



**CENTRAL UNIVERSITY OF TAMIL NADU
DEPARTMENT OF MICROBIOLOGY**

Neelakudi - 601 005, Thiruvarur - District, Tamilnadu State, India
(Phone 04366 - 277207)

31-8-2018

Minutes of the 1st Board of Studies (BOS) Meeting of the Department of Microbiology, Central University of Tamil Nadu (CUTN), Thiruvarur.

The 1st Board of Studies (BOS) Meeting of Department of Microbiology was held on 31st August, 2018 (FRIDAY) at 10.00 am at the Conference Hall of the CUTN' Guest house, CUTN, Thiruvarur.

The BOS was constituted by the following expert members who have participated in the meeting:

1. Dr. D. Siva Sundara Kumar, Central University of Tamil Nadu, Thiruvarur-Ex-officio Chairman
2. Dr. R. Suchitra, Central University of Tamil Nadu, Thiruvarur - Internal Expert
3. Dr. R. Kaushik, Central University of Tamil Nadu, Thiruvarur - Internal Expert
4. Prof. Mukesh Doble, Indian Institute of Technology Madras, Chennai- External Expert
5. Prof. K. Manjunath, University of Bangalore, Bangalore- External Expert
6. Prof. Jharna Mandal, Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry-External Expert
7. Dr. E. M. Shankar, Central University of Tamil Nadu, Thiruvarur- Observer
8. Dr. P. Thiyagarajan, Central University of Tamil Nadu, Thiruvarur- Observer

At the outset, Dr. D. Siva sundara kumar, Ex-officio Chairman welcomed the expert members of the BOS and presented the current syllabus of the MSc. Microbiology program and a draft for the proposed M.Tech (Applied Microbiology and Biotechnology) before the panel members for their perusal and review.

The expert panel carefully reviewed both the proposals/agendas and offered their valuable recommendations which are furnished hereunder:

Agenda 1: Revision of the existing syllabus of M.Sc (Microbiology)

General Comments:=

1. The panel members have observed that there is more repetition in the content of courses which are overlapping across different courses.
2. The redundancy in the course content should also be removed. The number of courses per semester can be 5 and the credit of each should be increased to 4 instead of 3.
3. The given credit score for the existing project was viewed very low the same may be increased to 12.
4. The student's project should be evaluated adopting the method of poster presentation (abstract) and viva (). Students should be motivated to publish their work in good journals.
5. As per the UGC recommendation, the MOOC and NPTEL courses should be introduced as electives.
6. Semester wise marks should be given for the general Seminar
7. Students with summer internship are eligible to score credits. Mode of evaluation and monitoring should be followed throughout the internship. The student should submit report and give presentation. Progress of the interns should be monitored and conveyed to the sponsoring companies by the Department through formal communication channel. The core contents of the

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31/08/2018

D. Siva Sundara Kumar
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J. Thiyagarajan
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Central University of Tamil Nadu
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- course must also allow preparedness of the prospective candidates for preparing for competitive examinations like UGC/CSIR/GATE/ICMR-NET etc.
8. The members of the BOS have suggested to minimize the number of students' uptake and should not exceed 20 students per intake to enhance the value of teacher student interaction and better supervision.
 9. The final copy of the revised syllabus will be submitted for your approval in due course.

The following text was a detailed revision of syllabus in an orderly manner.

Semester 1

- **CMB 101: GENERAL MICROBIOLOGY**
 - UNIT 1: Specify Bergey's classification.
 - UNIT 2: Remove fungal biology and replace with cyanobacteria.
 - UNIT 3: Microbial growth- shift entire unit from semester 2.
- **CMB 102: Cell and molecular biology**
This course can be moved to 2nd semester.
- **CMB 103: Microbial biochemistry- No changes**
- **CMB 104: Immunobiology-No changes**
- **CMB 105: Microbial genetics**
 - Distribute each unit to respective course
Bacterial genetics →Bacteriology
Viral →Virology
Gene expression →Cell and Molecular biology
Fungal →Mycology
- **CMB 106: Microbial physiology**
 - Add Microbial growth and nutrients topics.
 - Myxobacteria shifted to Mycology

Semester 2

- **CMB 201(delete):**
 - Unit 2 Bacterial growth shifted to CMB 101 Bacteriology
 - Significance fungi shifted to Mycology
 - Microbial technology →add alcohol wine
 - Mycology
 - ✓ Economic importance
 - ✓ Fungal classification
 - ✓ Fungal growth
 - ✓ Fungal taxonomy →brief
 - ✓ Myxobacteria
- **MBC 202: Basic of virology or molecular virology (separate course)**
 - Shift parasitology → medical microbiology
- **CMB 203: Food and industrial microbiology**
Introducing following topics in this course
 - Food packing and types of packing
 - Concept of food parks through Private / corporate
 - Unit 5
 - ✓ Biofuel and bio polymer
 - ✓ Bioenergy
 - ✓ Biosurfactant
- **CMB 204: Agriculture and plant pathology**

