

AMITY UNIVERSITY HARYANA

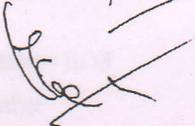
Amity Institute of Biotechnology
Minutes of Meeting of BOS (Board of Studies)
July 14th, 2017

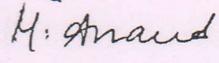
The meeting of the BOS (Board of Studies) was held on July 14th, 2017 (10:30AM) and was attended by the Faculty of Biotechnology, Amity University Haryana under the Chairmanship of the Director, AIB/AIISH.

The following were present:

(a) As Member of BOS - AIB

(i) Prof (Dr.) Rajendra Prasad, Chairperson , BOS 

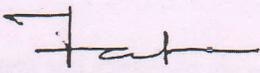
(ii) Prof (Dr.) S M Paul Khurana, Member 

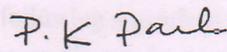
(iii) Prof (Dr.) Manju Anand, Member 

(iv) Prof (Dr.) S. K Ray, Member 

(v) Prof (Dr.) V B L S Prasad, Member

(b) As External Experts

(i) Prof (Dr.) T Satyanarayana (DU-NIST) 

(ii) Prof (Dr.) P K Paul (AUUP) 

Amity University Gurgaon

Amity Institute of Biotechnology

MINUTES OF BOARD OF STUDIES MEETING

1. The Board of Studies Meeting was conducted in Conference Room – A Block (Ground Floor) on 14 July 2017 and on subsequent days.

2. The following were present:

(a) As Member of BOS - AIB:

- (i) Prof (Dr.) Rajendra Prasad, Chairperson BOS
- (ii) Prof (Dr.) S M Paul Khurana, Member
- (iii) Prof (Dr.) Manju Anand, Member
- (iv) Prof (Dr.) S. K ray, Member
- (v) Prof (Dr.) V B L S Prasad, Member

(b) As External Experts

- (i) Prof (Dr.) T Satyanarayana (DU-NIST)
- (ii) Prof (Dr.) P K Paul (AUUP)

3. Agenda:

At the outset the Chairman welcomed all the members present and explained the purpose of the Meeting. He then gave a brief on each of the following Agenda issues to be taken up:-

- To rationalize number of credits and contact hours for students to align with best practices and market demands
- Revision of B.Sc. Biological Science Programme

4. To enhance the research and innovation activity for the students and to give more time to students for self study it is required to review the existing credit structure. In the Institute and Universities of repute the requirement of number of credits for getting the BTech and MTech degree is very less than for the BTech MTech degree programme of AIB. Taking the same into consideration it was unanimously decided in the meeting that the credit requirement is revised to 195 for Bachelors in BioTechnology and 100 for Masters in BioTechnology



5. Methodology followed:

- A balanced curriculum throughout all the semesters in terms of credit to confirm to the regulatory requirements
- Replace / discontinue subjects with lower relevance
- Merge subjects wherever possible
- Reducing number of credit for the courses having less relevance to the programmes
- Shifting of the courses which are prerequisite to the related courses being offered in the programmes

6. The detailed deliberations were made as per the agenda and the methodology. The existing programme structures and detailed syllabi of the programmes listed below were unanimously agreed and revised according to the new credit requirements as mentioned in the point number 4 and methodology explained in the point number 5

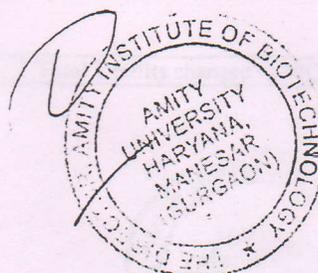
- (a) Review the Programme Structure of ongoing MSc Biotechnology -130to 100 Credits.
- (c) Review the Programme Structure of ongoing M.Tech Biotechnology - 130 to 100 Credits.
- (c) Review the Programme Structure of ongoing MSc Bioinformatics- 130 to 100 Credits.
- (d) Review the Programme Structure of ongoing BTech Biotechnology- 210 to 195 Credits.
- (e) Review the Programme Structure of ongoing BTech Bioinformatics- 210 to 195 Credits.
- (f) Review the Programme Structure of ongoing BTech + MTech Biotechnology (Dual) 280 to 260 Credits.
- (g) Review the Programme Structure of ongoing BSc + MSc Biotechnology (Dual) 280 to 250 Credits.
- (i) No change was suggested in the programme structure of BSc Biotechnology and BSc Biological Science



