

Co-operative planning for climate change disasters

Women's University collaborated with the government as many activities were held with the Agriculture Department of Azad Jammu & Kashmir related to sustainability and achieving SDG goals through implementation at our university. These initiatives are designed to benefit the community, providing valuable insights and resources to address local and national challenges. Through this collaboration, the university cooperates with the government to support public welfare. The university strengthens its relationship with government entities and provides a platform for students, faculty, and community to engage with policymakers and experts.

Global Sustainability and Collaboration with IUCN

Women University has a potential collaboration through its faculty member Dr. Mubashir Gardazi with IUCN (International Union for Conservation of Nature) to monitor the impacts of climate change on nature and guide the conservation and restoration of ecosystems to help mitigate and adapt to it. Our university is committed to global sustainability goals and believes partnering with IUCN would significantly enhance the impact. We strongly advocate for the worldwide use of Nature-based Solutions (**Annex. I**).

Curriculum designing in partnership with UK education gateway

Women University carried out curriculum design on environmental protection and plantation of fruit trees in the Poonch region of Azad Kashmir in collaboration with the British Council under the program-going global partnership Pak-UK education gateway mobility partnership for universities. This partnership will facilitate climate and environmental research and education (**Annex. II**).

Water Resource Management Workshop

On March 21, 2023, the Women University of Azad Jammu and Kashmir Bagh organized a "Water Resource Management" workshop to equip participants with essential knowledge and practical skills for effective water management.

This initiative aligns with the Sustainable Development Goals (SDG), particularly in addressing climate change by promoting sustainable water practices crucial for resilience and adaptation in a changing climate. **(Annex. III)**

Plantation Drive

Plantation is one more step towards a green and productive environment. Under the Green Youth Movement Club Women University Bagh Azad Kashmir, the Department of Environmental Science successfully organized plantation drives for fruit plants, which is an incredible achievement for the future. The primary purpose of this drive was to promote a green environment, but in turn, such plants are not only a source of greenery but also a source of food for biota. The university has engaged students, faculty, and staff in plantation to ensure the success and sustainability of the environment **(Annex. IV)**.

Rainwater Harvesting at Women University of AJK Bagh

Bagh, an Azad Jammu and Kashmir district, experiences an average annual rainfall of 1500 mm, making it an ideal location for rainwater harvesting. While there are a few months, such as September to November, with lower rainfall, implementing an efficient water harvesting and storage system can address this shortfall. This project promotes sustainability and environmental friendliness by reducing the reliance on energy-intensive water supply methods, such as pumping.

Additionally, it provides a valuable research opportunity for undergraduate and postgraduate students studying at the university. The GYM Club of Women University of AJ&K, in collaboration with the National Cleaner Production Center (NCPC), has installed the rainwater harvesting system on the rooftop of the library building, utilizing an approximate catchment area of 500 sq. ft. The collected water is directed through pipes connected to the catchment area and stored in a tank. This stored water is utilized for washroom activities and other purposes, such as watering plants.

Additionally, a treatment column consisting of sand and gravel filters is installed to enable the use of harvested water for drinking purposes. To ensure the quality of the drinking water, regular analysis of water samples is conducted every week.

The link for evidence is given below


<https://www.facebook.com/share/v/YMjaCAC9Sno1B2AB/?mibextid=jmPrMh>

Course designing

Women University has designed its Curriculum according to the needs of environmental issues. Several departments offered different courses on climate change and sustainable development. These courses create awareness among the community via students working on environmental sustainability and knowing the risks of climate change (**Annex. V**).



Annex. I



WOMEN UNIVERSITY

OF AZAD JAMMU & KASHMIR, BAGH. Website: www.wuajk.edu.pk

(Registrar Office)

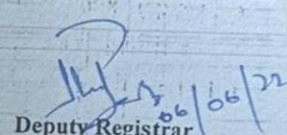
No. WUB/DRO/501-07/2022 Date: 06-06-2022

Office Order:

The Vice Chancellor, on the recommendation of the Registrar has been pleased to accord approval to nominate Dr. Mubashar Gardezi, Assistant Professor Department of Botany as focal person to liaise with International Union for Conservation of Nature (IUCN) pertaining to "Fostering Collaborations between IUCN Pakistan and Universities of Azad Jammu and Kashmir".

