**Department of Environmental Sciences**

**University of Peshawar**

**List of M.Phil/Ph.D Approved Course of the Department of Environmental Sciences**

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| **Course No** | **Title** | **Credit Hours** |
| ES-711 | Advance Ecosystem Management | 3 |
| ES-712 | Envirt, Population & Development | 3 |
| ES-713 | Integrating Conservation & Development Projects | 3 |
| ES-714 | Food Chain Contamination and Human Exposures | 3 |
| ES-715 | Soil Microbiology | 3 |
| ES-716 | Pollution Control Technology | 3 |
| ES-717 | Cleaner Production | 3 |
| ES-718 | Environmental Toxicology | 3 |
| ES-719 | Protected Areas Management | 3 |
| ES-721 | Environmental Laws and Policies | 3 |
| ES-722 | Advance Environmental Economics | 3 |
| ES-723 | Computer Studies | 3 |
| ES-724 | Writing of Manuscript and Reports  | 3 |
| ES-725 | Research Methods | 3 |
| ES-726 | Environmental Health Risk Assessment | 3 |
| ES-727 | Degradation of Organic Chemicals | 3 |
| ES-728 | Modeling Approaches of Contaminants in Soil | 3 |
| ES-729 | Organic Pollution and Climatic Change | 3 |
| ES-731 | Agronomics and Environmental Impacts of Biochar | 3 |
| ES-732 | Transformation of Chemicals in the Environment | 3 |
| ES-733 | Clean Technology (Cleaner Production) | 3 |
| ES-734 | Advance Statistics | 3 (2-1)  |
| ES-735 | Special Topic (Research Methods) | 2 |
| ES-736 | Advance Wastewater Treatment | 4 |
| Env.Sc.760 | Special Topics | 2-3 |
| Env.Sc.766 | Seminar | 1 |
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| Bot.709 | Edaphology | 3 |
| Bot.713 | Limnology | 3 |
| Bot.723 | Environmental Problems & Health  | 3 |
| Bot.725 | Biodiversity and its Conservation | 3 |
| Chem.717 | Environmental Chemical Analysis | 3 |
| Geo.725 | Oceanography | 3 |
| Geo.730 | Hydrogeology | 3 |
| Geo.735 | Environmental Geology-I | 3 |
| Geo.736 | Environmental Geology-II | 3 |
| Geo.792 | Remote Sensing | 3 |
| Geo.793 | Geographic Information System | 3 |
| Geog.733 | Adv. Envir Planning & Management | 3 |
| Geog.734 | Disaster Planning and Management | 3 |
| Geog.832 | Advance Envirt Impact Assessment | 3 |
| Phy.Chem.717 | Aquatic Chemistry of the Environment | 3 |
| Phy.Chem.720 | Advance Instrumental Techniques | 3 |
| Phy.Chem.726 | Atmospheric Chemistry | 3 |
| U&RP.722 | Community participation for Development | 4 |
| U&RP.733 | Sustainable Development | 4 |
| U&RP.734 | Green Planning | 4 |
| U&RP.742 | Techniques for Hazard Mapping | 4 |
| U&RP.744 | Environmental Hazards of Pakistan | 4 |
| U&RP.753 | Resource Conservation | 4 |
| Geol.790 | Phytoremediation | 2 |
| Geol.865 | Land Contamination and Remediation | 2 |

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**M.S Program in Environmental Science**

**Eligibility:** At Least 2.5 C.G.P.A or 1st Div. in Bachelor of Environmental Science (B.E.S) or other related disciplines with 16 years of Education. Admission will be granted exclusively on the basis of merit, giving 50% weight to the marks obtained in the qualifying examination and 50% marks obtained in the entry test and interview organized and conducted by the Department of Environmental science.

**Duration:** 1.5 to two years (3-4 Semesters)

**Credits:** 30 Credit Hours including research project

Taught Courses 24 CHR.

(Core Course: 12 CHR; Elective Courses: 12 CHR)

Thesis: 6 CHR.

**Courses:** **1ST SEMESTER**

 Core Courses (3 CHR)

 Env. Sc. 711 Environmental Policy

 Env. Sc. 713 Environmental Impact Assessment

Elective Courses (3 CHR)

 Env. Sc. 712 Environmental Analytical Techniques

Env. Sc. 714 Environmental Management

 Env. Sc. 733 Environmental Chemistry

 Env. Sc. 716 Freshwater Ecology

 Env. Sc. 717 Environmental Sociology

 Env. Sc. 718 Environmental Geology

 Env. Sc. 719 Marine Pollution

**2ND SEMESTER**

 Core Courses (3 CHR)

 Env. Sc. 722 Population Dynamics & the Environmental

 Env. Sc. 723 Pollution Control Technologies

 Elective Courses (3 C.H)

 Env. Sc. 721 Health Safety and Environment

 Env. Sc. 724 Epidemiology

 Env. Sc. 732 Wildlife, Forestry & Weltland Management

 Env. Sc. 726 watershed Management

 Env. Sc. 734 Solid & Hazardous Waste Management

 Env. Sc. 736 Environmental Economics

 Env. Sc. 729 Remote Sensing / GIS App in Environmental

**Note:** Additional courses already approved for M.Phil / Ph.D programs will be offered time to time.