Review of Existing Programme Structure of MSc Biotechnology : 130 Credits to 100 Credits

(a) Table below lists out semester wise changes after discussion by the members of the Board. It also gives the justification in support.

Sem.	Existing	Proposed
1 st Semester	BTH4101: Biochemistry (3Credits)	Its credit has been decreased by 1.
	BTH4102: Plant and Animal Physiology(3Credits)	Its credit has been decreased by 1.
	BTH4105: Foundation Course 1 (Mathematics)	Its credit has been decreased by 1.
	BTH4106: Foundation Course 2(Physics)	Its credit has been decreased by 1.
	Total Credits of 1st Semester was 29Credits	Total Credits changed to 25 Credits
2 nd Semester	BTH4201 Molecular Biology(3Credits)	Its credit has been decreased by 1.
	BTH4203 Immunology (3Credits)	Its credit has been decreased by 1.
	BTH4205 Cell Biology (3Credits)	Its credit has been decreased by 1.
	BTH 4236 Research Article PresentationI(3Credits)	It has been discontinued and no subject is added in its place
	Total Credits :30	Total Credits:24
3 rd Semester	BTH4301: Animal Biotechnology(3Credits)	Its credit has been decreased by 1.
	BTH4302: Biophysics and Structural Biology (3Credits)	Its credit has been decreased by 1.
	BTH4303: Genomics and Proteomics(3Credits)	Its credit has been decreased by 1.
	BTH4305: Bioinformatics and Computational Biology (3Credits)	Its credit has been decreased by 1.
	BTH4335: Summer Internship Evaluation (9Credits)	Its credit has been decreased by 3.
	Total Credits of 3rd Semester was 41 Credits	Total Credits changed to 31 Credits
4 th Semester	The credits of BTH4437: "Dissertation /Project report/ Presentation/ Viva Voce" has been decreased by10.	
	Total Credits of 4th Semester was 30 Credits	Total Credits changed to 20Credits



Review of Existing Programme Structure of MTech Biotechnology : 130 Credits to 100 Credits

(a) Table below lists out semester wise changes after discussion by the members of the Board. It also gives the justification in support.

