The seventh meeting of the Departmental Faculty Board for the academic session 2023-2024 was held on Monday, March 18, 2024, at 3:00 PM in the Committee Room of the Department. The main agenda of this meeting was to discuss the comments received from students during the class committee meetings.

The following members were present:

Prof. Ritu Kulshreshtha, Chairperson
Prof. KJ Mukherjee
Prof. Atul Narang
Prof. Prashant Mishra
Prof. D. Sundar
Prof. Preeti Srivastava
Prof. Ravikrishnan Elangovan
Prof. Ashish Misra
Prof. Ishaan Gupta
Prof. Lucinda Doyle
Prof. Kumari Priti Sinha
Prof. Amit Das, Convener

**Item 1: Confirmation of minutes of the previous DFB meeting held on February 23rd, 2024**

The minutes of the previous DFB meeting (DFB-06 of 2023-24) held on February 23rd, 2024, were discussed, and confirmed.

**Item 2: Matters arising if any.**

HOD informed the DFB that the incoming faculty Dr Jatin Panwar has expressed his willingness to teach the following course: Mass transfer – I (CLL252) in the semester I, 2024-25 for DBEB students.

(Immediate action: HoD DBEB and HoD ChE to discuss regarding floating of the course, Prof Lucinda to consult with CGR and TTI ChE regarding the course number and slot).

**Item 3: Class committee meeting minutes/feedback**

DFB discussed the feedbacks received from individual class committees comprising of representatives from the respective batch and provided specific comments as listed below. The DFB comments are in orange.

1. **Class of 2020**
   a. One credit course to be floated at least every even semester such that students need not do more credits than required.

   DFB suggested having a policy in place before the next semester for a 1-credit course.

   b. Some equipments are not functional in UG lab

   DFB recommended the respective course coordinators to revisit and update the templates of the practical labs and make a request for solving any repair or maintenance of specific equipment through NPN budget and/or PLN budget.
c. Use of computer lab in the department for BBL434, current issue with this is that the PCs are unable to connect to the internet thus installing softwares for the lab cannot be done (some password issue).

Prof IG updated that the said issue has now been resolved.

d. For placements, students would give the name of the company to whom the professors may talk to.

Prof IG informed the DFB that the students do not actively participate with the OCS unit and in any placement-related activities and meetings. DFB noted that more enthusiastic engagement is required from the students’ side. The faculty were also asked to suggest the names of the core companies who may be interested. To enhance participation in the OCS activities, it was suggested to hold open and transparent election of the post holders for Nucleus members for the department who will seriously champion the OCS activities.

2. Class of 2021 (see annexure 1 for detailed feedback received from the students)

a. BBL431 Bioprocess Technology (AM)
   i. It was requested that slide content be mapped more clearly to the textbook, e.g. reference chapter as footnote beneath image.
   ii. It was requested that details of presentation requirements be circulated by email 1-2 weeks in advance.

Prof. AM mentioned that he is using multiple textbook and references to more comprehensively cover the topic Bioprocess Technology. He also clarified that the slides were used to project images and then teach using the blackboard to encourage students to attend and ask questions as is normally done in ‘engineering courses’. He mentioned that the students had asked for the class project presentation to be rescheduled on 2 occasions (once in class and once by the CR emailing it to him). The project asked them to perform a mass and energy balance on any bioprocess of interest by making assumptions and without resorting to copying as students had mentioned was done in a previous course during class discussions. (This was mentioned in class multiple times - the presentation was 5 slides to be presented for 3-5 minutes). From hereon, he would make the class project much simpler based on the feedback and the mid-sem evaluation. He also mentioned that he will add MCQs on the question paper.

b. BBL432 Fluid Solid Systems (KPS)
   i. It was requested for the instructor to teach more slowly.
   ii. A detailed answer key was requested to be displayed while showing the minor/major marks.
   iii. It was noted that this course has overlap with ChemE courses (can be considered during curriculum revision)

DFB discussed the concern regarding the overlaps of contents of this course with the content of ChemE courses. DFB noted that this may be true for some other courses as well which should be rectified in the curriculum revision. DFB recommended that we should consider revamping our BB1 curriculum such that there is minimal dependence on the Chemical Engineering Department for teaching courses to DBEB UG students and include only those courses that our departmental faculty can offer with a distinct focus on biochemical engineering and biotechnology.
c. **BBL433 Enzyme Science & Engg. (RE)**
   i. It was requested that deviations in the standard exam timing (from 2 h to 1.5 h) be announced by email ahead of time.