R. J. [Signature]

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Tamil Nadu / तमिलनाडु

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- Unit 2: Fungal plant disease example → ascomycetes
- Unit 3:
 - ✓ Biofertilizer for rice
 - ✓ neem cakes and neem oil as local practice on paddy field
- **CMB 205: Methods in gene technology** (as elective)
- **CMB 206: Bioethics** (open elective) move from semester 2 to 3
- Introducing following topics in this course
 - Bio-entrepreneurship
 - Getting fund & Getting loans
 - Available Incubation centers
 - About Clearance from environmental board & Animal ethics
- **Practical III**
 - Flagella; spore staining → put back from practical II to I

Semester 3

- **CMB 301: Computational biology** (change title as Bioinformatics)
 - Practical lab must for routine exercise in this course.
 - Integrated theory and lab to be introduced.
 - Biostatistics → exercise and example
 - Case study-Bioinformatics for exam
 - Unit 2 will be practical lab
 - Separate unit for python programming
- **CMB 302: Marine biology**
 - Unit 4: Add about
 - ✓ Geo-satellite
 - ✓ Monitoring
 - ✓ Remote sensing
- **CMB 303: Environmental Microbiology**

New concepts as follows

 - Bioenergy
 - Bioremediation
 - Bioleaching
- **CMB 306: Microbial technology**
 - Distribute all units to respective course
 - Unit 1: shift to food microbiology
 - Unit 2: shift to Industrial microbiology
 - Unit 3: shift to Environmental microbiology
 - Unit 4: shift to Agricultural microbiology
 - Unit 5: Shift to section of biofuels

Semester 4:

- **EMB 401:** Change title as Bioinstrumentation and techniques in biology
- **EMB 402:** (open elective): can be core course in semester 3
- Students are advised to complete the compulsory electives before 4th semester in order to focus the final year project.

Agenda 2: Vision about introducing M.Tech (Applied Microbiology and Biotechnology) programme

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Introduction

The Microbiology department's Master of Technology Programme is a competitive education program with futuristic value-based curricula-oriented course. The M.Tech programme provides students with knowledge and skills required for facing the challenges of the modern science and technology field. Our Graduates will be prepared for careers within academia or industry in biotechnology-related research and development. The outline of the proposed M.Tech programme and its curriculum is enclosed herewith.

General Comments from Panelist:

The course must accommodate to the needs of the growing demand for industry professionals and the curriculum should be designed to attract candidates of microbiology to accommodate them proficiently in industry, research and academia following completion of the course.

Specific Comments from Panelist:

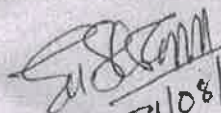
- Secure MoU with Industries and explore the possibility of stipend for intakes
- Create cordial Bonds with industrial companies to offer employment.
- Availing govt. schemes to organize several essential invited lectures during the course.
- The program can be framed as application-oriented research.
- Approaching DBT for Initial infrastructure grant for M.Tech course and setting up an advance lab facilities for this program.
- SOP's Certification, data instrumentation can be introduced during the course.
- Including a relevant programming for industrial purpose as a separate course.
- Vaccine technology can be added to Pharmaceutical Microbiology instead of Biomedical Technology.
- Giving credits for up taking certified online subject related courses.
- Basic biology courses can be opted as electives.
- Electives should bridge all disciplines in semester 1.
- Eligibility Criteria:
 1. B.Tech or B.E (Biotechnology/Biomedical engineering/Biochemical Engineering/Agricultural Engineering/Food Technology/Dairy Technology), B.VSc., B.Sc (Agriculture/Fisheries)
 2. M.Sc (Microbiology/Life Sciences/Zoology/Botany/BioChemistry/Molecular Biology) or its equivalent as criteria of eligibility.

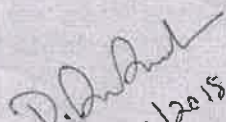
The full syllabus of the proposed M.Tech programme will be submitted in due course.

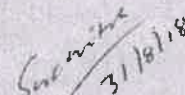
Conclusion:

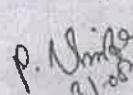
The chairman confirmed that comments raised by the distinguished panel members will be suitably incorporated in the revised syllabus in due course and the approval of the minutes of panel members will be obtained through emails and concurrence will be sought before placing the recommendation of the revised syllabus. The revised syllabus will be circulated to the panel members of the BOS through eMail and concurrence will be sought before placing the recommendation of BOS before upcoming Academic Council of CUTN.

Meeting was concluded with thanks to the participants for their active participation.


31/08/2018

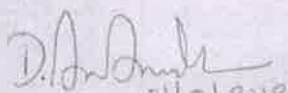

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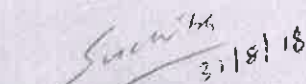

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Thiruvavur - 610 005 / तिरुवावर
Tamil Nadu / तमिलनाडु

Signatories:


31/8/2018


Dr. D. Siva Sundara Kumar
Associate Professor & Head
Department of Microbiology
Central University of Tamilnadu
Thiruvavarur


31/8/18

Dr. R. Suchitra
Assistant Professor
Department of Microbiology
Central University of Tamilnadu
Thiruvavarur

Dr. R. Kaushik
Assistant Professor
Department of Microbiology
Central University of Tamilnadu
Thiruvavarur

(Approval and Concurrence by email)

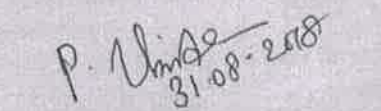

31/08/2018

Dr. E. M. Shankar,
Associate Professor & Head
Department of Life Sciences
Central University of Tamilnadu,
Thiruvavarur