Sem.	Existing	Proposed
1 st Semester	BTE4101: Biochemistry and Metabolic Regulation (3Credits)	Its credit has been decreased by 1.
	BTE4103: Instrumentation and Research Methodology (3Credits)	Its credit has been decreased by 1.
	BTE4104: Microbial Technology (3Credits)	Its credit has been decreased by 1.
	BTE4109: Biodiversity and Evaluation (3Credits)	It has been discontinued and no subject is added in its place
	BTE4110: Introductory Biochemical Engg (3Credits)	It has been discontinued and no subject is added in its place
	Total Credits of 1st Semester was 29Credits	Total Credits changed to 23 Credits
2 nd Semester	BTE4201: Recombinant DNA Tech (3Credits)	Its credit has been decreased by 1.
	BTE4202: Bioinformatics and Computational Biology (3Credits)	Its credit has been decreased by 1.
	BTE4203: Biochemical Engg (3Credits)	Its credit has been decreased by 1.
	BTE4204: Environmental Biotech (3Credits)	Its credit has been decreased by 1.
	BTE4211: Immunology	2Credit Course is Introduced
	BTE4212: Immunology LAB	2Credit Lab Course is Introduced
	BTE4231: Term Paper (2Credits)	Its credit has been decreased by 1.
	BTE4236: Research Article Presentation I (3Credits)	It has been discontinued and no subject is added in its place
	Total Credits :33	Total Credits:29
3 rd Semester	BTE4301: Enzyme Technology(3Credits)	Its credit has been decreased by 1.
	BTE4302: Genomics and Proteomics(3Credits)	Its credit has been decreased by 1.
	BTE4303: Structural Biology (3Credits)	Its credit has been decreased by 1.
	BTE4304: Downstream Processing and Fermentation Technology (3Credits)	Its credit has been decreased by 1.
	BTE4305: Enzyme Technology LAB (1Credits)	Its credit has been increased by 1.
	BTE4335: Summer Internship Evaluation (9Credits)	Its credit has been decreased by 3.
	BTE4336: Research Article Presentation II (3Credits)	It has been discontinued and no subject is added in its place
Total Credits of 3rd Semester was 38Credits	Total Credits changed to 28Credits	
4 th Semester	The credits of BTE4437: "Dissertation /Project report/ Presentation/ Viva Voce" has been decreased by 10.	
	Total Credits of 4th Semester was 30 Credits	Total Credits changed to 20Credits



Review of Existing Programme Structure of MSc Bioinformatics: 130 Credits to 100 Credits

(a) Table below lists out semester wise changes after discussion by the members of the Board. It also gives the justification in support.

Sem.	Existing	Proposed
1 st Semester	BIF4101: Introduction to Bioinformatics (3Credits)	Its credit has been decreased by 1.
	BIF4102: Basics of Mathematics (3Credits)	Its credit has been decreased by 1.
	BIF4103: Fundamentals of Physics (3Credits)	Its credit has been decreased by 1.
	BIF4106: Biomolecules (3Credits)	Its credit has been decreased by 1.
	BIF4107: Fundamentals of Computing (3Credits)	Its credit has been decreased by 1.
	Total Credits of 1st Semester was 30Credits	Total Credits changed to 25 Credits
2 nd Semester	BIF4201: Proteomics and Genomics (3Credits)	Its credit has been decreased by 1.
	BIF4202: Programming for Bioinformatics I(3Credits)	Its credit has been decreased by 1.
	BIF4203: Bioinformatics: Sequence Analysis (3Credits)	Its credit has been decreased by 1.
	BIF4204: Recombinant DNA Tech (3Credits)	Its credit has been decreased by 1.
	BIF4205: Biostatistics (3Credits)	Its credit has been decreased by 1.
	BIF4207: Proteomics and Genomics LAB (1Credits)	Its credit has been increased by 1.
	BIF4209: Bioinformatics: Sequence Analysis LAB (2Credits)	Its credit has been decreased by 1
	BIF4204: Recombinant DNA Tech LAB (1Credits)	Its credit has been increased by 1.
	Total Credits :30	Total Credits:26
3 rd Semester	BIF4301: System Biology (3Credits)	Its credit has been decreased by 1.
	BIF4302: Programming for Bioinformatics II(3Credits)	Its credit has been decreased by 1.
	BIF4303: Molecular Modeling and Drug Design (3Credits)	Its credit has been decreased by 1.
	BIF4304: Computational Approaches to Taxonomy and Phylogeny (3Credits)	Its credit has been decreased by 1.
	BIF4305: IPR and Bioethics (3Credits)	Its credit has been decreased by 1.
	BIF4335: Summer Internship Evaluation (9Credits)	Its credit has been decreased by 3.
	BIF4310- 4313: Elective I (3Credits)	Its credit has been decreased by 1
	Total Credits of 3rd Semester was 38Credits	Total Credits changed to 29Credits
4 th Semester	The credits of BIF4437: "Dissertation" has been decreased by 12.	
	Total Credits of 4th Semester was 32 Credits	Total Credits changed to 20Credits



Review of Existing Programme Structure of BSc+MSc Biotechnology (Dual): 280 Credits to 250 Credits

(a) Table below lists out semester wise changes after discussion by the members of the Board. It also gives the justification in support.

