## **School of Environmental Sciences** E-Notification (dated May 5, 2020)

MPhil/PhD Environmental Sciences (Revised Syllabus) w.e.f Monsoon 2020 semester onwards.

The M.Phil./Ph.D. coursework would consist of 3 core courses, 2 optional courses from the respective Area of admission only, and 3 optional courses from any Areas as per the distribution given below. All these courses are of 2 credits each. According to the JNU Ordinance, all the M.Phil./Ph.D. students need to complete 16 credits coursework in first two semesters. Only M.Phil. dissertation of 8 credits is to be carried out in the subsequent two semesters leading to total 24 credits for M.Phil. degree.

Semester wise distribution of the courses is proposed as below-

- The M.Phil./Ph.D. coursework will be of 16 credits to be completed in two semesters.
- It is mandatory and compulsory for all the students to opt 3 core courses (total 6 credits) offered in the I-Semester.
- It is mandatory and compulsory for the Area students to opt 2 Area optional courses (total 4 credits) offered from the respective Area of admission in the I-semester.
- It is mandatory and compulsory for the student to opt rest of the 3 courses (total 6 credits) offered from any Areas in the II-Semester.

M . Phil . /Ph.D. 1 St Semester: 3 Core courses (6 credits) + 2 Area Optional courses (4 credits)

= Total 10 credits.

M.Phil. /Ph.D. 2nd Semester: 3 Optional courses (6 credits) = Total 6 credits.

M.Phil. 3 rd and 4 th Semester: Dissertation (8 credits) = Total 8 credits.

Semester	I				
Core Courses (Mandatory for all): total 6 credits					
Code	Course Nomenclature	Credits	Course		
			In-charge		
ES 601R	Research Methodology I* -	2	APD		
ES 602R	Research Methodology II* -	2	UCK		
ES 603R	Research and Publication Ethics (RPE)*	2	PKJ		
<b>Optional</b>	Courses: total 4 credits. Choose 2 courses only, from the Area	a of admis	sion		
Area-I					
	Atmospheric Processes	2	APD		
	Statistical Methods	2	KK		
	Remote Sensing of Air Quality	2	AKS		
	Air Pollution Meteorology	2	RP		
Area-II					
	Earth Processes	2	NSS		
	Remote Sensing in Geosciences	2	SM		
Area-III					
	Sustainable Environmental Management	2	PSK		
	Water Pollution Chemistry	2	DM		
	Limnology	2	JKT		

Area-IV		
Ecosystem Processes	2	PKJ
Environmental Toxicology	2	IG
Advances in molecular biology	2	RM
Applied Environmental Biotechnology	2	IST
Environment and Carcinogenesis	2	PR
Semester II		
Optional Courses: total 6 credits. Choose 3 courses from any area		
Area I		
Climate Dynamics	2	APD
Urban Climate and Air Quality	2	KK
Aerosol and Cloud Physics	2	AKM
Area II		
Cryosphere Studies	2	ALR
Engineering Geology	2	NJR
Soil Geochemistry	2	NSS
Geochemical Cycles	2	AKT
Area III		
Bio-renewable Resources and Technology	2	DM
Air Pollution	2	UCK
Chemical Speciation in Environment	2	SY
Area IV		
Rehabilitation Ecology	2	KGS
Host-Pathogen Interaction and Environment	2	KM
Man and Tropical Forest Ecosystem Function	2	SCG
Himalayan Ecology	2	PKJ
Cell and Environment	2	IG
Environmental Microbial Genomics	2	MD
Climate Change and Air Pollution Implications on Plant	2	UM
Biodiversity		
Radiation and molecular biophysics	2	RM

<sup>\*</sup>Course will be shared by at least two teachers which will be decided by the Area Conveners and Dean. Course code will be carrying usual number followed by `R`suffix.

The evaluation process for each of the course work would be as follows:

10 marks - sessional evaluation (Quiz, Term Paper, Presentation etc.) before the mid-semester examination.

30 marks - mid semester examination

10 marks - sessional evaluation (Quiz, Term Paper, Presentation etc.) after the midsemester examination.

50 marks - end semester examination

It is recommended that the nature of sessional evaluation before and after the midsemester examination should be different.