Prof. K. Manjunath
Professor & Chairman
Department of Microbiology and Biotechnology
University of Bangalore,
Bangalore
(Approval and concurrence by Email)

Prof. Mukesh Doble,
Professor
Department of Biotechnology
Indian Institute of Technology Madras,
Chennai
(Approval and concurrence by Email)

Prof. Jhama Mandal
Additional Professor
Jawaharlal Institute of Postgraduate
Medical Education and Research
Pondicherry
(Approval and concurrence by Email)


31/08-2018

Dr. P. Thiyagarajan,
Assistant Professor, Head I/C
Department of Computer Science
Central University of Tamilnadu


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Minutes of the Board of Studies (BOS) Meeting, Department of Microbiology, Central University of Tamil Nadu (CUTN), Thiruvarur.

The Board of Studies (BOS) Meeting of Department of Microbiology was held on 31st August, 2019 (FRIDAY) at 10.00 am at the Conference Hall of the CUTN' Guest house, CUTN, Thiruvarur.

Member present:

1. Dr. D. Siva Sundara Kumar, Central University of Tamil Nadu, Thiruvarur–Ex-officio Chairman
2. Dr. R. Suchitra, Central University of Tamil Nadu, Thiruvarur – Internal Expert
3. Dr. R. Kaushik, Central University of Tamil Nadu, Thiruvarur – Internal Expert
4. Prof. Mukesh Doble, Indian Institute of Technology Madras, Chennai- External Expert
5. Prof. K. Manjunath, University of Bangalore, Bangalore- External Expert

The following members were unable to attend the meeting due to pre-occupation

6. Prof. Jharna Mandal, Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry-External Expert
7. Dr. E. M. Shankar, Central University of Tamil Nadu, Thiruvarur– Observer
8. Dr. P. Thiyagarajan, Central University of Tamil Nadu, Thiruvarur– Observer

The Bos members gathered to discuss the following agenda items

1. Syllabus for the PhD programme and
2. Introduction of new master degree program M.Sc (Applied Microbiology and Biotechnology)

At the outset Dr. D. Siva sundara kumar, Ex-officio Chairman, welcomed the expert members of the BOS and presented the syllabus of the PhD programme and MSc. Microbiology program and a draft for the proposed M.Sc (Applied Microbiology and Biotechnology) before the panel members for their perusal and review. The expert panel carefully reviewed both the proposals/agendas and offered their valuable recommendations which are furnished hereunder:


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Agenda 1: Syllabus for the PhD programme and minor changes in the MSc Microbiology course
 The syllabi of five new courses for the PhD programme were presented before the committee members. After detailed and careful deliberation, the committee reviewed and finalized structure and syllabus of the course as below.

Semester I				
Sl. No	Course Code	Course Title	Core/ Elective & Slot	Credits
1	DMB 101	Cell and Molecular Biology of Neurodegenerative Diseases	Core	4
2	DMB 102	Biofuel production	Core	4
3	DMB 103	In-vitro protein display techniques	Core	4
4		MOOCs elective 1	Elective	3/2
5		Subject specific elective	Elective	3
Semester II				
Sl. No	Course Code	Course Title	Core/ Elective & Slot	Credits
1	DMB 201	Research Methodology and Experimental design	Core	4
2	DMB 202	Techniques in Microbiology	Core	4
4		MOOCs elective 2	Elective	3/2
5		Subject specific elective	Elective	3

The syllabus of all core courses is enclosed herewith (Annex 1)

Agenda 2: Vision about introducing M.Sc (Applied Microbiology and Biotechnology) programme

Introduction

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General Comments from Panelist:

The course must accommodate to the needs of the growing demand for industry professionals and the curriculum should be designed to attract candidates of microbiology to accommodate them proficiently in industry, research and academia following completion of the course.

Specific Comments from Panelist:

- Secure MoU with Industries and explore the possibility of stipend for intakes
- Create cordial Bonds with industrial companies to offer employment.
- Explore schemes to organize several essential invited lectures during the course

R. Jeyapalan

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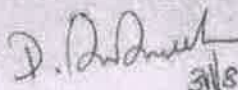
- SOP's Certification, data instrumentation can be introduced during the course.
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 2. B.Tech (Biotechnology/Biomedical engineering/Biochemical Engineering/Agricultural Engineering/Food Technology/Dairy Technology), B.VSc., B.Sc (Agriculture/Fisheries)


Conclusion:


The chairman confirmed that comments raised by the distinguished panel members will be suitably incorporated in the revised syllabus in due course and the approval of the minutes of panel members will be obtained through emails and concurrence will be sought before placing the recommendation of the revised syllabus. The revised syllabus will be circulated to the panel members of the BOS through eMail and concurrence will be sought before placing the recommendation of BOS before upcoming Academic Council of CUTN.

Meeting was concluded with thanks to the participants for their active participation.