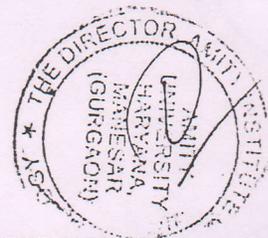
Sem.	Existing	Proposed
7 th Semester	BT116701: Advanced Biochemistry (3Credits)	Its credit has been decreased by 1.
	BT116702: Plant and Animal Physiology(3Credits)	Its credit has been decreased by 1.
	BT116705: Foundation Course I (Mathematics)	Its credit has been decreased by 1.
	BT116706: Foundation Course II(Physics)	Its credit has been decreased by 1.
	BT116707: Advanced Biochemistry LAB (2Credits)	Its credit has been decreased by 1.
	BT116708: Plant and Animal Physiology LAB (2Credits)	Its credit has been decreased by 1.
	Total Credits of 7th Semester was 31Credits	Total Credits changed to 25 Credits
8 th Semester	BT116801 Advanced Molecular Biology(3Credits)	Its credit has been decreased by 1.
	BT116803: Advanced Immunology (3Credits)	Its credit has been decreased by 1.
	BT116805 Cell Biology (3Credits)	Its credit has been decreased by 1.
	BT11 6836 Research Article PresentationI(3Credits)	It has been discontinued and no subject is added in its place
	Total Credits :29	Total Credits:23
9 th Semester	BT116901: Advanced Animal Biotechnology(3Credits)	Its credit has been decreased by 1.
	BT116902: Biophysics and Structural Biology (3Credits)	Its credit has been decreased by 1.
	BT116903: Genomics and Proteomics(3Credits)	Its credit has been decreased by 1.
	BT116905: Bioinformatics and Computational Biology (3Credits)	Its credit has been decreased by 1.
	BT116907: RDT LAB (2Credit)	Its credit has been decreased by 1.
	BT116909: Genomics and Proteomics LAB (2Credit)	Its credit has been decreased by 1.
	BT11 6936 Research Article PresentationII (3Credits)	It has been discontinued and no subject is added in its place
	BT116935: Summer Internship Evaluation (3Credits)	Its credit has been increased by 1.
	Total Credits of 9th Semester was 35 Credits	Total Credits changed to 27 Credits
10 th Semester	The credits of BT116037: "Dissertation /Project report/ Presentation/ Viva Voce" has been decreased by 10.	
	Total Credits of 10th Semester was 30 Credits	Total Credits changed to 20Credits



Review of Existing Programme Structure of BTech Biotechnology : 210 Credits to 195 Credits

(a) Table below lists out semester wise changes after discussion by the members of the Board. It also gives the justification in support,

