Department of Biochemical Engineering and Biotechnology
Minutes of the Departmental Faculty Board Meeting
(DFB-06/2023-2024)

26/02/2024

The sixth meeting of the *Departmental Faculty Board* for the academic session 2023-2024 was held on **Friday, February 23, 2024,** at **10:30 AM** in the Committee Room of the Department. The main agenda of this meeting was to discuss the course list for the next semester and budget requirements for the next financial year.

The following members were present:

Prof. Ritu Kulshreshtha, Chairperson
Prof. KJ Mukherjee
Prof. Sunil Nath
Prof. D. Sundar
Prof. Preeti Srivastava
Prof. Ashish Misra
Prof. Ishaan Gupta
Prof. Lucinda Doyle
Prof. Kumari Priti Sinha
Prof. Anjan Roy
Prof. Amit Das, Convener

Item 1: Confirmation of minutes of the previous special DFB meeting held on January 5th, 2024
*The minutes of the previous DFB meeting (DFB-05 of 2023-24) held on **January 5th, 2024,** were discussed, and confirmed.*

Item 2: Matters arising if any.
HOD informed the DFB that Prof Indranil Biswas will likely not going to teach a course as a visiting faculty as proposed earlier. Afterwards, the DFB discussed the policy to offer courses offered by visiting faculty. DFB proposed that any proposed course with strong overlap with any of our currently offered regular courses, should have appropriate prerequisites to remove any kind of conflict.

Item 3: Proposed course list for the next semester
DFB discussed the proposed course list as shared by Prof Lucinda. In this connection, HOD informed the DFB that Dr. Jatin Panwar, faculty candidate who interviewed with our department, has received an offer to join DBEB from the institute. He has subsequently committed to join before the next semester. The DFB proposed that Dr. Jatin may be requested to consider one of three options for UG core chemical engineering courses to offer exclusively for DBEB students. He will be requested to adapt the courses accordingly. The three options are the following: Transport Phenomena (CLL110), Process Dynamics & Control (CLL261), and Mass Transfer-I (CLL252).

The proposed course list for semester 1, 24-25 with suggested slots is attached as Annexure-1. Final course list will be shared when all slots are finalized.

Item 4: Budget allocation (2024-2025)
DFB recommended the department should allocate some budget to create a common facility in the new academic building which can be used by the students for daily purposes. This will ease the research work of PG students, and PhD scholars once we shift there – they don't have to make frequent trips to the current UG lab for some standard tasks. The inputs were received from all faculty and common facility in-charges. The proposed budget for DBEB, FY 2024-2025 is attached as Annexure 2.

Item 5: Proposed Room and Lab allotment to new faculty.
Prof IG suggested Dr Jatin can share his lab to settle down after he joins. In this connection, Prof DS suggested that students working with Prof IG, AR and AD doing computational work can share his lab.

Item 6: Note received from Prof. Ishaan Gupta regarding the roles of BETA society members.
DFB discussed the responsibilities of BETA society, especially the UG members, and a few issues that surfaced during recent programs. DFB recommended that during the upcoming selection of BETA team members the selectors should choose separate personnel for different responsibilities. DFB also recommended that the PG students should be involved more with BETA activities.

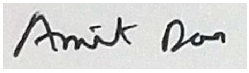
Item 7. Discussion on BAP agenda
DFB discussed the following BAP agenda item: To consider recommendations of the Committee constituted to look into matters linked to the Final Stage of the PhD Degree:
https://owncloud.iitd.ac.in/nextcloud/index.php/s/AX3t2bBmeHFwDKd

DFB discussed several points related to the new suggestions regarding the PhD program and agree with the proposed points.

Item 8. Biosafety and bioethics
HOD requested Prof PS to schedule the proposed meeting on biosafety and bioethics involving all master's and PhD students.

Item 9. MTP evaluation.
DFB suggested we should continue the existing modality for evaluation of mid-semester presentations and reports.

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



Amit Das,
DFB Convener

Annexure 1

Courses- Semester I, 2024-2025

Available caps from Institute: 30 / 60 / 90 / 150 / 300
[Deviations require justification to Institute (e.g. due to lab capacity)]

Institute slotting rules:
UG core: A,B,C,D,E,F (i.e. mornings)
Electives not to be in core slots (can be in J/H/AA/AB/AC/AD)

Departmental Core Courses (DC)

B.Tech

Sl	Course Number	Course Title	L - T - P Structure			Credits	Course Coordinator	Slot	Cap
			L	T	P				
1	BBL131	Principles of Biochemistry	3	0	3	4.5	LED	D	90
2	BBL132	General Microbiology	3	0	3	4.5	SS	F	90
3	BBL133	Mass and Energy Balances in Biochemical Engineering	3	0	0	3	KPS	H	90
4	BBL231	Molecular Biology and Genetics	3	0	3	4.5	AR	D	90
5	BBL331	Bioprocess Engineering	3	0	0	3	AM	B	90
6	BBP332	Bioprocess Engineering Lab	0	0	3	1.5	AM	P	90
7	BBL731	Bioseparation Engineering	3	0	3	4.5	SN	C	90
8	BBL732	Bioprocess Plant Design	3	0	2	4	ZAS	B	90
9	BBL733	Recombinant DNA Technology	2	0	3	3.5	RK	D	90
10	BBQ301	Seminar Course – I	0	0	2	1	PM	P	30
11	BBQ302	Seminar Course – II	0	0	2	1	AD	P	30
12	BBD451	Major Project Part 1 (BB1)	0	0	6	3	KPS	P	90
13	CLL110 or CLL261 or CLL252	Transport Phenomena/ Process Dynamics & Control /Mass Transfer-I (TBC)	3 3 3	1 1 0	0 0 0	4 4 3	JP		

