



AMITY UNIVERSITY

MADHYA PRADESH

(Established by Ritand Balved Education Foundation)

Date: 12 /03/2021

BOARD OF STUDIES (Biotechnology)

MINUTES OF THE MEETING

(6 Pages Only)

1. A meeting of Board of Studies in Biotechnology, Amity Institute of Biotechnology, Amity University Madhya Pradesh was held on 12th March 2021 at 1100 hrs in virtual mode on MS Teams Platform under the Chairmanship of Prof. (Dr.) R.S. Tomar, Director, AIB and Dean (Academics), AUMP. The following members attended the meeting:-

(a) **Chairman:** Prof. (Dr.) R.S. Tomar
Director AIB and Dean (Academics)
Amity University Madhya Pradesh, Maharajpur, Gwalior

(b) **Members**

i) Prof. (Dr.) Rajesh Kumar Tiwari (External)
Professor, AIB & Dean (Academics)
Amity University Lucknow Campus

ii) Prof (Dr.) G.B.K.S. Prasad (External)
Professor Biochemistry,
Coordinator, Centre for Studies in Food Technology,
Jiwaji University Gwalior

iii) Prof (Dr.) Vikas Shrivastava
Professor, Amity Institute of Biotechnology,
Amity University Madhya Pradesh, Maharajpur, Gwalior

iv) Dr.Raghvendra Kumar Mishra
Associate Professor, Amity Institute of Biotechnology,
Amity University Madhya Pradesh, Maharajpur, Gwalior

V. K. S. Prasad

R. S. Tomar
12/03/2021

For R.O

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15/03/21

Prof (Dr.) R. S. Tomar
Director, Amity Institute of Biotechnology
Amity University Madhya Pradesh
Maharajpur, Gwalior 474005

2. Agenda for the BoS meeting 2021:

1. Review & approval of syllabi of B.Sc.(H)Biotechnology for the batch 2021-24 and B. Tech Biotechnology batch 2021-25.
2. Review & approval of syllabi of M.Sc.(Biotechnology) for the batch 2021-23 and M. Tech (Biotechnology) batch 2021-23.
3. Review & approval of syllabi of B.Sc (Hons).-M.Sc.(Biotechnology) Dual Degree for the batch 2021-26.
4. Review & approval of syllabi of B.Sc.(Biology) for the batch 2021-24.
5. Review & approval of syllabi of Ph.D. course work of Ph.D. in Biotechnology for the batch 2021-2022.
6. Review & approval of syllabi of minor tracks in Biotechnology: Biotechnology Management and Conservation Biology for the batch 2021-2024.
7. Any other point with the permission of Chairman of the Board of studies.

3. Recommendations.

- (i) The BoS recommended changes in various courses of AIB as below:
- (a) Course BSB 403 & BMB 403: Syllabus to be reorganized into 04 modules in place 8 modules and one new module (V) to make it more effective from learning and assessment point of view.
 - (b) Course BSB 420 & BMB 420: Lab exercise "Protein and nucleotide sequence retrieval and analysis using different databases" to be included in module I and "Agarose gel electrophoresis" is to be added in module III for better learning of the course.
 - (c) Course BSB 502 & BMB 502: Syllabus to be reorganized and mapped with BTB-502 to make it more comprehensible.
 - (d) Course BTB 303: Topic, "Fed batch culture" to be included in module II for better learning of the topics in this module.
 - (e) Course BTB 321: Lab exercise "Colour based tests for the identification of common adulterants" to be included to make the course more significant.
 - (f) Course BTB 323: Lab exercise "Isolation of protein" to be included in module II and "Agarose Gel Electrophoresis" to be included in module IV to make the course more significant.
 - (g) Course BTB 401: Topic, "Disorders of amino acid metabolism" to be included in module III to make the course more comprehensible.
 - (h) Course BTB 501: New Module V to be added about success stories in plant biotechnology for some of the important crops like Banana, Cotton etc. Fundamental of automation in plant tissue culture and disruptive technologies to make the students more aware about latest applications of genetic engineering in biotech research and industries.

Jasthu

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- (i) Course BTB 502: Syllabus to be reorganized in IV modules in place of VII modules in old course. Add 02 modules (one from BSB 502 and one of the latest techniques in animal biotechnology) to make the course more effective and contemporary.
 - (j) Course BTB 520: Lab exercise, "Agrobacterium mediated transformation studies in plants" to be included as module IV to make the course more significant and contemporary.
 - (k) Course BTB 603: 12 modules of the syllabus to be reorganized into 5 modules and one new module (VI) is added to make it more effective from learning and assessment point of view.
 - (l) Course BTB 708: Syllabus to be reorganized into 5 modules in place of 9 modules to make it more effective from learning and assessment point of view.
 - (m) Course BTB 820: Lab exercise, "DNA sequencing methods" to be elaborated as "DNA sequencing method : Method to find out the unknown DNA sequence by Sanger sequencing" to make it more clear.
- (ii) Syllabi of B.Sc. (H) Biotechnology for the batch 2021-24 and B.Tech Biotechnology batch 2021-25 are recommended for approval with above mentioned changes.
 - (iii) Syllabi of M.Sc. (Biotechnology) being followed in batch 2020-22 is recommended for batch 2021-2023 without any change.
 - (iv) Syllabi of M.Tech (Biotechnology) being followed in batch 2020-22 is recommended for batch 2021-2023 without any change.
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 - (vi) Syllabi of minor tracks in Biotechnology: Biotechnology Management and Conservation Biology followed in batch 2020-23 are recommended for batch 2021-2024 without any change.
 - (vii) Syllabi of B.Sc (Hons)-M.Sc.(Biotechnology) Dual Degree batch 2021-26 is recommended for approval with above mentioned changes.
 - (viii) Syllabi of B.Sc. (Biology) prepared/approved last year for the batch 2020-23 are recommended for batch 2021-2024 without any change.