Signatories:


3/8/19
Dr. D. Siva Sundara Kumar
Associate Professor & Head
Department of Microbiology
Central University of Tamilnadu
Thiruvārur

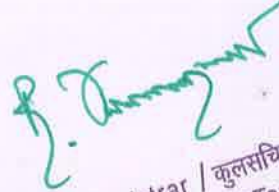

Dr. R. Suchitra
Assistant Professor
Department of Microbiology
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Dr. R. Kaushik
Assistant Professor
Department of Microbiology
Central University of Tamilnadu
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Prof.K.Manjunath
Professor & Chairman
Department of Microbiology and Biotechnology
University of Bangalore,
Bangalore
(Approval by email concurrence)

Prof. Mukesh Doble,
Professor
Department of Biotechnology
Indian Institute of Technology Madras,
Chennai
(Approval by email concurrence)



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HOD, Department of Microbiology <hodmbiol@cutn.ac.in>

BOS minutes ofr PhD syllabus and a proposal for new MSc programme

2 messages

Wed, Dec 18, 2019 at 1:09 PM

HOD, Department of Microbiology <hodmbiol@cutn.ac.in>
To: Mukesh Doble <mukesh.doble0@gmail.com>, microbiology@cutn.ac.in, prof manjunath <ushamanjunath58@rediffmail.com>

Dear Madam/Sir,

Greetings from Siva!

In line with the recommendations of the BoS Members, I have attached herewith, the revised syllabus and the minutes of the meeting for your kind perusal.

I request your kind concurrence and necessary approval!

Thank you.

Sincerely

Best Regards

Dr.D.Siva Sundara Kumar M.Sc., M.Tech (IIT-KGP), PhD (HKU)

Associate Professor and Head

Division of Mycobiology & Neurodegenerative Disease Research

Department of Microbiology

School of Life Sciences

Central University of Tamil Nadu

Thiruvarur, India

Google Scholar: <https://scholar.google.co.in/citations?user=fqpFFe0AAAAJ&hl=en>

Justia Patents: <https://patents.justia.com/inventor/siva-sundara-kumar-durairajan>

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6 attachments

- Minutes of BOS meeting_DMB.pdf
2197K
- Cell and Molecular biology of Neurodegenerative Diseases_DMB101.pdf
119K
- Biofuel production_SR.pdf
130K
- Invitro display techniques_DMB103.pdf
47K
- Research Methodology_Experimental design_DMB.pdf
122K
- Techniques in Microbiology_DMB201.pdf
106K

Wed, Dec 18, 2019 at 6:03 PM

Mukesh Doble <mukesh.doble0@gmail.com>
To: "HOD, Department of Microbiology" <hodmbiol@cutn.ac.in>
Cc: microbiology@cutn.ac.in, prof manjunath <ushamanjunath58@rediffmail.com>

Dear Dr.D.Siva Sundar kumar
Thanks

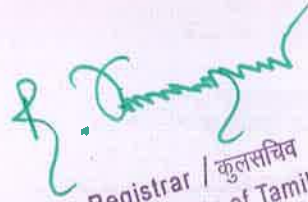
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Central University of Tamil Nadu Mail - BOS minutes ofr PhD syllabus ... <https://mail.google.com/mail/u/0?ik=395bbcabfc&view=pt&search=all&>

I approve the minutes of the meeting
Regards
Mukesh Doble

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This mail is governed by the relevant disclaimer policies of Central University of Tamil Nadu



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CENTRAL UNIVERSITY OF TAMIL NADU
THIRUVARUR – 610 005
(Established by an Act of Parliament, 2009)

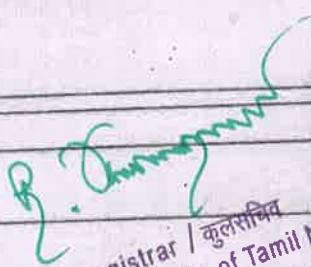
DEPARTMENT OF MICROBIOLOGY
SCHOOL OF LIFE SCIENCES

MINUTES OF THE BOARD OF STUDIES MEETING

The Board of Studies meeting for the Department of Microbiology, SLS, held on 13th December 2022 at 11.00am (Online mode).

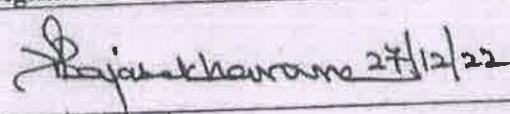
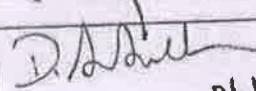
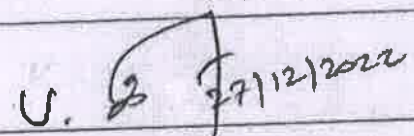
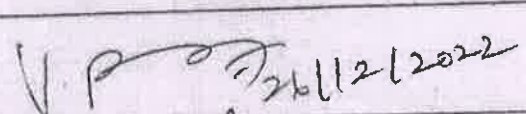
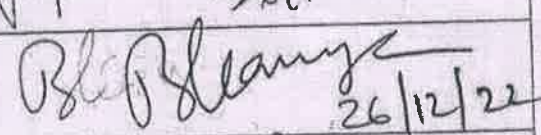
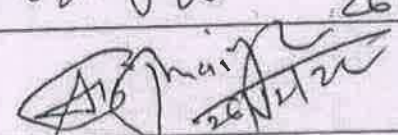
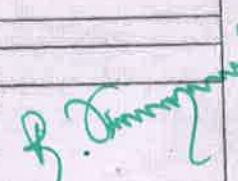
Members Present:

