Department of Biochemical Engineering and Biotechnology

Dated: 22nd February 2013

Minutes of the special Departmental Faculty Board Meeting (2012-2013) held on 21st February 2013 at 12 noon in the Departmental Committee Room (I-230). Following members were present:

1. Prof. T. R. Sreekrishnan Chairman
2. Prof. V. S. Bisaria Member
3. Prof. G. P. Agarwal Member
4. Prof. Saroj Mishra Member
5. Prof. A. K. Srivastava Member
6. Prof. Sunil Nath Member
7. Prof. P. K. Roychoudhury Member
8. Prof. Prashant Mishra Member
9. Dr. Atul Narang Member
10. Dr. D. Sundar Member
11. Dr Ritu Kulshreshtha Member
12. Dr. Ravikrishnan Elangovan Member
13. Dr Praveen Kaul Member
14. Dr. Shilpi Sharma Member Convenor

1. Discussion on note received by Dean (Academics) regarding Undergraduate Curriculum Implementation

Note received by Dean (Academics) was extensively deliberated upon. There was no feedback with respect to the matter regarding tutorials in the new curricular frame-work, and Schedule of Institute core courses. Regarding the course templates from different departments the board had the following views:

*Introductory Biology for Engineers*

The course content is too advanced for an “Introductory” course, with over emphasis on 2 modules, viz. Darwinian evolution & molecular perspective, and Phylogenetic trees, study of inter and intra- species relationships. Such in depth treatment of these modules is not required at this preliminary
stage. Further, modules like Cancer Biology, and Stem Cell Biology are at levels higher than what a 10 + 2 student can appreciate, without any basic introduction to the biological system. The following topics were suggested for incorporation in this Introductory course: Cell Structure, Biomolecules and Self assemblies, Molecular Basis for Cellular Diversity. Bioenergetics, Information storage and Processing, Cellular networks, Molecular recognition (concepts of immunology, antigen-antibody, enzyme-substrate).

Mathematics

Both Mathematics I and II seemed too intense as 1st Year courses. In module 5 of Mathematics II (Linear Algebra and Differential equations), Numerical Methods should be included. Matlab or Mathematica should be a part of either of the courses. Also, Linear Algebra (Mathematics II) should precede Vector Calculus (Mathematics I) because many ideas of latter are essentially concepts of linear algebra.

Computer Science

Atleast one language should be focussed upon.

It was considered important that students’ feedback should be taken into account when finalizing the course templates. The need to have a relook at the content of our departmental courses in view of final Course template for “Introductory Biology for Engineers” was also felt.

Head was requested to communicate the same to Dean (Academics). 

(Act: Head)

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

Shilpi Sharma
Convenor

All Faculty members