Detail of the focal person is as follows:

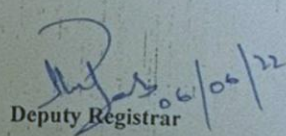
S. #	Name of Focal Person	Department/Designation	Contact No.	Email Address
01	Dr. Mubashar Hussain Gardazi	Assistant Professor, Department of Botany	03349554272	mubashargardezi@wuajk.edu.pk



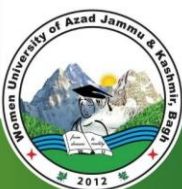
Deputy Registrar

CC:

1. PS to the Vice Chancellor, WUAJ&K Bagh
2. The Secretary Presidential Affairs, Presidential Secretariat Muzaffarabad (for kind information)
3. PS to the Registrar, WUAJ&K Bagh
4. Chairperson Department of Botany, WUAJ&K Bagh
5. Mr. Mahmood Akhter Cheema Country Representative, IUCN Pakistan
6. Ms. Fauzia Malik, Program Coordinator IUCN Pakistan
7. Focal Person from Women University of AJ&K Bagh
8. Office Copy




Deputy Registrar





Annex. II

**WOMEN UNIVERSITY**
OF AZAD JAMMU & KASHMIR, BAGH. Website: www.wuajk.edu.pk
(REGISTRAR OFFICE)

Date: 30-01-2023

No: WUB/ARO (Acad)/ 195-201 /2023

Office Order

The Vice Chancellor is pleased to accord approval in favor of Dr. Arshad Mehmood, (Assistant Professor, English) Principal Investigator & Head of English Department to submit his project proposal, titled: "Developing English Language Proficiency of Secondary Teachers and Creating Awareness through Collaborative Curriculum on Environment Protection and Plantation of Fruit-Trees in Poonch Region of Azad Kashmir" to British Council under the program, Going Global Partnership Pak-UK Education Gateway Mobility Partnership for Universities.

- The university resolute to ensure transparency of the project in every aspect and will provide required facilitation for the successful completion of the project.

Assistant Registrar
(Academics)

Copy to the:

1. PS to the Vice Chancellor, WUAJ&K Bagh.
2. The Incharge Dean Faculty of Arts & Social Sciences, WUAJ&K Bagh.
3. PS to the Registrar, WUAJ&K Bagh.
4. The Treasurer, WUAJ&K Bagh.
5. The Director, QEC, WUAJ&K Bagh.
6. The Director, ORIC, WUAJ&K Bagh.
7. Dr. Arshad Mehmood Assistant Professor, Department of English, WUAJ&K Bagh.
8. Office Copy.

Assistant Registrar
(Academics)

Annex. III



WATER RESOURCES PROBLEMS AND MITIGATION SEMINAR

Annex. IV





Annex. V

4 YEARS BS PROGRAMME LAY OUT

According to HEC guidelines an undergraduate program should be from minimum 124 credit hours and maximum 136 credit hours. The proposed scheme is of 133 credit hours in accordance HEC and WUAJK Policy.