S.No	Name and Address of the members	Internal Members
1.	Prof. Ram Rajasekharan, Head & Dean, Department of Microbiology, CUTN	Chairperson & Convener
2.	Dr. Siva Sundara Kumar, Associate Professor, Department of Microbiology, CUTN	Member
3.	Dr. Ravanan P, Associate Professor, Department of Microbiology, CUTN	Member
4.	Dr. Rajesh Banu, Associate Professor, Department of Microbiology, CUTN	Member
5.	Dr. Rajendiran Venugopal, Assistant Professor, Department of Chemistry, CUTN	Member
6.	Dr. Kavya Bakka, Assistant Professor, Department of Microbiology, CUTN	Member
7.	Dr. Amit Kumar Bajhaiya, Assistant Professor, Department of Microbiology, CUTN	Member & BOS Coordinator
S.No	Name and Address of the members	External members
1.	Prof. Krishnaveni Mishra, Professor, Department of Biochemistry, SLS, University of Hyderabad, Telangana.	Member
2.	Prof. S. Karthikeyan, Professor, Department of Renewable Energy Engineering, TNAU, Coimbatore	Member
3.	Dr. N. Ravi Sundaresan, Associate Professor, Department of Microbiology & Cell Biology, IISC, Bangalore	Member
S.No	Name and Address of special Invitee	Invitee
1.	Dr. Suchitra Rakesh, Assistant Professor, Department of Microbiology, CUTN	Invitee
2.	Dr. Kaushik Rajaram, Assistant Professor, Department of Microbiology, CUTN	Invitee
3.	Ms. Arathi Sreenikethanam, Student Alumni & PhD Student, Department of Microbiology, CUTN	Invitee


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The following agenda items were discussed and resolutions made in the BoS:

S.No	Agenda item	Resolutions taken
1.	Revision of syllabus	<ul style="list-style-type: none"> The revised syllabus for M.Sc. & Ph.D. Microbiology was critically assessed by all the BoS members. Comments & suggestions were provided, which were addressed and the final version of the syllabus was accepted by all the BoS members.
2.	Introduction of new elective courses	<ul style="list-style-type: none"> Eight new elective courses were proposed by Department of Microbiology and all BoS members agreed with the proposed courses and their syllabus. Further BoS members suggested to introduce more electives in future such as elective course on food microbiology and host pathogen interactions.

Name of the Internal Members	Signature
Prof. Ram Rajasekharan, Head & Dean	 27/12/22
Dr. Siva Sundara Kumar	 26/12/22
Dr. Ravanan P	 27/12/2022
Dr. Rajesh Banu	
Dr. Rajendiran Venugopal	 26/12/2022
Dr. Kavya Bakka	 26/12/22
Dr. Amit Kumar Bajhaiya	 26/12/22
Name of the External Members	
Prof. Krishnaveni Mishra	Email concurrence attached 
Prof. S. Karthikeyan	Email concurrence attached Registrar / कुलसचिव Central University of Tamil Nadu तमिलनाडु केन्द्रीय विश्वविद्यालय
Dr. N. Ravi Sundaresan	Email concurrence attached Neelankudi Campus / नीलक्कुडी परिसर Thiruvarur - 610 005 / तिरुवारूर Tamil Nadu / तमिलनाडु
Name of special Invitee	

Dr. Suchitra Rakesh	<i>Suchitra</i> 27/12/22
Dr. Kaushik Rajaram	<i>RC</i> 26/12/22
Ms. Arathi Sreenikethanam	<i>Arathi</i> 27/12/22

Meeting ended with vote of thanks

Rajasekharan 27/12/22
Dean of the School

Chairperson & Convener (BOS)

Dr. Ram Rajasekharan, Ph.D.FNA, FNAC, FNASc, FNAAS,
Dean
School of Life Sciences
Central University of Tamil Nadu, Thiruvarur-610 005.
deanis@cutn.ac.in

Encl: Revised Syllabus (if any) - four copies in thick binding and soft copy (CD)

R. Srinivasan
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CENTRAL UNIVERSITY OF TAMIL NADU
THIRUVAVUR – 610 005
(Established by an Act of Parliament, 2009)

DEPARTMENT OF MICROBIOLOGY
SCHOOL OF LIFE SCIENCES

MINUTES OF THE BOARD OF STUDIES MEETING

The Board of Studies meeting for the Department of Microbiology, SLS, held on 15th July 2023 at 10.00am (Online mode).

