Annexure I-B

Syllabus revision during last five years

BOS meeting



Baba Ghulam Shah Bads<mark>hah Univ</mark>ersity Rajouri (J&K)

The Dean School of Biosciences & Biotechnology BGSB University Rajouri

No: BGSBU/Acad/17/13 Dated: 3-1-2017

Sir.

On November 8, 2016 you were requested to communicate all such issues related to M. Phil and Ph. D programme as you desire to refer to Board of Research Studies.

The issue was also discussed in the Meeting of Deans and Heads of all Departments on December 17, 2016 and all Heads were requested to communicate their cases for inclusion in the Agenda (refer Minutes of the Meeting).

We have not heard anything from you so far. In case there are any issues kindly communicate them latest by January 16, 2017 failing which we shall presume your School has no case for consideration by the Board of Research Studies and prepare the agenda accordingly.

Thanking you.

information and needs to be referred to any weeker that meeds to be letter.

Deputy Registrar

ours faithfully,

Minutes of the meeting of Board of Studies in Zoology School of Biosciences and Biotechnology

Pursuant upon Registrar office letter No. BGSBU/Acad/790-95, dated 20-12-2016, the meeting of the Board of Studies in Zoology was held today, on December 29, 2016 in the office of the Dean, School of Biosciences and Biotechnology.

Present:

The following were present:

- 1. Prof. G.H. Dar, Dean, School of Biosciences and Biotechnology (Convener)
- Prof. S. M. A. Abidi, Department of Zoology, Aligarh Muslim University, Aligarh (External Expert)
- Dr. Susheel Verma, Academic Coordinator, Biotechnology, BGSB University (Member)
- 4. Dr. A.A. Shah, Academic Coordinator, Zoology, BGSB University (Member)
- 5. Dr. Shreekar Pant, Academic Coordinator, Botany, BGSB University (Member)
- Dr. Saima Aslam, Assistant Professor in Biotechnology, BGSB University (Member)
- Dr. Amir Raja, Assistant Professor in Biotechnology, BGSB University (Coopted)
- Dr. Shavish Vaid, Assistant Professor (contractual), Department of Zoology, BGSB University (By special invitation)
- Dr. M. A. Hannan Khan, Assistant Professor (contractual), Department of Zoology, BGSB University (By special invitation)

Agenda:

 To draft syllabi for theory and laboratory courses for I to IV semesters of M. Sc. Zoology programme for the years as shown against each Semester below:

I Semester 2017, 2018 & 2019
II Semester 2017, 2018 & 2019
III Semester 2018, 2019 & 2020
IV Semester 2018, 2019 & 2020

 To draft syllabi of open courses in Zoology for students of other Departments/ Schools.

Resolution:

The members thoroughly went through the drafts of syllabi for theory and laboratory courses for I to IV Semesters of M. Sc. Zoology prepared by the faculty for the years 2017-2020. Draft syllabi of Open Choice Courses in Zoology developed for students of other Departments/Schools were also discussed. The following recommendations were made after prolonged deliberations:

A-Semester-Wise Recommendations:

The draft syllabi developed for theory and lab. courses for I to IV Semesters be approved with modifications/incorporations shown in each Semester as follows:

Semester I

- i. A paper on Toxicology should be introduced.
- ii. To add programmed cell death in Zol-153 unit 3rd subunit 3.4.
- To add exercise on preparation of stained permanent slides of given specimens.
- To add exercise in Zol-161- lymphocyte chromosome preparation using DAPI dye and visualizing under fluorescent microscope.
- v. To replace *Paramecium* and *Euglena* from Zol-162, lab exercise number 2. with Tape worm and Liver fluke.
- vi. To add exercise-Agarose gel electrophoresis.
- To replace exercise 11 with 'isolation of RNA using Trizol-method' in Zol-162.
- viii. To add Northern, Southern and Western blotting as 14th exercise in
- Paper entitled bacteria and viruses should be opted out from the syllabi.

Semester II

To add transgenic animals models (Zebra fish, C. elegans) in Zol 251 unit
 3 subunit 3.2.

- ii. Replace subunit 1.2 with subunit 2.2 in ZoI 251.
- iii. Reorganize unit 1 and 2 in Zol 251 as shown in draft.
- iv. Rearrange the units in Zol 253 as shown in draft.
- To add analysis of variance (one way and two way ANOVA) in Zol 260 lab course.
- vi. To add lab ethics and osozone formation in Zol 261.
- vii. To delete exercise in Zol 261 lab.

Semester III

- To introduce a new course entitled 'Embryology and Histology' of 02 credits as Zol- 354.
- To reduce 4 credits paper of the entitled 'Animal Biotechnology' (Zol 350) to 2 credits.
- To add in unit 4 subunit 4.2: Immunolocalization of antigens- fluorescence and confocal microscopy. RIA (Principles, properties and applications) advantages and disadvantages.
- iv. In Zol-352, introduce raising polyclonal antibodies and antigen preparation in unit 5 subunit 5.1.

Semester IV

- Dissertation with 4 credit work load of 100 marks (break up 80:20) shall be introduced.
- Delete Zol-452 'Insects and Fishes: Structure and Diversity'.
- iii. Zol-453 be kept as a new course entitled 'Fundamentals of Endocrinology'
- Zol-455 'Human Genetics' be redesigned as shown in the draft.
- Zol-456 'Wildlife Biology Conservation and Management' be rearranged.

B- General Observations/ Suggestions

In addition to the aforesaid recommendations, the external expert emphatically made the following suggestions for taking up with the university authorities:

 For undertaking Dissertation work in 4th Semester, each student be provided an amount of Rs. 10,000. In the end, the Dean, School of Biosciences and Biotechnology (Convener of BoS) thanked the expert for sparing his time for the meeting and providing valuable inputs and expertise in developing a standard Course Curriculum for M.Sc. Zoology programme. He also thanked all members of the Board for their painstaking and active participation in this meeting.

The meeting ended with a vote of thanks to the Chair.

Baba Ghulam Shah Badshah University Rajouri-185 234 (J&K)

1. Prof. G.H. Dar (Convener)

3. Dr. Susheel Verma (Member)

5. Dr. Shreetar Part \ (Member)

7. Dr. Shavish Vaid (Special Invitee)

9. Dr. Raja Amir 79/17 116 (Co-opted)

(External Expert)

4. Dr. A.A. (Member)

6. Dr. Saima Aslam (Member)

8. Dr. Hanan Khan (Special Invitee)