

Index Department of Physiotherapy & Paramedical Sciences

Malwanchal University, Indore



Enhance Skills in Microbiology:

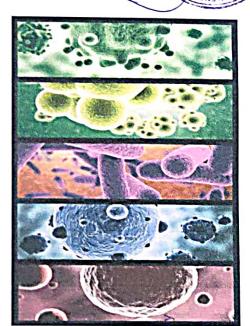


ABOUT

"Enhance Skills in Microbiology:
Developing expertise in microbial
identification, isolation, and
characterization, and applying
microbiological principles to
prevent infections, diagnose
diseases, and promote public health
and safety."

Eligibility Criteria:

BMLT Students.
Resource Person
Mr. Durgesh Yadav
Registration Fees: 0
Start Date:- 14/11/23 To 16
Schedule:- 09:00 to 04:00



PRINCIPAL

Module

- Microbial taxonomy and classification
- 2. Laboratory techniques (staining, culturing, PCR)
- 3. Microbial metabolism and genetics
- 4. Immunology and vaccine development
- 5. Antimicrobial resistance and therapy
 - Microbiome analysis and bioinformatics"

Course Outcome

Upon completion, students will demonstrate expertise in microbiological techniques, critically evaluate microbial data, and apply microbiological principles to real-world scenarios, enhancing skills in research, diagnostics, and infection control."

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Department of Physiotherapy & Paramedical Sciences



MALWANCHAL UNIVERSITY, INDORE

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Email: principalparamed@indexgroup.co.in, paramedical@indexgroup.co.in Website. Www.malwanchaluniversity/paramedical.co.in

City Office: 104, Trishul Apartment., 5, Sanghi Colony, A.B. Road, Indore M.P. -452008 (M.P.)

REF.NO.- IDOPT/PO/2023/

DATE: 04/11/2023

CIRCULAR

Index Department of Physiotherapy and Paramedical Sciences, Malwanchal University is conducting Enhance skills in Microbiology for BMLT students: the course will provide a depth knowledge on given topic

*Topic: -Enhance skills in Microbiology for BMLT students

*Date: 14/11/2023 - 16/11/2023

*Venue: Index department of physiotherapy and paramedical sciences.

*Resource Person: MR. Durgesh Yadav

You are expected to attend the above mentioned course to facilitate in-depth understanding of the topic and enhance the skills.

Faculties can enroll the names to Course Coordinator on or before 08/11/2023

COURSE COORDINATOR DR. SURBHI RAJPUT

PRINCIPAL
PARAMEDICAL COURSES

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Department of Physiotherapy and Paramedical Sciences

MALWANCHAL UNIVERSITY, INDORE

Ref: - IDOPT/PO/2023/605(h)

Date: 17/11/2023

Report: Enhance Skills in Microbiology for BMLT Students

Date :- 14/11/23-15/11/23

Introduction and Overview

Microbiology is a vital component of medical laboratory technology, playing a crucial role in disease diagnosis, treatment, and prevention. Medical laboratory technologists (MLTs) must possess comprehensive knowledge of microbiological principles, techniques, and safety protocols to provide accurate and reliable test results. This two-day workshop aimed to enhance the skills of BMLT students in microbiology, focusing on theoretical and practical aspects.

The objectives of this workshop were:

- To understand the fundamental principles of microbiology, including microbial classification, growth, and metabolism
- To learn laboratory techniques for microbial isolation, identification, and characterization
- To develop skills in microscope handling and staining procedures
- To apply microbiological principles to clinical scenarios and case studies

The workshop combined lectures, discussions, and hands-on laboratory sessions to provide students with a comprehensive understanding of microbiological concepts.