Members Present:

S.No	Name and Address of the members	Internal Members
1.	Dr. Ravanan P, Associate Professor, Department of Microbiology, CUTN	Chairperson & Convener
2.	Dr. Siva Sundara Kumar, Associate Professor, Department of Microbiology, CUTN	Member
4.	Dr. Rajesh Banu, Associate Professor, Department of Biotechnology, CUTN	Member
5.	Dr. Rajendiran Venugopal, Associate Professor, Department of Chemistry, CUTN	Member
6.	Dr. Kavya Bakka, Assistant Professor, Department of Microbiology, CUTN	Member
7.	Dr. Amit Kumar Bajhaiya, Assistant Professor, Department of Microbiology, CUTN	Member & BOS Coordinator
S.No	Name and Address of the members	External members
1.	Prof. Krishnaveni Mishra, Professor, Department of Biochemistry, SLS, University of Hyderabad, Telangana.	Member
2.	Prof. S. Karthikeyan, Professor, Department of Renewable Energy Engineering, TNAU, Coimbatore	Member
3.	Dr. N. Ravi Sundaresan, Associate Professor, Department of Microbiology & Cell Biology, IISC, Bangalore.	Member
S.No	Name and Address of special Invitee	Invitee
1.	Dr. Suchitra Rakesh, Assistant Professor, Department of Microbiology, CUTN	Invitee
2.	Dr. Kaushik Rajaram, Assistant Professor, Department of Microbiology, CUTN	Invitee
3.	Ms. Arathi Sreenikethanam, Student Alumni & PhD Student, Department of Microbiology, CUTN	Invitee

[Handwritten Signature]
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Central University of Tamil Nadu
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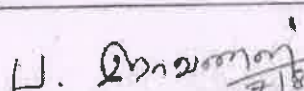
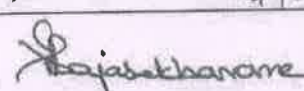
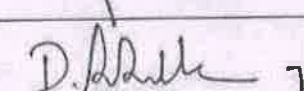

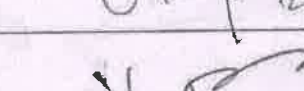

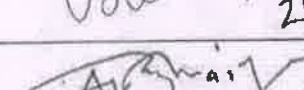
Dr. Ravanan P, Head, Department of Microbiology welcomed the external and internal members of BoS and presented the proposed curricula and syllabi of the MSc/PhD Microbiology Programmes offered by the department of microbiology, CUTN. He explained that as National Education Policy

(NEP) 2020 has been implemented in CUTN from the AY 2022-23, the curricula and syllabi for both the programs were prepared as per NEP-2020 and National credit framework guidelines (NCrf) as recommended by UGC, New Delhi. The curricula and syllabi prepared as per NCrf guidelines will be offered to the students admitted in the academic year (AY) 2023-2024 in the M.Sc/PhD Microbiology program. HoD requested the BOS coordinator Dr. Amit Kumar Bajhaiya to share his computer screen and go through the syllabus of individual courses to receive the suggestions/recommendations of respective BoS members.

- Due to preoccupation, Prof. Ram Rajasekharan, Dr. Rajesh Banu and Dr. Rajendiran Venugopal could not participate in the meeting.
- All the faculty members of the Department of Microbiology along with student alumni was invited and participated in the meeting.
- As the proposed curricula and syllabi were shared with the members of BoS in advance, after careful evaluation of the curricula and syllabi proposed for M.Sc/PhD Microbiology programmes, the members suggested/recommended the following points.

The following agenda items were discussed and resolutions made in the BoS:

S.No	Agenda item	Resolutions taken
1.	Revision in curriculum and syllabi for M.Sc. Microbiology program and introduction of new courses	Attached as Annexure I
2.	Revision of course work syllabi for PhD Microbiology Program	Attached as Annexure II
3.	Question paper and Evaluation pattern for M.Sc. Microbiology Programs	• Members agreed to adapt the question paper and evaluation pattern as suggested by the university.

Name of the Internal Members	Signature
Dr. Ramanan P (Head of Department)	 7/8/2022
Prof. Ram Rajasekharan	 2/8/2023
Dr. Siva Sundara Kumar	 7/8/23
Dr. Rajesh Banu	 2/8/23
Dr. Rajendiran Venugopal	 2/8/23
Dr. Kavya Bakka	 2/8/23
Dr. Amit Kumar Bajhaiya	 2/8/23

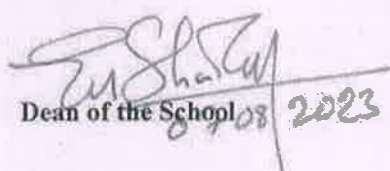

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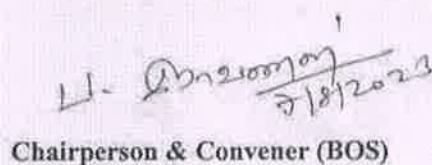
Name of the External Members	
Prof. Krishnaveni Mishra	Email concurrence attached
Prof. S. Karthikeyan	Email concurrence attached
Dr. N. Ravi Sundaresan	Email concurrence attached
Name of special Invitee	
Dr. Suchitra Rakesh	
Dr. Kaushik Rajaram	
Ms. Arathi Sreenikethanam	

Suchitra
2/8/23
R. Kaushik
Arathi
22/08/23

The meeting ended with a vote of thanks by the Head and BOS coordinator, and thereafter, was adjourned at 12.30pm.

Detailed curricula and syllabi incorporating all suggested modifications, and evaluation pattern are enclosed as Annexures.