   No specific comment.

d. **BBL434 Bioinformatics (IG)**
   i. It was requested for syllabus to be covered in less depth as some students feel the current workload exceeds a three credit course.

   DFB discussed the high significance of the contents covered by BBL434, which are relevant in every domain of biochemical engineering and biotechnology – be it in academia or industry. DFB recommended that in future BBL434 should be made into a possibly 4 or 4.5 credit course including labs. Prof. IG also assured that the classes taken per week will be as per the current credit structure of this course.

e. **Department Electives**
   i. It was reported that there are a considerable number of students who have failed/dropped CLL110: Transport Phenomena in previous semesters and whose degree will be extended as a result. The course is taken by students of 3 depts. (Biochemical and Biotechnology, Chemical Engineering and Material Science and Eng.). There are more than 15 students of 2021 and earlier entry and possibly more 2022 entry students (who are still doing this course this semester). It is usually floated in the odd semester (Sem 1) and it was noted that the DBEB students have no free slot in their degree where they can retake this course once they fail [slot clash is with BBL732 Bioprocess Plant Design (ZSA) - B slot]. Therefore, it can only be taken if it is also offered in a different slot, or if it is offered in the even semester (Sem 2) or as a self-study course/summer course.

   List of students known to be affected (non-exhaustive):
   1. Kushal Singh Rawat 2021BB10345
   2. Neetan Kumar 2020BB10031
   3. Meenakshi Mina 2021BB10012
   4. Deep Patel 2021BB10315
   5. Syed Mohammad Husain 2021BB10339
   6. Amogh Vijayvargiya 2021BB10007
   7. Pranav Kharat 2021BB10365
   8. S Shashank Choudhary 2021BB10362
   9. Anantre Aditya Ashok 2021BB11205
   10. Sara Sinha 2021CH10023
   11. Priyansh Jorwal 2021BB10013

   DFB recommended that HOD to conduct a separate meeting with the students with a backlog and who have failed CLL110 to decide the policy to be undertaken. DFB also recommended a
possible solution could be that the course may be offered in the next odd or even semester with a different course number only for the BB1 students.

ii. It was requested for more 4 credit DEs to be available.

DFB suggested that there should be clear policy to offer 4-credit courses. This should be decided before the next semester.

iii. BBL745 Combinatorial Biotech (PS): it was noted that students would like the audit policy of 45 to be reconsidered.

No specific comment.

iv. It was requested for there to be more options to re-take BBL231 (Molecular Biology & Genetics), due to slot clashes.

DFB suggested that this should be considered and rectified before BBL231 is offered next time.

3. **Class of 2022**
   a. **Course specific concerns**
      i. CLL231: A request was made in both BB and Chemical committee meetings for relaxation of surprise quiz policy and clarification was requested on the course policy as it was changed recently.
      ii. CLL251: A request was made in both BB and Chemical committee meetings to consider only n out of n+1 quizzes taken. Another request was made for relaxing the grading policy.

      Regarding both these concerns, DFB recommended that HOD may contact the course coordinator through the HOD of the Department of chemical engineering.

   b. **Department specific concerns**
      i. Students face problems in chemical courses due to lack of knowledge about Numerical Methods which are separately taught to chemical students in their third semester.

      DFB discussed options to address this concern. DFB recommended that one solution that can be readily implemented is opting for CLL113 which focuses on numerical methods for chemical engg. Alternatively, DFB suggested that as a the current MTL courses is not adequate, we should request the mathematics department to design such a course as part of institute core that will fulfil the specific modules on numerical and computational methods.

      ii. Students also feel that the chemical courses are not directly useful, and can be made more relevant if our department could take up these courses, by adding the biological applications in these courses.