M.Tech

Sl	Course Number	Course Title	L - T - P Structure			Credits	Course Coordinator	Slot	Cap
			L	T	P				
14	BBL771	Microbial Biochemistry and Molecular Biology	3	0	2	4	PS/PM	B	30
15	BBL772	Data Analytics and Informatics in Biotechnology	2	0	2	3	AD	A	30
16	BBL773	Applied Mathematics for Biochemical Engineering	3	0	0	3	AN	C	30
17	BBD855	Major Project Part 1 (BEM)	0	0	12	6	AR	P	30

Program Electives (PE)

Sl	Course Number	Course Title	L - T - P Structure			Credits	Course Coordinator	Slot	Cap
			L	T	P				
18	BBL735	Genomics and Proteomics	2	0	2	3	IG	D	30
19	BBL737	Instrumentation and Analytical Methods in Bioengineering	2	0	2	3	RK	E	30
20	BBL754	Optics with Life Sciences	3	0	0	3	RE	AB	30
21	BBL756	Plasmid Biology	3	0	0	3	KJM	AA	30

MSR and PhD

Sl	Course Number	Course Title	L - T - P Structure			Credits	Course Coordinator	Slot	Cap
			L	T	P				
22	BBD895	MSR thesis	0	0	72	36	LED	P	60

Annexure 2

Department of Biochemical Engineering and Biotechnology (DBEB)

(Use additional rows whereever required)

Plan/Capital/Equipment (OH-35) budget requirements

Sr. No	Name (in order of priority)	Description	Specify priority: (1) Critical, (2) Essential, (3) Long-term	Cost estimate (in lacs)	Justification
1	Milli Q	Type 1 & Type 2 water purification system	Essential	1800000	Required by all the labs of the Department
2	RO water	for various lab supply of salt free/minimal TDS water	Essential	300000	RO water is required for running the autoclave, bioreactor and for routine reagent preparations in lab experiments
3	Ice Machine	For Ice flakes for laboratory experiment purpose_Celfrost make, capacity-315 kg/24 Hrs,Bin capacity-125 Kg	Critical	400000	Ice machine is required on routine basis by several labs of the Department
4	Autoclave	Equitron make SLEFA series model - cap- 180L	Essential	400000	Autoclave is required for sterilization of laboratory glasswares, culture media and reagents
5	4degree refrigerator	Celfrost	Long term	60000	This is required for storage of heat sensitive chemicals and biochemicals
6	Deep freezer(minus 20)	Celfrost	Long term	100000	This is required for storage of molecular biology grade regaents and biochemicals
7	Minus 80	Thermo Scientific	Essential	1200000	This is required for long term storage of microbial strains
8	Pipette (1ml)	Gilson make (1000ul)	Critical	300000	These are required for accurate transfer of lower volumes of different reagents
9	Microwave	LG make	Essential	18000	This is required for preparation of agarose gels and microbiological media
10	Compressor	ELGI make	Long term	250000	This is required for air supply in bioreactor related experiments
11	Shaker	Orbitek make_single tire	Long term	400000	This is required for cultivation of aerobic microorganisms
12	Desktops (Quantity=8)		Long term	320000	For the Common Labs, Store and Office Use
			Total	5548000	

Non-Plan/Recurring budget (OH-31) requirements

1	Departmental Operational Expenses		Critical	200000	Photocopier bills, stationary, Imprest, repair of furniture and
2	PhD/MSR/Mtech Examiner Fee/Guest House/DBEB common programs		Critical	20000	Examiner fees, guest house charges, Biosphere (annual
3	UG Teaching and Research		Essential	1200000	UG practicals and research work
4	PG Teaching and Research		Essential	600000	PG practicals and research work
5	AMC for equipments in shared facility		Essential	500000	5 HPLC- (2 lakhs) , GC (0.4 lakhs), Milli Q unit- (0.5 lakhs),
6	AMC for picking biowaste disposal		Critical	100000	All Labs
	Repair of Teaching Equipments		Essential	500000	Compressor in UG lab- 1 lakh, Shaker repair (UG lab)- 2.5 lakhs
7	Repair of Equipments in common labs		Essential	700000	HPLC (5 Lakhs), HPLC (Instrumentation Lab)- 2 Lakhs,Bioprocess Lab- (Mass Spec maintenance-2.5 Lakhs), LC (AMC- 2 Lakhs,
			Total	3820000	

Faculty laptop budget requirement (OH-35)

1	1 Laptop			75000	Prof. Ritu Kulshreshtha
2	1 Laptop			75000	Prof. Lucinda E Doyle
3	1Laptop			75000	Prof. Jatin Panwar (New faculty- will join on 6 May, 2024)
4	1 Laptop			75000	Prof. Shilpi Sharma
			Total	300000	