Dean of the School 08/08/2023


Chairperson & Convener (BOS)

Encl: Revised Syllabus (if any) -four copies in thick binding and soft copy (CD)




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Annexure I:

Agenda 1: Revision in curriculum and syllabi for M.Sc. Microbiology program from the AY 2022-23 onwards and introduction of new courses:

- The Syllabus of M.Sc. Microbiology was revised as per National Educational Policy (NEP) and national credit framework. The revised syllabus was critically assessed by all the BoS members and suggestions were provided. Further, the members agreed for implementation of the modified curriculum and syllabi of the M.Sc. Microbiology program from the academic year (AY) 2023-2024 onwards.
- The suggestions/recommendations provided by BoS members were addressed and the final version of the syllabus was accepted by all the BoS members. The revised curricula and syllabi will be offered to the students admitted in the AY 2023-2024 of M.Sc. Microbiology program. The modified curriculum for the students admitting in the AY 2023-2024 of M.Sc. Microbiology program is given below:

Semester I: Core & Lab Courses (23 Credits)			Periods / Week			Total Contact Hours	Credits
S.No.	Course Code	Course Title	L	T	P		
Course courses							
1	MIB2011	General Microbiology	4	0	0	4	4
2	MIB2012	Microbial physiology & Biochemistry	4	0	0	4	4
3	MIB2013	Cell & Molecular Biology	4	0	0	4	4
4	MIB2014	Immunology & Virology	4	0	0	4	4
5	MIB2015	Recombinant DNA & Protein Technology	3	0	0	3	3
Practical courses							
6	MIB2016	Practical I	0	0	2	4	2
7	MIB2017	Practical II	0	0	2	4	2
Total:			19	0	4	27	23

Semester II: Core courses, lab courses, Training, Open Elective + Value added Course (VAC) (23+2 Credits)			Periods / Week			Total Contact Hours	Credits
S.No.	Course Code	Course Title	L	T	P		
Course courses							
1	MIB2021	Food & Industrial Microbiology	3	0	0	3	3
2	MIB2022	Bioinformatics, Biostatistics & IPR	3	0	0	3	3
3	MIB2023	Medical Microbiology & Diagnostics	3	0	0	3	3
4	MIB2024	Bacteriology, Mycology &	3	0	0	3	3


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		Microbial Genetics					
5	MIBOE01	Open Elective	3	0	0	3	3
6	MIB2027	Training	*	*	*	*	4*
7	MIB2028	VAC	2	0	0	2#	2#
Practical courses							
8	MIB2025	Practical III	0	0	2	4	2
9	MIB2026	Practical IV	0	0	2	4	2
Total:			17	0	4	23 + 2#	23 + 2#

*Internship will be conducted in continuous mode for 160 hrs (1 credit =40hrs)


These two credits are not part of core and practical credits.

Semester III: Core, lab courses, Discipline Specific Elective & Soft Skills (25 Credits)			Periods / Week			Total Contact Hours	Credits
S.No.	Course Code	Course Title	L	T	P		
Course courses							
1	MIB2031	Agricultural Microbiology & Plant Pathology	3	0	0	3	3
2	MIB2032	Genomics & Proteomics	4	0	0	4	4
3	MIB2033	Marine & Environmental microbiology	4	0	0	4	4
4	MIB2034	Bioanalytical techniques	4	0	0	4	4
5	MIBEC01 to MIBEC06	Discipline Specific Elective	4	0	0	4	4
6	MIB2037	Soft Skills	2	0	0	2	2
Practical courses							
7	MIB2035	Practical V	0	0	2	4	2
8	MIB2036	Practical VI	0	0	2	4	2
Total:			21	0	4	29	25

Semester IV: Dissertation, Discipline Specific Elective (21 credits)			Periods / Week			Total Contact Hours	Credits
S.No.	Course Code	Course Title	L	T	P		
Course courses							
1	MIB2041	Dissertation	0	0	12	**	12
2	MIBON01	Bio-Inoculants Production Technology	0	3	0	3	3
3	MIBON02	Nanobiotechnology	0	3	0	3	3
4	MIBON03	Microbiome Biology	0	3	0	3	3
Total:			0	9	12	9+**	21

*Total credits earned at the end of 2nd year M.Sc. Microbiology is 94 (92+2 VAC)

- According to NCrF guidelines, various categories of courses including core course, core course practical, discipline specific elective courses, open elective, soft skill course, value added courses, internship and project dissertation are included in the curriculum.


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- Further, as recommended by NEP 2020 and NCrF guidelines, exit/entry options will be provided to the students after completion of first year of M.Sc. programme.
- It was recommended that all the students have to complete one open elective (3 credit), Internship/Training (4 credit) and a Value-added course (2 credit) in the second semester of M.Sc. Microbiology.
- In case of a student opting to exit the program after completion of first year of M.Sc., then PG Diploma in Microbiology can be offered subject to the condition that student should have cleared all the exams and completed the Internship/Training (4 credit).
- It was recommended that students should complete a course on soft skills (2 credit) and also choose one discipline specific elective (4 Credit) in the third semester of M.Sc. Microbiology program.
- Students will be permitted to undertake various courses offered in on-line platforms such as MOOC, NPTEL, SWAYAM, in the fourth semester and department will also offer online course such as Bio-Inoculants Production Technology, Nanobiotechnology and Microbiome Biology.

