی مشقوں، ورکشاپ اور آخری امتحان میں کامیاب ہونا لازمی ہے۔

☆ امتحانی مشقوں میں کامیابی کے لیے کم از کم 50% نمبر حاصل کرنا ہوں گے۔

☆ آخری امتحان میں کامیابی کے لیے کم از کم 50% نمبر حاصل کرنا ہوں گے۔

گریڈ کی تقسیم کا طریقہ کار

A+ 80 فی صد اور اس سے زائد

A 70 فی صد سے 79 فی صد تک

B 60 فی صد سے 69 فی صد تک

C 50 فی صد سے 59 فی صد تک

فیل 50 فی صد سے کم