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(i) Summary of changes is given below:-

| Current Syllabus | | | | | Proposed Changes/Modifications (addition/deletion in the Syllabus) | New Course Code | No. of Credits |
|---|-----------------------|-----------------------------|-----------------|----------------|---|-----------------|----------------|
| Sr. No. | Course Title | Module of the syllabus | Old Course Code | No. of Credits | | | |
| B.Sc. (H) Biotechnology & B.Sc.(H)-M.Sc. Biotechnology (Dual Degree) | | | | | | | |
| 1 | Immunology | Reorganization of syllabus | BSB/BMB-403 | 03 | Syllabus to be reorganized into 04 modules in place 8 modules and module V is added. | No change | No change |
| 2 | Biotechnology lab-IV | Module I & III | BSB/BMB-420 | 2 | Lab exercise "Protein and nucleotide sequence retrieval and analysis using different databases" to be included in module I and "Agarose gel electrophoresis" is added | No change | No change |
| 3 | Animal Biotechnology | Entire syllabus reorganized | BSB/BMB-502 | 3 | Entire syllabus reorganized and mapped with BTB-502 | No change | No change |
| B.Tech Biotechnology | | | | | | | |
| 1 | Microbiology | Module II | BTB 303 | 4 | Topic, "Fed batch culture" is included in module II | No change | No change |
| 2 | Biochemistry Lab-I | Module II | BTB 321 | 01 | Lab exercise "Colour based tests for the identification of common adulterants" is included | No change | No change |
| 3 | Molecular Biology Lab | I & IV | BTB 323 | 01 | Lab exercise "Isolation of protein" to be included in module II and | No change | No change |

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|---|---------------------------------|----------------------------|---------|----|--|-----------|-----------|
| | | | | | "Agarose Gel Electrophoresis" is included in module IV | | |
| 4 | Biochemistry -II | III | BTB 401 | 04 | Topic, "Disorders of amino acid metabolism" is included in module III | No change | No change |
| 5 | Plant Biotechnology | | BTB 501 | | Added New Module V: Success stories in plant biotechnology for some of the important crops like Banana, Cotton etc, Fundamentals of automation in plant tissue culture and disruptive technologies. | No Change | No change |
| 6 | Animal Biotechnology | Reorganization of syllabus | BTB 502 | 03 | Syllabus to be reorganized in IV modules in place of VII modules in old course. Add 02 modules Module V [Growth factors promoting proliferation of animal cells (EGF, FGF, PDGF, IL-1, IL-2, NGF, erythropoietin).] New Module VI [Fundamentals of Stem cell based therapy, Regenerative medicines] | No change | No change |
| 7 | Plant Biotechnology Lab | | BTB 520 | 1 | Lab exercise, "Agrobacterium mediated transformation studies in plants" to be included as module IV | No change | No change |
| 8 | Immunology and immunotechnology | Reorganization of syllabus | BTB 603 | 04 | 12 modules of the syllabus to be reorganized into 5 modules and one new module (VI) added | No change | No change |
| 9 | Environmental Biotechnology | Reorganization of syllabus | BTB-708 | 03 | Syllabus is reorganized into 5 modules in place of 9 modules | No change | No change |

V. Jeyaraj

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12/2/2021

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AMITY UNIVERSITY
MADHYA PRADESH

(Established by Ritnand Balved Education Foundation)

Date: 12 /03/2021


BOARD OF STUDIES (Biotechnology)

MINUTES OF THE MEETING

(6 Pages Only)

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V. Shrivastava


12/3/2021

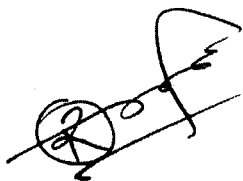


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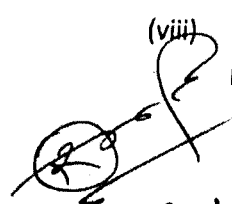
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R. Tiwari

