# Department of Biotechnology and Bioinformatics JUIT Waknaghat

# Minutes of BoS meeting held on 05.12.2020

A meeting of The Board of Studies of the Department of Biotechnology and Bioinformatics was held on 05.12.2020 at 11:00 AM online via Google meet.

	owing BoS Members and attendees were present.		1
1	Dr. Sudhir Kumar, Head, Department of Biotechnology and Bioinformatics, JUIT Waknaghat	10/2/2	20.
2	Dr. Anil Kant Associate Professor, Department of Biotechnology and Bioinformatics, JUIT Waknaghat (Member Secretary BoS)	Aut 18 1/2/2	020
3	Dr TC Bhalla Ex, Professor Emeritus Department of Biotechnology HPU Shimla (External Member BoS)	al	
4	Mr Girish Minocha, Managing Director Minchys Industries Kandaghat, Solan	External .	of the
5	Dr Vinay Bhardwaj, Head Division of Crop Improvement, CPRI Shimla	almeet	1
6	Dr Tirtha Raj Singh Associate professor, Department of Biotechnology and Bioinformatics, JUIT Waknaghat (Member BoS)	Bo 1/2/2022	
7	Dr Harish Changotra Associate professor, Department of Biotechnology and Bioinformatics, JUIT Waknaghat (Member BoS)	Atrapa apropria	
8	Dr. Jata Shankar, Associate Professor, Department of Biotechnology and Bioinformatics, JUIT Waknaghat (Invited attendee as coordinator M. Tech. Program)	John 9/11	120 X
9	Dr. Saurabh Bansal, Assistant Professor (Senior Grade), Department of Biotechnology and Bioinformatics, JUIT Waknaghat (Member BoS)	036280 W	
10	Head (or Representative), Electronics and Communication Engineering, JUIT Waknaghat, (Member BoS)	Qui 12/202	•
11	Dr Rahul Shrivastava, Associate Professor, Department of Biotechnology and Bioinformatics, JUIT Waknaghat (Invited attendee as coordinator M Sc Microbiology)	Anshulth	VASTAV

Dr Anil Kant presented the welcome address and introduced External BoS members to the house. Professor Sudhir Kumar also welcomed the members. Dr Anil Kant presented the agenda items one by one for discussion and following were the item wise recommendations.

 To ratify the adoption of DBT remodelled curriculum and syllabi along with elective courses for MSc Biotechnology, for MSC Biotechnology Program from academic session 2020-21.

Name of Course	Elective Basket	Semester	Credit s
Nanobiotechnology - MII	Elective-I	Second	02
Environmental Biotechnology - MII	Elective-I	Second	02
Protein Engineering MII	Elective-I	Second	02
Vaccines MIV	Elective-II	Fourth	02
Drug Discovery and Development MIV	Elective-II	Fourth	02
Computational Systems Biology MIV	Elective-II	Fourth	02

Dr Anil Kant informed the house that to adopt the DBT recommended curriculum and syllabi is one of the term and condition of DBT to support our MSc Biotechnology under their flagship PG Teaching program, sanctioned to us this year and we accepted these term and conditions. Prof TC Bhalla congratulated the Department for this achievement.

Following recommendations were made by the Departmental level committee regarding the adoption of this curriculum. These recommendations have been endorsed by Hon'ble VC through Dean Academic and Research.

#### Recommendation of the committee

- a) The DBT remodelled curriculum and syllabi would be applicable for all the students (DBT, Non DBT) admitted in MSc biotechnology program with respect from academic session 2020-21.
- b) Course nomenclature, credits and distribution in four semesters will be kept largely similar as that of DBT remodelled curriculum, apart from some minor changes in course names to avoid similarity in nomenclature of already running courses of other programs of Biotechnology and Bioinformatics.
- c) Course codes may be assigned by JUIT academic cells as per specified norms.

## Deliberations:

Prof. TC Bhalla and Mr Girish Minocha suggested some valuable changes with respect to the sequence of courses and credits of the courses.