Sem.	Existing	Proposed
1 st Semester	BTE2101 Applied Mathematics – I (4Credits)	It has been replaced with BTE2111:Engineering Mathematics (4Credits)
	BTE2102 Applied Physics - I Fields & Waves	It has been discontinued and no subject is added in its place
	BTE2103 Applied Chemistry (3Credits)	It has been replaced with BTE2112:Engineering Chemistry (2Credits)
	BTE2105 Life Sciences	Placed in IInd Sem
	BTE2107 Applied Physics- I Lab	It has been discontinued and no subject is added in its place
	BTE2109 Applied Chemistry Lab	It has been replaced with BTE2113:Engineering Chemistry LAB
	Total Credits of 1 st Semester was 28Credits	
2 nd Semester	BTE2201 Applied Mathematics – II	It has been replaced with BTE2207:Engineering Mathematics
	BTE2202 Applied Physics - II –Modern physics	It has been replaced with BTE2208:Engineering Physics (2Credits)
	BTE2204 Applied Physics- II Lab	It has been replaced with BTE2209:Engineering Physics LAB
	BTE2105 Life Sciences	Introduced in IInd SEM
	Total Credits :22	Total Credits:25
3 rd Semester	BTE2304 Database Management System	Its credit has been decreased by 1.
	BTE2309-34Concentration Electives (3Credits)	Its credit has been decreased by 1
Total Credits of 3 rd Semester was 29Credits		Total Credits changed to 27Credits
4 th Semester	BTE210-34Concentration Electives (3Credits)	Its credit has been decreased by 1
	Total Credits of 4 th Semester was 28 Credits	Total Credits changed to 27Credits
5 th Semester	BTE2509-34Concentration Electives (3Credits)	Its credit has been decreased by 1
	Total Credits of 5 th Semester was 31 Credits	Total Credits changed to 30Credits
6 th Semester	BTE2604 Fundamentals of Biochemical Engineering(3Credits)	Its credit has been decreased by 1
	BTE2607 Immunology & Immunotechnology Labv(2Credits)	Its credit has been decreased by 1
	BTE2608-34Concentration Electives (3Credits)	Its credit has been decreased by 1
	Total Credits of 6 th Semester was 28 Credits	Total Credits changed to 25 Credits



7 th Semester	BTE2702 IPR, Biosafety & Bioethics (3Credits)	Its credit has been decreased by 1
	BTE2703 Research Methodology & Report Writing (3Credits)	Its credit has been decreased by 1
	BTE2705-34 Concentration Electives (3Credits)	Its credit has been decreased by 1
	Total Credits of 7 th Semester was 24 Credits	Total Credits changed to 21 Credits

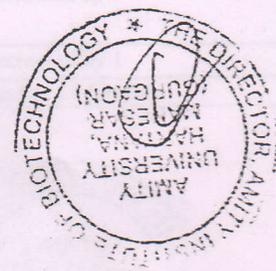
Revision of B. Sc. Biological Science

The syllabus of Chemistry I and II as well as Lab I and Lab II can be modified. From Chemistry I, Module IV can be removed as metallurgy portion is not relevant for Biological Sciences students.

In Chemistry Lab I, Viscosity determination may be added to Module IV.

In Chemistry II, the contents of Module III can be in the form of general methods of preparation of alcohol and acid.

In Chemistry Lab II, an extra module can be added for determination of pH values of different liquids.



Review of Existing Programme Structure of BTech Bioinformatics : 210 Credits to 195 Credits

(a) Table below lists out semester wise changes after discussion by the members of the Board. It also gives the justification in support.

Sem.	Existing	Proposed
1 st Semester	BIF2101: Applied Mathematics – I (4Credits)	It has been replaced with BIF2110:Engineering Mathematics (4Credits)
	BIF2102: Applied Physics - I Fields & Waves	It has been discontinued and no subject is added in its place
	BTE2103 Applied Chemistry (3Credits)	It has been replaced with BIF2111:Engineering Chemistry (2Credits)
	BIF2106 Applied Physics- I Lab	It has been discontinued and no subject is added in its place
	BTE2109 Applied Chemistry Lab	It has been replaced with BIF2112:Engineering Chemistry LAB
	Total Credits of 1 st Semester was 25Credits	Total Credits changed to 20 Credits
2 nd Semester	BIF2201 Applied Mathematics – II	It has been replaced with BIF2208:Engineering Mathematics
	BIF 2201: Applied Physics - II –Modern physics	It has been replaced with BIF2209:Engineering Physics (2Credits)
	BIF2204 Applied Physics- II Lab	It has been replaced with BIF2210:Engineering Physics LAB
	Total Credits :25	Total Credits:25
3 rd Semester	BTE2309-34Concentration Electives (3Credits)	Its credit has been decreased by 1
	Total Credits of 3 rd Semester was 29Credits	Total Credits changed to 27Credits
4 th Semester	BIF2409-34Concentration Electives (3Credits)	Its credit has been decreased by 1
	Total Credits of 4 th Semester was 28 Credits	Total Credits changed to 27Credits
5 th Semester	BIF2535: Summer Internship I (Evaluation) (3Credits)	Its credit has been decreased by 1
	BIF2508-34Concentration Electives (3Credits)	Its credit has been decreased by 1
	Total Credits of 5 th Semester was 31 Credits	Total Credits changed to 29Credits
6 th Semester	BIF2602 JAVA & VB. Net (3Credits)	Its credit has been decreased by 1
	BIF2605 Oncogenomics & Cell Signalling(3Credits)	Its credit has been decreased by 1
	BIF2609-33Concentration Electives (3Credits)	Its credit has been decreased by 1
	Total Credits of 6 th Semester was 28 Credits	Total Credits changed to 25 Credits
7 th Semester	BIF2702 :IPR, Biosafety & Bioethics (3Credits)	Its credit has been decreased by 1
	BIF2735 Summer Internship II (Evaluation) (3Credits)	Its credit has been decreased by 1
	BIF2705-34Concentration Electives (3Credits)	Its credit has been decreased by 1
	Total Credits of 7 th Semester was 24 Credits	Total Credits changed to 21 Credits