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V. Dastgir


 12/2/2021


 R. Tiwari

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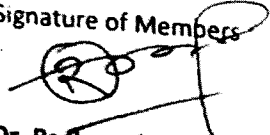
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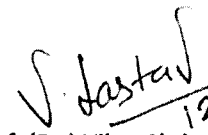
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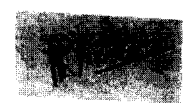
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| 10 | Genomics and Proteomics Lab | Module II | BTB 820 | 1 | Lab exercise, "DNA sequencing methods" is elaborated as "DNA sequencing method : Method to find out the unknown DNA sequence by Sanger sequencing" | No change | No change |
|----|-----------------------------|-----------|---------|---|--|-----------|-----------|

Signature of Members



Dr. Raghendra Kumar Mishra
Associate Professor AIB



12/03/2021
Prof. (Dr.) Vikas Shrivastava
Coordinator AIB



Prof. (Dr.) Rajesh Kumar Tiwari
Professor-AIB & Dean (Academics)
Amity University Lucknow

Prof. (Dr.) G.B.K.S. Prasad (ABSENT)
Professor Biochemistry,
Coordinator, Centre for Studies in Food
Technology,
Jiwaji University Gwalior


Prof. (Dr.) R.S. Tomar (Chairman-BoS)
Director-AIB & Dean (Academics)
Amity University Madhya Pradesh


12/3/21
APPROVED BY
Hon'ble Vice Chancellor
AUMP, Gwalior



Date: 15/03/2021

BOARD OF STUDIES (DEPARTMENT OF ENVIRONMENTAL SCIENCE)
MINUTES OF THE MEETING

(3 Pages Only)

1. A meeting of Board of Studies of Department of Environmental Science, Amity University Madhya Pradesh was held on **15th March 2021 in Online Mode on MS Teams at 15:30 hrs**, under the Chairmanship of Prof. (Dr.) Kuldip Dwivedi, HOD Environmental Science. The following members attended the meeting: -

(a) **Chairman:** Prof. (Dr.) Kuldip Dwivedi, HOD, Environmental Science

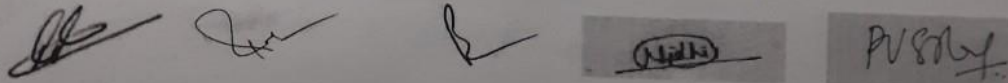
(b) **Member**

- i) Dr. Swapnil Rai, Associate Professor, Environmental Science
- ii) Dr. Rwitabrata Mallick, Assistant Professor, Environmental Science
- iii) Dr. Nidhi Shukla, Assistant Professor, Environmental Science
- iv) Prof. (Dr.) P V S Raju, Amity Centre for Atmospheric & Science Technology (Amity-COAST), Amity University Rajasthan, Jaipur
- v) Prof. (Dr.) Avinash Tiwary, SOS in Botany, JU Gwalior

2. **The agenda of the meeting included the following:**

- (a) Approval of the syllabus of Environmental Studies I and II for all UG Courses.
- (b) **Approval of the syllabi offered for new PG course i.e. 'Master of Environmental Science'.**
- (c) Approval of the proposed fee structure for new PG course i.e. 'Master of Environmental Science'. (Annexure 1).
- (d) Approval of the syllabi of Ph.D. course work in Environmental Science.
- (e) Approval of syllabi of Environmental Management (EM) offered for Choice Based Credit System (CBCS).
- (f) Approval of syllabi of Environmental Law (EL) offered for Choice Based Credit System (CBCS).
- (g) Approval of syllabi of Industrial Environment Health & Safety (ES) offered for Choice Based Credit System (CBCS).
- (h) Approval of syllabi of Disaster Management (DM) offered for Choice Based Credit System (CBCS).
- (i) Any other point with due permission of the Chairperson.

3.

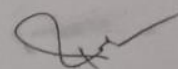


Recommendations:

- (i) The BOS recommends that all the syllabi are up to mark and approved.
- (ii) As per the recommendation of External Expert, "Early Warning System" has been included in the Syllabus of Disaster Management

4. Summary of changes is given below: - No Change**5. Signature of Members**

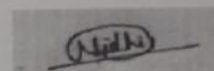

(Prof. (Dr.) Kuldip Dwivedi)
Chairman BOS & HOD EVS



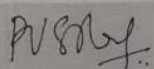
(Dr. Swapnil Rai)
Internal Member



(Dr. Rwitabrata Mallick)
Internal Member



(Dr. Nidhi Shukla)
Internal Member

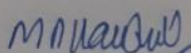
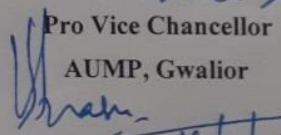


(Prof. (Dr.) P V S Raju)
External Expert

ABSENT

(Prof. (Dr.) Avinash Tiwari)
External Expert

APPROVED BY


Pro Vice Chancellor
AUMP, Gwalior

12/3/24
Hon'ble Vice Chancellor
AUMP, Gwalior

Proposed Fee Structure**Course - M.Sc. Environmental Science**

Duration 2.0 years

Semester - 4

Program Fee

Non-Sponsored Semester Fee = Rs. 0.35 Lacs

