Central University of Punjab

Ref no:

Dated: 24-05-2021

Subject: Minutes of the Meeting of Board of Studies of Department of Biochemistry for Academic Session 2021-2022

A meeting of Board of Studies of Department of Biochemistry was held on May 24, 2021 at 9:00 am through online mode.

The agenda of the meeting is given below:

- 1. To review and approve the proposed changes, course structure and syllabus of M.Sc. in Biochemistry for academic session 2021-22.
- 2. To review and approve the proposed changes, course structure and syllabus of Ph.D. Biochemistry for academic session 2021-22.
- 3. To discuss curriculum feedback from stakeholders.
- 4. To nominate external experts for evaluation of Masters' dissertation.
- 5. To nominate visiting faculty.

The agenda items were placed before the BoS.

Item no. I. Changes in course structure and syllabus of M.Sc. Biochemistry in line with NEP-2020 and confer to university guidelines.

Graduate attributes for the program were added. Learning outcomes were added to new courses and revised for existing courses. Web resources were added.

Courses Added/Revised	Courses Removed/ Moved
Semester I	1. Microbial Biochemistry (Removed) - The
1. Biochemistry Practical-I: Credit hours reduced to 3.	content was moved to Plant and Microbial
Practicals related to Microbial Biochemistry removed.	Biochemistry in third semester
2. Research Methodology (3 Cr.): Research	2. Metabolism-I removed.
Methodology and Biostatistics in semester II was	
divided into two courses.	
3. Four options for Discipline Elective courses added:	
Genetics and Animal Cell Culture were added.	
Genetics was moved from third semester. Two other	
options, Evolutionary Biology and Nanobiology from	
other departments were added.	
4. Principles of Biotechnology (2 Cr. Interdisciplinary	
course) moved from second semester to first semester.	
Semester II	1. Research Methodology and Biostatistics was
1. Biochemistry Practical-II: Credit hours reduced to 4.	removed from semester II. It was divided into two
Clinical Biochemistry practicals were moved to	
semester III.	semester I and Biostatistics was moved to semester
2. Metabolism: Metabolism-I and II combined into	III.
Metabolism. Unit on coenzymes is part of	2. Principles of Biotechnology (2 Cr.
Enzymology and membranes is part of Cell Biology.	Interdisciplinary course) moved to first semester.
Xenobiotics metabolism is now part of the course,	souprimary course) moved to mist somester.
Secondary Metabolites and Xenobiotics Metabolism.	
3. Discipline Elective Courses: Developmental	
Biology and Secondary Metabolites and Xenobiotics	
Metabolism were added. Five options from other	

departments were added: Cancer Biology,	
Environmental Microbiology, Microbial	
Pathogenicity, Molecular and Cellular Oncology, and	
Stem Cell and Regenerative Medicine.	
4. Entrepreneurship course: New course added.	
5. A new Value Added Course, Forensic and	
Molecular Diagnostics was added.	
Semester III	1. Essentials of Genetics moved to semester I as
1. Biostatistics was added.	discipline elective
2. Plant and Microbial Biochemistry: Content from	2. Science and Society (Value added course)
Plant Biochemistry and Microbial Biochemistry was	removed.
combined.	3. Principles of Ecology, Evolution and
3. Clinical Biochemistry moved from semester IV.	Developmental Biology removed.
4. Genetic Engineering moved from semester IV	4. Secondary Metabolites and Metabolic
Discipline Elective to semester III core.	Engineering removed.
5. Discipline Elective Courses: Human Physiology	
moved from core to discipline elective. Clinical	
Diagnostics added as Discipline Elective. Three	
options from other departments were added:	
Pharmaceutical Microbiology and Molecular Stress	
Physiology.	
6. Recent Advances in Life Sciences (Discipline	
Enrichment courses) was added. Previously, two parts	
of this course was part of semester IV.	
7. Research proposal was added.	
Semester IV	1. Seminar-II removed.
1. Dissertation replaces Project.	2. Science and Society (Value added course)
	removed.
	3. Clinical Biochemistry moved to semester III.
	4.Genetic Engineering moved to semester III.
	5. Recent Advances in Life Sciences I and II
	combined into one course and moved to semester
	III.
	6. Nutritional Biochemistry was removed from
	Discipline Elective

Item no. II. Changes in Ph.D. Biochemistry program for academic session 2021-22.