Professor Sudhir and Dr Anil Kant were of the view that it would be better to adopt the curriculum unchanged, because of our commitment of implementing DBT endorsed curriculum as part of terms and conditions already signed.

Dr Vinay Bhardwaj enquired about the inclusion of some latest techniques in the syllabi particularly genome editing.

Dr Anil Kant informed that faculty always have a flexibility to incorporate the advance topics in their respective courses, and there is an existing course viz. "Emerging Technologies" in which such advance topics can be easily adjusted. Topics are also assigned as a credit seminars which are part of the curriculum.

Dr Suarabh Bansal pointed out a discrepancy with respect to names of courses "Bioprocees Engineering and Technology", and Microbiology which were rectified.

### M.Sc 1st Semester

Existing Nomenclature			Fig.	Proposed Nomenclature		change in	
Laboratory Microbiology-	II:	General	-		ALC: UNIVERSAL PROPERTY.	Microbiology-	

### M.Sc 3<sup>rd</sup> Semester

Existing No.	Proposed change Nomenclature					
	Technology	and	-	Bioprocess	Engineering	and
Engineering			Technology	-MIII		

Resolution: The MSc course structure and syllabi were approved to be adopted as proposed

To discuss the proposal of including specializations viz. I Industrial Biotechnology,
 Medical Biotechnology in M.Tech. Biotechnology program via mean of assigning the projects in 3<sup>rd</sup> & 4<sup>th</sup> semester in the areas of specialization and electives taken by the students in respective area of specialization as per attached (Annexure 2, detailed scheme of proposal)

**Deliberations:** Dr Jata Shankar presented the proposal, Members participated in discussion and most of the members were opined that this can enhance job prospectus of the students.

**Resolution:** The proposal of including specializations in M.Tech program was approved as presented.

3. To discuss the proposal of changing the name of undergraduate B.Tech. Bioinformatics program to the proposed B.Tech Bioinformatics and Data Science. An

Elective course Artificial Intelligence is proposed to be included in fourth year of B.Tech., Bioinformatics.

**Deliberations:** Dr Tiratharaj presented the proposal. Professor Sudhir Kumar informed that such nomenclature of any degree does not exist in UGC and AICTE list of the degrees and sought the advice from the members. Prof TC Bhalla and other members opined that it may require deep deliberations on part of University, so as to satisfy the regulatory body's requirements in such a scenario.

**Resolution:** The proposal changing the name of undergraduate B.Tech. Bioinformatics program to the proposed B.Tech Bioinformatics and Data Science was not approved.

4. To discuss and finalize the course structure of new post graduate program; MSc Microbiology. This program is proposed to be initiated in place of MSc Bioinformatics. M.Sc Bioinformatics program did not admit any students since past three years. For this, a Departmental level committee consisting of Dr Rahul Shrivastava, Dr Anil Kant, Dr TirathaRaj and Dr Ashok Nadda have been constituted to submit course structure (Proposed Course with modifications).

**Deliberations:** Dr Rahul Shrivastava presented the proposal. The matter was discussed in details and following changes were made in the proposed course structure.

- 1) "Fungal Biology" has been included as core course in semester 1
- 2) Name of Basic Bioinformatics and respective lab changed to Bioinformatics and Bioinformatics lab respectively to coincide courses in MSc Biotechnology, so as to offer these common courses in these programs.
- The contents of microbial physiology to be included in the course "General Microbiology"
- 4) "Microbial Genetics and Physiology" will not have any overlap with that of "Molecular Biology "Course credits of Basic Mathematics and Statistics and Bioinformatics reduced from 3 to 2 to coincide with courses in MSc Biotechnology.

**Resolution:** The course structure of MSc Microbiology is approved after including the suggestions in the structure and with a commitment to incorporate suggestion while developing the syllabi of specific courses mentioned above.

Anil Kant Associate Professor

Member Secretary, BoS Department of Biotechnology

JUIT Waknaghat

Prof. Sudhir Kumar

Chairman BoS, HOD Department of Biotechnology, JUIT Waknaghat