      This concern has been addressed by DFB above as part of class of 2021 feedback point b.
iii. Students will be facilitated if the department floats a form to get their preference about which department electives should be floated in next semester. This already takes place in other departments.

DFB suggested that this may be considered and discussed before the next semester.

4. Class of 2023

DFB recommended to forward the comments to the Dean (academics), and the respective course coordinators. The comments can be found in Annexure 2.

5. Class of PG students

DFB discussed the feedback from PG class committee in detail. The minute of that meeting is attached as Annexure 3. Following are the comments from DFB:

a. Regarding the BTP and MTP evaluation: DFB suggested that the respective coordinators should share the consolidated marks with the students.

b. Regarding placement – Prof Ishan Gupta reiterated that the PG students don’t turn up for the meetings related to placements. DFB recommended that the PG students should be strongly encouraged to take leadership.

c. Regarding easier facilitation of common instrumentation facilities in the department: DFB noted that students did not inform the names of the specific equipment during the meeting. DFB recommended that a common email to the PhD students should be sent asking them to mention the list of equipment/facilities. Then those can be purchased and made accessible through the instrumentation lab.

Item 4: Policy regarding the usage of -80 in the Instrumentation lab

DFB discussed the issue raised by Prof IG regarding incomplete accessibility of the -80 freezer (owner-Prof. RKE, project funded) housed in the Instrumentation lab with the understanding that it will be available to all faculty in the department like a shared equipment (as per usage rules agreed to in the previous DFB minutes). DFB generally agreed that any equipment housed in the Instrumentation facility must be accessible to DBEB faculty and students 24 x 7. Thus, Prof. RKE was asked to move the -80 freezer currently kept in the Instrumentation facility to his own lab as soon as possible. DFB also suggested that all -80 freezers bought from PLN03 funds must be moved to Instrumentation Facility and if they are in non-working condition then NPN05 funds may be used for its repair.

Item 5: Selection of students for 3 min thesis presentation in the RSF meeting.

DFB recommended that Prof Prashant Mishra as the chair of DRC may be requested to come up with the criteria through DRC. Then the same can be implemented in the future.

Item 6: FIST grant

DFB recommended that the young faculty should come together with a common themed proposal for FIST grant.
The meeting ended with a vote of thanks to the chairperson.

Amit Das,
DFB Convener
Annexure 1: 2021 class committee detailed feedback received from the students

Agenda for Class Committee meeting

Query Regarding BBL431
1. Need more clarification in a documented form about things regarding course
2. The PPT are super confusing even if you attend the classes its just images
3. Project detail is not mailed we want exact things listed that we need to do in that project
4. Nothing is clear in this course, the course syllabus is very vast and it very difficult to cover
5. In minor syllabus was quite vast and it was difficult to prioritize whether to cover more or to read in depth.
6. Please upload better slides

Query Regarding BBL432
1. The pace is a bit fast but otherwise everything is very good
2. Teach slower

Query Regarding BBL433
1. Paper was lengthy and there wasn't enough time to go through every question
2. At least should have clarified about the time duration of exam in a mail or something we should Not get to know that in the middle of the paper.
3. Please make the exam closed book but ask things taught in class.

Query Regarding BBL434
1. Please make this course relative grading. Average is very less even after getting double the mark of avg we might get very less grade as it is absolute. since we also have heavy load in this course with lab hours, making it relative with 7 grade will be better.
2. Too much syllabus is covered in the classes. Sir should understand that many students don't have completed idea of COL100, i.e., don’t pursue with coding. Hence lagging in the classes. Also if the course is 3 credits why do we even have labs? The labs have internal classes in them from which questions are asked in the exams. I request you to please increase the credits to 4 or omit the labs
3. BBL434 prof is taking 3 instead of 2 classes each week. Workload is getting too much
4. Too much syllabus is covered in the classes and in labs too. Sir is teaching the course assuming, we are proficient in coding and expects us to write pseudo code in 60 secs. Which is not the case, therefore it is very hard to keep concentration, hence many students are lagging in the classes. Also the course is 3 credits and we have 3 lectures and a 3 hour lab. I request you to please increase the credits to 4-4.5 or omit the labs.
5. I understand that professor has very good reasons to teach this much syllabus and I totally support him this but we should get the credits for the course proportionally, else it is not fair for us.

