

**Institute of Applied Sciences & Humanities
Department of Biotechnology**

Agenda for 10th Meeting of Board of Studies


Date- 20-06-2020

Time- 11:00 AM

Venue- Chamber of HOD Biotechnology, GLA University, Second Floor VI Block

Agenda Items-

1. Approval and Confirmation of the minutes of last meeting.
2. Approval of modified syllabi of B.Sc. (Hons.) Biotechnology programs.
3. Discussion and Approval of course structure and the detailed syllabi for the first year of B. Tech Biotechnology.
4. Approval of courses imparting employability/entrepreneurship/skill development in the B.Sc. (Hons.) Biotechnology, M.Sc. (Biotechnology) and M.Sc. (Microbiology & Immunology) programs.
5. To consider and approve introduction of CBCS (choice based credit system) in the III year of B.Sc. (Hons.) Biotechnology.
6. To consider and approve introduction of new courses in the B.Sc. (Hons.) Biotechnology, program.
7. To consider and approve modification in one course and to introduce one new course in PhD Programme, as recommended by the Research Cell of the University.
8. Agenda with permission of the chair.


(Dr. Vishal Khandelwal & Dr. Alok Brardwaj)
Secretary


(Prof. Shoorvir Singh)
Chairman

GLA University
Institute of Applied Sciences & Humanities
(Department of Biotechnology)

Minutes of the 10th Meeting of Board of Studies

Date- 22.06.2020

Time- 11:00 AM

Venue- Chamber of HOD Biotechnology, GLA University, Second Floor VI Block

Members Present-

- Prof. A.S. Vidyarthi, Director, NanhiPariSeemant Engineering Institute, Pithoragarh
- Prof. Birinchi K. Sarma, Dept. of Mycology and Plant Pathology, BHU, Varanasi
- Dr. Vimala Prakash, IPL Biologicals Limited, Gurgaon, Haryana
- Prof. Ashish Sharma, Associated Dean Academics, GLAU, Mathura.
- Prof. PiyushSinghal, Head- Dept. of Mechanical Engineering, GLAU, Mathura.
- Prof. Vinay Deolia, Head- Dept. of Electronics & Communication Engineering, GLAU, Mathura.
- Prof. B.R.K. Gupta, Head- Dept. of Physics, GLAU, Mathura.
- Prof. Deepak Kumar Das, Head- Dept. of Chemistry, GLAU, Mathura.
- Dr. Sanjay Maurya, Associate Head, Electrical Engineering, GLAU, Mathura.
- Dr. Vipin Dubey, Assistant Professor, Dept. of Mathematics, GLAU, Mathura.
- All faculty members, Dept. of Biotechnology, GLAU, Mathura.

Sub.: Meeting of Board of Studies B. Tech Biotechnology, B.Sc. (Hons.) Biotechnology, M.Sc. (Biotechnology) and M.Sc. Microbiology & Immunology).

Sir,

It is to inform you that the meeting of Board of Studies in the subject of B. Tech Biotechnology, B.Sc. (Hons.) Biotechnology, M.Sc. (Biotechnology) and M.Sc. Microbiology & Immunology has been fixed on 22 June, 2020 at 11:00 am in the Chamber of undersigned.

The agenda in meeting will include:

1. Approval and Confirmation of the minutes of last meeting.
2. Approval of modified syllabi of B.Sc. (Hons.) Biotechnology programs.
3. Discussion and Approval of course structure and the detailed syllabi for the first year of B. Tech Biotechnology.
4. Approval of courses imparting employability/entrepreneurship/skill development in the B.Sc. (Hons.) Biotechnology, M.Sc. (Biotechnology) and M.Sc. (Microbiology & Immunology) programs.
5. To consider and approve introduction of CBCS (choice based credit system) in the III year of B.Sc. (Hons.) Biotechnology.
6. To consider and approve introduction of new courses in the B.Sc. (Hons.) Biotechnology program.
7. Agenda with permission of the chair.

Discussion & Suggestions:

Agenda No. I

Minutes of last meeting has been approved and confirmed

Agenda No. II

Approval of modified syllabi of B.Sc. (Hons.) Biotechnology.

On the basis of various feedbacks received from different stakeholders (Employer, Student, Faculty and Alumni) the revision/up gradation/modification in syllabus of existing courses in various programs is proposed as follows:

Programme	No. of Courses under consideration for revision	Name of the Courses under consideration for revision
B.Sc. (H) Biotechnology	2	<ul style="list-style-type: none"> • Human Physiology • Environmental Biology

The member considered and approved the same.

Syllabi of above courses are enclosed as Annexure-I.

Agenda No. 3

Discussion and Approval of course structure and the detailed syllabi for the first year of B. Tech Biotechnology.

(a) Approval of the course structure with particular emphasis on credits with respect to Humanities and social sciences, Basic Sciences, Engineering Sciences, Program Core, Program Electives, Open Electives, Project Work and Mandatory Non Graded Course

(i) Detailed course structure of B. Tech Biotechnology was placed by Head of Department in front of members of BOS for their suggestions and approval. Expert members of BOS have suggested and approved total credits i.e. 184 to be taught in entire B. Tech Biotechnology program. BOS members approved percentage wise distribution of credits as Humanities and social sciences (25), Basic Sciences (24), Engineering Sciences (28), Program Core (48), Program Electives (26), Open Electives (16) and Project Work (17).

