REVISED SYLLABUS

M.Sc. COURSE IN HIMALAYAN AQUATIC BIODIVERSITY

Effective from academic session 2018-2019

Department of Himalayan Aquatic Biodiversity

School of Life Sciences
HNB Garhwal University
(A Central University)
Srinagar (Garhwal), Uttarakhand

REVISED SYLLABUS

M.Sc. COURSE IN HIMALAYAN AQUATIC BIODIVERSITY

Admission to Master's Program in Himalayan Aquatic Biodiversity shall be through entrance examination conducted by University and the program shall be based on the choice based credit system in which credit defines the quantum of content/ syllabus prescribed for a course system and determines the number of hours of instruction per week.

The student shall be eligible for admission to a Master's Degree Program in Himalayan Aquatic Biodiversity after he/she has successfully completed a three year undergraduate degree or earned prescribed number of credits through the examinations conducted by University as equivalent to an undergraduate degree. The fee structure would be as per University ordinances but the fee once deposited by the candidate would not be refundable under any circumstances barring security fee.

Core courses prescribed for every Semester shall be mandatory for all students registered for the Master's Program in Himalayan Aquatic Biodiversity and shall carry minimum 54 credits. There shall be Elective courses offered in semester III and IV and shall carry a minimum of 18 credits. A self-study course would comprise of maximum 09 credits of which minimum 03 credits shall be mandatory which shall not be included while calculating grades. The student may choose self-study course either only in one of the three semesters (II/III/IV) or one each in all the three semesters. In order to qualify for a two year master's degree, a student must acquire a minimum of 72 credits including a minimum of 18 credits in electives choosing at least two elective (leading to a minimum 06 credits) in Semester III offered either by the parent department or other departments and one qualifying self-study course of minimum 03 credits.

The dissertation is a semester long elective course of 06 credits and is mandatory for every student. The dissertation would be allotted in the beginning of III Semester and candidate would submit the report during IV Semester examination. The dissertation may be in the form of a field based minor research work/ project work/ practical training. The students may complete the dissertation work in the department/ other research institutes/ industries/ hospitals etc.

A candidate has to secure a minimum of 51 percent marks in aggregate (Two Sessional Tests marks plus End-Term Examination marks) to pass.

Course structure

PROGRAMME- M.Sc. Himalayan Aquatic Biodiversity

Semester I (July to November)			
CODE	**Core courses**	MARKS	CREDIT
SLS/HAB/C001	Biodiversity :An Introduction	100	3
SLS/HAB/C002	Taxonomy & Systematics	100	3
SLS/HAB/C003	Himalayan: An Introduction	100	3
SLS/HAB/C004	Aquatic Ecosystems	100	3
SLS/HAB/C005	Lab course I (for course C001 & C002)	100	3
SLS/HAB/C006	Lab course II (for course C003 & C004)	100	3
	Total	600	18
Core Credits= 18			
Semester II (December to April)			
CODE	**Core courses**	MARKS	CREDIT
SLS/HAB/C007	Techniques in Aquatic Ecology and Biodiversity	100	3
SLS/HAB/C008	Freshwater Biodiversity	100	3
SLS/HAB/C009	Planktonology and Microbiology	100	3
SLS/HAB/C010	Biodiversity conservation and Management	100	3
SLS/HAB/C011	Lab course I(for course C007 & C008)	100	3
SLS/HAB/C012	Lab course II(for course C009 & C010)	100	3
	Total	600	18
Core Credits= 18			
Semester III (July to November)			
CODE	**Core courses**	MARKS	CREDIT
SLS/HAB/C013	Biostatistics	100	3
SLS/HAB/C014	Climate change and Aquatic Biodiversity	100	3
SLS/HAB/C015	Lab course I (for course C013 & C014)	100	3
Open electives (any one out of three)			
SLS/HAB/E01A	Freshwater Algal Flora of Himalaya	100	3
SLS/HAB/E01B	Environmental Impact Assessment (EIA) and Auditing		
SLS/HAB/E01C	Environmental Toxicology		
SLS/HAB/E02A	Basic of Remote Sensing and GIS	100	3
SLS/HAB/E02B	Environmental pollution		
SLS/HAB/E02C	Fishery Science		
SLS/HAB/E03	Lab course II (for elective course E01 & E02)	100	3
	Total	600	18
Total Credits = 18 (Core Credits 09+ Elective Credits 09) with additional 03 Credits of Self Study			
Semester IV (December to April)			
CODE	**Core courses**	MARKS	CREDIT
SLS/HAB/C016	Freshwater invertebrate fauna of Himalaya	100	3
SLS/HAB/C017	Freshwater Fish Fauna of Himalaya	100	3
SLS/HAB/C018	Lab course I(for course C016 & C017)	100	3
SLS/HAB/E04A	Research Methodology	100	3
SLS/HAB/E04B	Ecosystem Analysis		3
SLS/HAB/E04C	Analytical Techniques And Instrumentation		3

SLS/HAB/E05	Dissertation	100	06
	Total	500	18
Total Credits = 18(Core Credits 09+ Elective Credits 09)			

Grand Total: Core Credits 54+ Elective Credits 18= 72

* With a total of 09 Credits (3+3+3 Credits in II, III and IV semester) of Self Study (2 Seminars equivalent to 2 Sessional Tests plus one End term written examination).

Maximum Marks for each paper is 100 (Sessional Tests-40 + End Term Test- 60).

The 2- Year Masters Programme will have the following components:

1. Core course: Minimum 54 credits.

2. Elective course: Minimum 18 credits choosing at least two Electives (leading to a minimum 06 credits) in Semester III offered either by the parent department or other departments and one Elective course(03credits) and Dissertation (06 credits) in IV Semester.

3. Self study course: Maximum 09 credits (one minimum 03 credits shall be mandatory but not to be included while calculating grades).

Dissertation

Dissertation is an elective mandatory for every student. The dissertation is to be allotted in the beginning of III Semester and report would be submitted at the time of IV Semester examination.

The distribution of marks for the Dissertation will be as below:

Periodical Presentation: 20 Marks

Dissertation : 60 Marks

Viva Voce : 20 Marks

Total : 100 Marks

The dissertation would carry 06 credits in all. Dissertation shall be evaluated jointly by the supervisor and one external examiner.