Compulsory Requirements (i.e., student has no choice)		General Courses (to be chosen from other Departments)	
9 courses		7 courses	
25 Credit hours		21 Credit hours	
Subject	Cr. hr	Subject	Cr. hr
1. ENGLISH I (Functional English)	3(3+0)	1. Essentials of Biology	3(2+1)
2. ENGLISH II (Communication Skills)	3(3+0)	2. Essentials of Chemistry	3(2+1)
3. ENGLISH III (Technical report writing and presentation skills)	3(3+0)	3. Sociology	3(3+0)
4. PAKISTAN STUDIES	2(2+0)	4. Introductory Economics	3(3+0)
5. ISLAMIC STUDIES	2(2+0)	5. Wildlife of Pakistan	3(3+0)
6. ESSENTIALS OF MATHEMATICS	3(3+0)	6. International Relations	3(3+0)
7. STATISTICS	3(3+0)	7. One course from courses listed below	3(3+0)
8. INTRODUCTION TO COMPUTER	3(3+0)	a). Psychology	
9. KASHMIR STUDIES	3(3+0)	b). Philosophy	
		c). Globalization	
		d). Anthropology	
		e) International Politics of Environment	
25(25+0)		21(19+2)	
Foundation Courses		Major Courses (Final year research project/internship)	
11 courses		12 courses + Final year project	
33 Credit hours		42 Credit hours	
Subject	Cr. hr	Subject	Cr. hr
1. Introduction to Environmental Science	3(3+0)	1. Applied Ecology	3(2+1)
2. Introduction to Earth Sciences	3(3+0)	2. GIS & RS	3(2+1)
3. Environmental Chemistry	3(3+0)	3. Environmental Management System	3(2+1)
4. Environmental Physics	3(2+1)	4. Biodiversity and Conservation	3(2+1)
5. Fundamentals of Ecology	3(3+0)	5. Environmental Monitoring	3(3+0)
6. Environmental Microbiology	3(2+1)	6. Climate Change	3(2+1)
7. Environmental Pollution	3(3+0)	7. Environmental Impact Assessment	3(3+0)
8. Environmental Profile of Pakistan	3(3+0)	8. Natural Resource Management	3(3+0)
9. Analytical Techniques in ES	3(1+2)	9. Environmental Governance	3(3+0)
10. Population and Environment	3(3+0)	10. Public Health and Environment	3(2+1)
11. Research Methods in Environmental Science	3(2+1)	11. Pollution Control Technologies	3(2+1)
		12. Environmental Biology	6
		13. Final Year Project (FYP)	
33(28+5)		42(35+7)	
		12(12+0)	



List of Elective Courses

Course Code	Course Title	Credits
7th Semester		
ES-4706	Water Resource Management	3 (3+0)
ES-4707	Soil and Environment	3 (3+0)
ES-4708	Urban Environmental Management	3 (3+0)
ES-4709	Disaster Risk Management	3 (3+0)
ES-4710	Pollutant Movement in Soil	3 (3+0)
ES-4711	Energy and Environment	3 (3+0)
ES-4712	Hydrology	3 (3+0)
ES-4713	Mushroom Cultivation	3 (3+0)
ES-4714	Bioinformatics	3 (3+0)
ES-4715	Water Quality Treatment	3 (3+0)
ES-4716	Agricultural Biotechnology	3 (3+0)
ES-4717	Experimental Taxonomy	3 (3+0)
ES-4718	Biofuels and Bio Refineries	3 (3+0)
ES-4720	Bacteriology and Virology	3 (3+0)
ES-4721	Ecosystem Services	3 (3+0)
ES-4722	Biosafety and Bioethics	3 (3+0)
ES-4723	Ethnobotany	3 (3+0)
ES-4724	Wildlife Management	3 (3+0)
ES-4725	Environmental Law	3 (3+0)
ES-4726	Environmental Prospective of AJ& K	3 (3+0)
8th Semester		
ES-4806	Agro-ecology	3 (3+0)
ES-4807	Occupational Safety, Health and Environment	3 (3+0)
ES-4808	Solid Waste Management	3 (3+0)
ES-4809	Ecotourism	3 (3+0)
ES-4810	Project Management	3 (3+0)
ES-4811	Environmental Biotechnology	3 (3+0)
ES-4812	Air and Noise Pollution	3 (3+0)
ES-4813	Occupational Health and Safety	3 (3+0)
ES-4814	Microbial Biotechnology	3 (3+0)
ES-4816	Sustainable Sanitation and Water	3 (3+0)
ES-4817	Forest and Shade Tree Pathology	3 (3+0)
ES-4818	Cell and Tissue Culturing	3 (3+0)
ES-4819	Wastewater Treatment and Management	3 (3+0)
ES-4820	Watershed Management	3 (3+0)
ES-4821	Conservation Biology	3 (3+0)
ES-4822	Advanced Ecology	3 (3+0)
ES-4823	Phytogeography	3 (3+0)
ES-4824	Herbarium Technology	3 (3+0)
ES-4825	Economic Biology	3 (3+0)