(b) Approval of the syllabus with modification as suggested and recommended by members of BOS

Detailed syllabi of B. Tech Biotechnology first year were placed by Head of Department in front of members of BOS for their suggestions and approval. Expert members of BOS have suggested following suggestions for approval of syllabi of B. Tech Biotechnology.

- Members of BOS suggested that nomenclature of Elementary Mathematics II should be Mathematics II, taught in second semester of B. Tech Biotechnology and was approved.
- Members of BOS agreed to merge two subjects i.e. Biomolecules and Biochemistry of program core and was approved.
- BOS members suggested the merger of Animal Biotechnology Lab and Plant Biotechnology Lab and was approved. Members of BOS agreed the inclusion of new subject Bioprocess Engineering Lab in program core and was approved
- Members of BOS proposed that new subject Food Technology should be included in program core and was approved
- BOS members suggested modification in the nomenclature of Program electives with Genetic Engineering Bouquet. Members proposed the introduction of new subject Host-Pathogen interaction in Genetic Engineering Bouquet. Members agreed to separate Virology and Cancer Biology subject with two new subjects i.e. Virology and Cancer Biology. Molecular Diagnostics subject should be merged with Molecular Therapeutics with new nomenclature Molecular Therapeutics and Molecular Diagnostics and was approved.
- Members of BOS suggested the incorporation of Artificial Intelligence as new subject in Program electives with Bioinformatics Bouquet.
- Syllabus of above courses are enclosed as Annexure-II.

Agenda No.4:

Approval of courses having focus on employability/entrepreneurship/skill development in B.Sc. (Hons.) Biotechnology, M.Sc. (Biotechnology) and M.Sc. (Microbiology & Immunology).

Members considered and approve the same. Details enclosed as Annexure III.

Agenda No. 5:

To consider and approve introduction of CBCS (choice based credit system) in the III year of B.Sc. (Hons.) Biotechnology.

Members considered and approve the same. Details enclosed as Annexure IV.

Agenda No. 6:

To consider and approve introduction of new courses in the B.Sc. (Hons.) Biotechnology, program.

On the basis of feedback obtained from various stakeholders (Student, Alumni, Faculty and Employer) department presented detail of new courses to be introduced. After thorough discussion BOS approved the same. Details enclosed as Annexure V.

Agenda No. 7:

To consider and approve modification in one course and to introduce one new course in PhD Programme, as recommended by the Research Cell of the University.

Research Cell of the University recommended modification in the Syllabus of "Research Methodology" Course as well as recommended to introduce "Research and Publication Ethics" course in PhD Programme from the Session 2020-21. Syllabi of both the courses were duly considered by the board and subsequently approved. Details enclosed as Annexure VI.

Agenda No. 8:

Any agenda with permission of the chair.

The meeting ended with the vote of thanks to the chair.



(Dr. Vishal Khandelwal & Dr. Alok Bharadwaj)

Secretary



(Prof. Shoorvir Singh)

Chairman

List of New Courses Introduced during Session 2020-21

B.Sc.(H)Biotechnology – III year

Plant Biotechnology
Recombinant DNA Technology
Plant Biotechnology Lab
Recombinant DNA Technology Lab
Chemistry-III
Genetics
Plant Science II
Food and Industrial Biotechnology
Enzymology
Evolution and Ecology
Chemistry-III Lab
Genetics Lab
Plant Science II Lab
Food and Industrial Biotechnology Lab
Enzymology Lab
Evolution and Ecology Lab
Animal Biotechnology
Genomics & Proteomics
Animal Biotechnology Lab
Genomics & Proteomics Lab
Fermentation Technology
Role of Biotechnology in Forensic Science
Developmental Biology
Human Physiology
Environmental Biotechnology
Clinical Biochemistry
Fermentation Technology Lab
Role of Biotechnology in Forensic Science Lab
Developmental Biology Lab
Human Physiology Lab
Environmental Science Lab
Clinical Biochemistry Lab
Project Training



B. Tech. (Biotechnology) – I Year

Elementary Mathematics-I
Introduction to Biology
Engineering Chemistry
English Language skill for Communication-I
Electrical Engineering
Python programming
Engineering Chemistry Lab
English Language Lab – I
Electrical Engineering Lab –I
Python programming Lab
Engineering Drawing Lab
Elementary Mathematics-II
Engineering Physics
Animal and Plant Physiology
English Language skill for communication-II
Electronics Engineering
Basic Mechanical Engineering
Engineering Physics Lab
English Language Lab - II
Electronics Engineering Lab - I
Engineering Workshop Practices Lab
Animal and Plant Physiology Lab

Ph.D. Biotechnology/Ph.D. (Microbiology & Immunology) – I Year

Research & Publication Ethics



Dr. S.V. Singh
Professor & Head, Dept. of Biotechnology
GLA University, Mathura (U.P.), INDIA