- The total number of courses were reduced from four to three and the number of credits were reduced from 14 to 10 by removing "Any Other Life Sciences Ph.D. Course". This will enable students to focus on research. The course content of Research Methodology and Computer Applications was revised.

Item no. III. Discuss curriculum feedback from stakeholders.

- Curriculum feedback from different stakeholders was discussed.

Item no. IV. To nominate external experts for evaluation of Masters' dissertation.

- The names of external experts were proposed for evaluation of Masters' dissertation.

Item no. V. To nominate visiting faculty.

The names of visiting faculty were proposed for nomination by BoS.

The following changes/comments were proposed:

Item no. I: The external experts were of the opinion that the proposed changes are in line with evolving the programs in progressive way as per NEP-2020 which will benefit students. The external experts suggested some changes in the courses and their content. Minor changes in the content of Biochemistry Practicals (Enzymology) and Research Methodology courses were suggested.

Item no. II: The external experts suggested that the course content of Research Methodology and Computer Applications be revised to include handling of animals and experiments with animals. Minor changes in computer applications part were also suggested. The external experts suggested that the course content of Advanced Biochemistry be revised with reference to units 2 and 3.

Item no. III, IV and V: Feedback from alumni and parents of current students was discussed. Suggestions regarding curriculum were already incorporated in the proposed changes for 2021-22 session. The names of external experts for evaluation of Masters' dissertation and visiting faculty were discussed. The names of fifteen external experts were nominated for evaluation of Masters' dissertation: Prof. Sunil Arora, Prof. Geetanjali Goyal, Prof. Suneel Kateriya, Dr. Hridayesh Prakash, Prof. Umesh Chand Singh Yadav, Dr. Manoj Kumar Tripathi, Prof. Gyanendra Kumar Sonkar, Prof. Pramil Tiwari, Prof. B.K. Bajaj, Prof. Pramod Ramteke, Dr. Vidya Shrikant Gupta, Dr. Milind Ratnaparkhe, Prof. Pratap Kumar Pati, Prof. M. S. Reddy and Dr. Rahul Shrivastava. The names of five eminent academicians/researchers were nominated for Visiting Faculty: Prof. Prashant Mishra, Prof. R. S. Verma, Dr. Vidya Shrikant Gupta, Prof. Greg Matlashewski and Prof. Satyajit Rath.

All revised files for the above agenda items were sent to BoS members and were approved. The above agenda items placed before the BoS were approved and recommended to be placed in the School Board for further recommendation.

Prof. Ramakrishna Wusirika Chairperson and HoD Dept. of Biochemistry

Dr. Shashank Kumar **Assistant Professor** Dept. of Biochemistry

Dr. Manju Jain **Assistant Professor** Dept. of Biochemistry

Prof. Monisha Dhiman

HoD Dept. of Microbiology

Prof. Abhay Kumar Pandey Prof. Rajat Sandhir Dept. of Biochemistry University of Allahabad (External expert)

Dept. of Biochemistry Panjab University, Chandigarh (External expert)

Dr. Harmesh Sahay

Assistant Research Scientist ITC Analytical Services Agribusiness Division, ITC Limited Mewar University, Gangrar (Co-opted External Member)

Abhishek Kumar Verma Assistant Professor Department of Life Sciences (Co-opted Alumni)

Dr. Vinay Kumar Assistant Professor Dept. of Biochemistry Special Invitee

Dr. Ravindresh Chabra

Assistant Professor Dept. of Biochemistry Special Invitee