**Review of Existing Programme Structure of BTech +MTechBiotechnology (Dual Degree) :
280 Credits to 260 Credits**

(a) Table below lists out semester wise changes after discussion by the members of the Board. It also gives the justification in support.

Sem.	Existing	Proposed
1 st Semester	BTE6101 Applied Mathematics – I (4Credits}	It has been replaced with BTE6111:Engineering Mathematics (4Credits)
	BTE6102 Applied Physics - I Fields & Waves	It has been discontinued and no subject is added in its place
	BTE6103 Applied Chemistry (3Credits)	It has been replaced with BTE6112:Engineering Chemistry (2Credits)
	BTE6105 Life Sciences	Placed in II nd Sem
	BTE6107 Applied Physics- I Lab	It has been discontinued and no subject is added in its place
	BTE6109 Applied Chemistry Lab	It has been replaced with BTE6113:Engineering Chemistry LAB
	Total Credits of 1 st Semester was 28Credits	Total Credits changed to 20 Credits
2 nd Semester	BTE6201 Applied Mathematics – II	It has been replaced with BTE6207:Engineering Mathematics
	BTE6202 Applied Physics - II –Modern physics	It has been replaced with BTE6208:Engineering Physics (2Credits)
	BTE6204 Applied Physics- II Lab	It has been replaced with BTE6210:Engineering Physics LAB
	BTE6209 Life Sciences	Introduced in II ^{ns} SEM
	Total Credits :22	Total Credits:25
3 rd Semester	BTE2304 Database Management System	Its credit has been decreased by 1.
	BTE2309-34Concentration Electives (3Credits)	Its credit has been decreased by 1
	BTE 6331:Term Paper (Evaluation) - I	Its credit has been decreased by 1
	Total Credits of 3 th Semester was 26 Credits	Total Credits changed to 25Credits
5 th Semester	BTE6531Term Paper (Evaluation) – II (2Credits)	Its credit has been decreased by 1
	Total Credits of 5 th Semester was 34 Credits	Total Credits changed to 33 Credits
7 th Semester	BTE673Term Paper (Evaluation) – II nd (2Credits)	Its credit has been decreased by 1
	Total Credits of 7 th Semester was 32 Credits	Total Credits changed to 31 Credits
9 th Semester	BTE673 Research Article Presentation (3Credits)	Its credit has been decreased by 2
	Total Credits of 9 th Semester was 32 Credits	Total Credits changed to 30 Credits
10 th Semester	The credits of BTE6037: "Dissertation" has been decreased by 10.	
	Total Credits of 10 th Semester was 30 Credits	Total Credits changed to 20 Credits