Annexure II: Revision of course work syllabi for PhD Microbiology Program:

- The Syllabus of PhD Microbiology was revised and critically assessed by all the BoS members.
- Seven revised elective courses were proposed for PhD microbiology program and all BOS members agreed for the same.
- Members suggested inclusion of at least 1 units or few topics in each unit, related to latest research highlights/trends or ground breaking research aspects in the elective courses of PhD Microbiology program.
- The suggestions/recommendations provided by BoS members were addressed and the final version of the syllabus was accepted by all the BoS members.
- Further, the members agreed for the implementation of the modified curriculum and syllabi of the PhD Microbiology program from the academic year (AY) 2023-2024 onwards.


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amitkumar@cutn.ac.in

Re: Syllabus with track change & Minutes of BoS meeting.

From : Dr. Krishnaveni Mishra <krishnaveni@uohyd.ac.in>
Subject : Re: Syllabus with track change & Minutes of BoS meeting.

Thu, Jul 27, 2023 06:40 PM

To : Dr. Amit Kumar Bajhaiya, Asst. Professor, Dept. of Microbiology <amitkumar@cutn.ac.in>

I approve the minutes and the modified syllabus.
 KM

Krishnaveni Mishra, PhD
 Professor
 Department of Biochemistry
 School of Life Sciences
 University of Hyderabad
 Hyderabad- 500046
 Telangana, India

On Thu, Jul 27, 2023 at 4:55 PM Dr. Amit Kumar Bajhaiya, Asst. Professor, Dept. of Microbiology <amitkumar@cutn.ac.in> wrote:

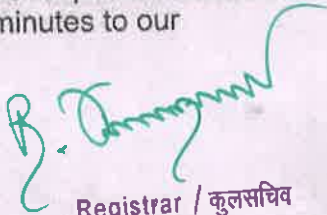
Dear all,

Greetings. Once again thanks a lot for giving your valuable time to improve our M.Sc & Ph.D. Microbiology syllabus. Here I have attached both the final and the track change version of the syllabus for your kind consideration. Kindly let me know if any further changes are required. Further the minutes of the meetings along with suggestion/recommendation are also attached. Here, I request the respected external members to kindly give email concurrence for submission of the minutes to our Academic section.

Thanks a lot once again.

डॉ. अमित कुमार बजैया | Dr. Amit Kumar Bajhalya, (PhD UoM, UK)
 (BoS Coordinator)

सहायक आचार्य | Assistant Professor,
 सूक्ष्मजीवविज्ञान विभाग | Department of Microbiology,
 जीव विज्ञान विद्यापीठ | School of Life Sciences,
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 तमिलनाडु, भारत | Tamil Nadu, INDIA
 दूरभाष | Telephone : +91 7499879105


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amitkumar@cutn.ac.in

Re: Syllabus with track change & Minutes of BoS meeting.

From : N. Ravi Sundaresan <rsundaresan@iisc.ac.in>
Subject : Re: Syllabus with track change & Minutes of BoS meeting.

Fri, Jul 28, 2023 09:43 AM

To : Dr. Amit Kumar Bajhaiya, Asst. Professor, Dept. of Microbiology <amitkumar@cutn.ac.in>

Dear Amit

Everything looks fine. Please go ahead and submit.

RAVI

From: Dr. Amit Kumar Bajhaiya, Asst. Professor, Dept. of Microbiology <amitkumar@cutn.ac.in>
Sent: Thursday, July 27, 2023 4:55 PM
To: krishnaveni <krishnaveni@uohyd.ac.in>; skarthy <skarthy@tnau.ac.in>; N. Ravi Sundaresan <rsundaresan@iisc.ac.in>; Dr. J. Rajesh Banu, Associate Professor, Dept. of Life Sciences <rajeshbanu@cutn.ac.in>; Dr. V. Rajendiran, Asst. Professor, Dept. of Chemistry <rajendiran@cutn.ac.in>
CC: ram <ram@cutn.ac.in>; Ravanan <ravanan@cutn.ac.in>; Dr. D. Siva Sundara Kumar, Associate Professor, Dept. of Microbiology <d.sivasundarakumar@cutn.ac.in>; Dr. Suchitra Rakesh, Asst. Professor, Dept. of Microbiology <suchitrar@cutn.ac.in>; Dr. Kaushik Rajaram, Asst. Professor, Dept. of Microbiology <rkaushik@cutn.ac.in>; Dr. Kavya Bakka, Asst. Professor, Dept. of Microbiology <kavyabakka@cutn.ac.in>; Dr. Amit Kumar Bajhaiya, Asst Professor, Asst Professor, Dept. of Microbiology <amitkumar@cutn.ac.in>; arathi sreenikethanam <arathi0517@gmail.com>; Dept. of Microbiology HOD, CUTN <hodmbiol@cutn.ac.in>
Subject: Syllabus with track change & Minutes of BoS meeting.

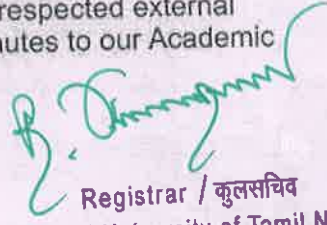
External Email

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Thanks a lot once again.

डॉ. अमित कुमार बड़ैया | Dr. Amit Kumar Bajhaiya, (PhD UoM, UK)
 (BoS Coordinator)
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 सूक्ष्मजीवविज्ञान विभाग | Department of Microbiology,
 जीव विज्ञान विद्यापीठ | School of Life Sciences,


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