Query Regarding Department Electives
1. BBL 745 : what are the audit policy why is it 45
2. On 45 you get a decent grade
3. Its too much effort for someone who is not interested in the course and just want to do it because they have to complete there department electives
4. A 4 credit DE in odd semester
5. Please float CLL110 or else degree will get extended
6. Any plans on floating immunology course as DE, approx. date for 1-credit DE registration
7. Float CLL110 in the summer please
8. I have a F grade in BBL231. I cannot take this course next semester as there is another recommended course in the same slot next semester. I am ready to take the course again but please float it in another slot.
9. many students have not passed cll 110 and have no slots in future semester to take the course. can the course be floated in any other slot. there are sufficient students including the branches of biotech, material science and chemical engineering who have this problem.

10. i am writing on behalf of the students who have failed/dropped cll110: transport phenomena in previous semesters. the course is taken by students of 3 depts. (biochemical and biotechnology, chemical engineering and material science and eng.). this is a very crucial course and a prerequisite for many following ones. there are more than 15 such students of 2021 and before entry and there might be more in the 2022 entry batch (who are still doing this course this semester). it is usually floated in the odd semester and unfortunately the students of the biotech dept. they have no free slot in their 4-year degree where they can retake this course once they fail. therefore, it can be only taken in the even semester or as a self-study course. on behalf of these students, i request you to please float the cll110 course in a suitable slot in the even semester of 2023-24. here is a list of requestors with their name and entry number.

   1. Kushal Singh Rawat 2021BB10345
   2. Neetan Kumar 2020BB10031
   3. Meenakshi Mina 2021BB10012
   4. Deep Patel 2021BB10315
   5. Syed Mohammad Husain 2021BB10339
   6. Amogh Vijayvargiya 2021BB10007
   7. pranav kharat 2021BB10365 S
   8. hashank Choudhary 2021BB10362
   9. Anantre Aditya Ashok 2021BB11205
  10. Sara sinha 2021CH10023
  11. Priyansh Jorwal 2021BB10013
Annexure 2

2023 Class committee Feedback
3 responses

Publish analytics

How was your experience of semester 1 academically? Was the number of subjects too many? Semester load was adequate? Grading was reflecting the effort done? Topics were taught with practical relevance?
3 responses

my first semester was good enough. I was in batch a, and the no of subject were not too many. semester load was also adequate we have labs, projects and assignment too. in some the grading reflect the effort but in some it doesn't. like in pyp and elp efforts were much more but the grading were not good, and the professors coming in different group were different and there viva grading were also different and no normalization were done in the courses.

It was quite tough for me to manage all my courses in my Sem-1 as somewhere I felt No. Of courses were too many. I am not able to get till now that what's the point to have 3 lab courses in the first year of just 2 credits?

It was decent. Number of subjects was fine. Semester load was unevenly distributed. November was hellish as too many tests were there. Grading was not good at all, especially for courses cml 101, cmp100 and mcp100. Topics were fine

How is the current semester going? Is there any particular course you are facing challenge? What kind of challenge?
3 responses

my current semester is not going well. my midsem exams didn't well. also this sem has some courses which require different set of skills like mcp100 and mcp101, in which I am not able to perform very well. Also, the marking of midsem copies of mtl101 was not good. ApI is also a tough course that requires a lot more effort.

In ELL I am struggling a lot, how to prepare it structurally.

Current semester is going better. MTL101 is challenging as the marking scheme is very rigid which is causing the overall average to drop
Is there any suggestions on course load, style of teaching or any challenges faced?
3 responses

the course load is ok, just we have more labs in this semester than the previous. the teaching could be improve.