Day 1:

The first day of the workshop began with an overview of microbial classification, morphology, and growth. Students learned about:

- Bacterial cell structure and function
- Microbial metabolism and genetics
- Laboratory safety protocols and biosafety levels

Key Takeaways:

- 1. Microscopic examination of microorganisms
- 2. Staining techniques (Gram staining, acid-fast staining)
- 3. Cultivation and isolation of microorganisms

Practical Session:

Students participated in a hands-on laboratory session, focusing on:

- Microscope handling and staining procedures
- Cultivation of microorganisms on selective media
- Isolation and identification of microorganisms using biochemical tests

Day 2:

The second day of the workshop focused on:

- Immunology and vaccine development
- · Antimicrobial susceptibility testing
- Molecular diagnostic techniques (PCR, RFLP)





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Case Study Presentations:

Students presented case studies, applying microbiological principles to real-world scenarios. Discussions focused on:

- Microbial identification and characterization
- Antibiotic resistance and treatment options
- · Laboratory safety and quality control

Conclusion:

This workshop enhanced the skills of BMLT students in microbiology, providing a solid foundation for future practice. By applying microbiological principles, students will provide accurate and reliable test results, contributing to effective disease diagnosis, treatment, and prevention.

Assessment:

Students demonstrated proficiency through:

- Practical assessments (60%)
- Written quizzes (20%)
- Case study presentations (20%)

Resource Persons:

- Mr. Durgesh Yadav

Duration:

Two days (16 hours)

This workshop equipped BMLT students with essential knowledge and skills to excel in microbiology, ensuring accurate and reliable test results in clinical settings.

Summary of Key Takeaways:

- · Microbial classification, morphology, and growth
- Laboratory techniques for microbial isolation and identification
- Microscope handling and staining procedures
- Application of microbiological principles to clinical scenarios and case studies

Report Made by: Dr. Surbhi Rajput



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Department of Physiotherapy and Paramedical Sciences Malwanchal University Indore

Researce Person: We Francis to Suche

Value Added Course: Enhance Skills in Microbiology for BMLT Students

Date: 14th-16th November 2023

Venue: Index Department of Physiotherapy and Paramedical Sciences College, Indore

Resource Person: Mr. Durgesh Yadav

Course Overview:

This 3-day value-added course aims to enhance the skills of BMLT students in microbiology, focusing on practical applications and advanced techniques.

Day 1: Foundations of Microbiology

The first day covers:

- Review of Microbial Anatomy and Physiology
 - Classification and Identification of Microorganisms
 - Microbial Cultivation and Staining Techniques
 - Biochemical Tests for Microbial Identification
 - Laboratory Safety and Biosafety Protocols

Day 2: Advanced Microbiology Techniques and Applications

The second day focuses on:

- Molecular Diagnostic Techniques: PCR, RAPD, and DNA Sequencing
- Immunological Techniques: ELISA, Western Blot, and Immunofluorescence
- Microbial Resistance and Antibiotic Sensitivity Testing
- Bioinformatics and Microbial Genomics
- Case Studies and Group Discussions: Applying Microbiology Principles to Clinical Scenarios

Day 3: Practical Sessions and Project Work

The third day involves:

- Hands-on Training in Microbial Cultivation and Identification
- Molecular Diagnostic Technique Practicals
- Project Work: Designing and Presenting Microbiology Research Projects
- Viva Voce and Feedback Session

Course Objectives:

Upon completion, participants will:

- 1. Understand microbial anatomy, physiology, and identification techniques.
- 2. Apply advanced microbiology techniques, including molecular diagnostics.
- 3. Recognize microbial resistance and antibiotic sensitivity testing.
- 4. Integrate microbiology principles with clinical applications.

Registrar
Malwanchal University
Indore (M.P.)



Assessment and Certification:

Participants will be assessed through written quizzes, practical sessions, and project presentations. Successful completion will result in a certificate from Index Department of Physiotherapy and Paramedical Sciences College, Indore.