Teachers should teach in Hinglish mode...Coz As a fresher we take time to grab that fast English. That the only suggestion enough I think to solve the problems of many students so the students would take classes with joy instead of missing those.

Grading should be a bit more considerate for mtl101 and scores of pyp100 lab should be normalized

How could the overall experience of the year 1 program improved?
3 responses

overall its good if the grading is good and at avg we get 7 then its fine

1. Give Lectures in Hinglish mode (Hindi+English)
2. Reduce lab courses in 1st year if it's only of 2 credits
3. Rest things you better know

Active mentors who keep enquiring about their mentees on a regular basis( I'm happy with my mentor ) and profs to be more considerate as it is the first year of college
Annexure 3

Department of Biochemical Engineering and Biotechnology

Minutes of the PG Class Committee Meeting

11/03/2024

The Class Committee Meeting of the PG students (M.Tech., MS(R), and Ph.D.) of DBEB, for semester-2 of Academic year 2023-2024 was held on **Monday, 11th March, 2024, at 1600 Hrs** in the Committee Room of the Department.

The following members were present: Prof. Ritu Kulshreshtha (HoD), Prof. Zia (Ph.D. coordinator), Prof. Lucinda (MS(R) coordinator) and Prof. Anjan (M.Tech. coordinator)

The following comments were received:

**M.Tech.**:

- Students conveyed the problem they face in finding accommodation in their 1st year. It was told to them that this is infrastructure issue that IIT Delhi faces because of its prime location, and best efforts are being made to optimize the resources that are available.
- Students requested for the possibility of choosing elective courses from outside the department. They were informed that the new curriculum should be addressing that issue.
- Students requested for more core sector companies to be invited for placements. The HoD discussed the ideas of having industry days, Bio-Fare with all three departments, and online series with industries and biotech companies (on Saturday or after 5:00 PM on weekdays), etc. It was also suggested to students to actively work with the Department placement coordinator and form a common mailing list of industrial representatives.
- HoD also discussed the possibility of departmental visit to R&I Park / incubation center, which was welcomed by students.
- Students requested for industry internship opportunities in the summer. They were informed that such a provision is not there currently, and that they are required to start their MTP in the summer. However, the new curriculum review committee is looking into it.
- Students enquired about the possibility to get industry-based PhD. They were informed that previous attempts from IIT ran into issues like IPR, patents etc. But we can look into again after we start interacting more with the industry representatives.
- Regarding courses – students requested project-oriented courses or industries specific courses instead of common courses to all. It was suggested to them that once we get the industry on board through the various possible outreach programs, we can know what skills they are looking for, and then accordingly think about re-shaping our courses.
- Students requested for a course in research writing and seminar. HoD conveyed that such a course, specific to DBEB, is being considered.
• Students requested for training in writing PhD application letter to Professors and
academic CV. They were suggested to request their respective MTP supervisor for
the same as any faculty member would be capable of helping with that.
• Students requested that they are more clearly made aware of the scope and policies
of contingency grant. The HoD requested the M.Tech. Coordinator to get in touch
with the PG section to get the relevant document.
• Students requested to know the schedule of their final MTP presentation. It was
conveyed to them that it will take place as per institute calendar.
• Students requested for feedback along with marks for their MTP work. It was
conveyed to them that the Q&A session after the presentation actually includes
feedback from the faculty. For more detailed insights into the marks they obtained,
their presentation quality, their report, and how their work is going they were
suggested to discuss with their respective supervisors.

MSR: No comment

PhD:
• PhD students also showed interest in placements in Core companies.
• Students requested for expanding the scope of contingency to books, electronic
items like hard drives, and softwares.
• Students requested for more transparency in the selection process towards RSF
events. They were told that some student’s name came in late and therefore could
not be included. In response, they suggested circulation of Google forms to all the
members of the department, for RSF events in future.
• Students requested easier facilitation of common instrumentation facilities of the
department.
• Students requested that the gate of department should remain open in odd timings
as well. HoD is already coordinating that.
• Students requested facilitation of drinking water and clean toilets (especially female)
in the department.