Course Materials:

- Workshop manual
- PowerPoint presentations
- Handouts and worksheets
- Relevant journals and research articles

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Enhance skills in microbiology for BMLT students



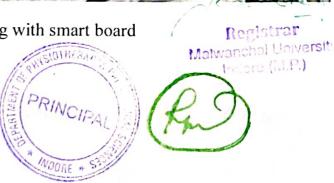
Mr. Durgesh sir telling about skills in microbiology



Mr. Durgesh sir giving introduction on enhancement [microbiology]



Mr. Durgesh sir teaching with smart board



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Department of Physiotherapy and Paramedical Sciences Malwanchal University Indore

Topic: - Enhance skills in microbiology for BMLT students

Resources Person: -Mr. Durgesh Yadav

Resour Date: - 14/11/2023-15/11/2023

Student Attendance List

(BMLT)

S.No	Students Name	Signature	
_1	Roshni Rathod	CHILL	
-2	rajni sisodiya	(Co	
3	Yashoda jadhav	(Van	
4	Nikita panchal	Melita	
5	Kali bariya	Kali	
6	Anil Chauhan	Anil	
7	Ankit vaidya	Dali	
8	Hariom Dangi	Harrim	
9	Satish Manik	3	
10	Yuvraj waskle	Yeurai	
11	Anand devda	(A) -	
12	Uzma Ali	1 pma	
13	Basanti khanna	Dorani	
14	Arzeena khan	Argem	
15	Pawan solanki	Rusy	
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16	Durgesh solanki	Jogesh	7
17	Deepak kag	Dockak	
18	Street D. J. J.		,
19	Shivam Deshmukh	Shivan	/ //
20	Neeraj ahirwal	Mooray	Sod Kand
21	Mayanka singh	(1) ayanh	Registrar
22	Pushpa jamle	Hushpy	Malwanchai Unive
	Komal bhanwar	Lamot	Indore (M.P.)
23	Pratima chouhan	(1) I	
24	Radha alawa	(D) N. I.	
	Audia alawa	10 carlhour	
25	Priyanka vasuniya	Donalda	
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26	Abhishek kaushik	Alaustan	(0)
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27	Abhishek makwana		(m)
28	Atul jadam	Alubos	The same of the sa
29	Anushi verma	Anusho	
30	Anuj Patel	Doubl -	ON SIOTHERADI
31	Hasmat Ali	Harmal	PHYSION IN
32	Ilma Khan	1/612143	
33	Iqra Abbasi	Faces - 1	(PRINCIPAL)
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34	krishnapal solanki	(hi)
35	Prashant chauhan	Poasso
36	Rohit panwar	Rabit
37	Nikita solanki	aire
38	Mahesh baghel	Mari
39	Vijay mujalde	(Va)
40	Birja waskle	Buo
41	Rekha rawat	
42	Renuka Patel	Renuto
43	Ranu gavliya	Ran-
44	Rameshwar Dangi	Rameshus
45	Kamal Dangi	(Ward
46	Sangeeta chouhan	Jangerta
47	Sadhana randhawa	Sadone-
48	Raj Nandini Patel	Ray.
49	Saniya ali	Baryo.
50	Naman Achale	Namas -

Registrar

Malwanchal University
Indore (M.P.)

Resource Person Mr. Durgesh Yadav

Principal
Paramedical Courses



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Topic: - Enhance skills in microbiology for BMLT students

Resources Person: -Mr. Durgesh Yadav

Date: - 14/11/2023-15/11/2023

Student Certificate List

(BMLT)

S.No	Students Name	Signature	
1	Roshni Rathod	Fullin	Frank - I -
2	rajni sisodiya	(F) on	
3	Yashoda jadhav	Yashool	
4	Nikita panchal	·Nibila	
5	Kali bariya	(Durl	
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18	Shivam Deshmukh	A	Indone (Len)
19	Neeraj ahirwal	Niny	
20	Mayanka singh	nagartan	
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22	Komal bhanwar	Kome	
22	D	Galuntes	
23	Pratima chouhan		
24	Radha alawa	Paur	
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23	Priyanka vasuniya	4 - (20	
26	Abhishek kaushik	Alhishek	100
	Abilisher Raushir		(Mar)
27	Abhishek makwana	Reve	
28	Atul jadam	Ala	
29	Anushi verma	America	
30	Anuj Patel	Amui /s	OTHEHAPYCARREN
31	Hasmat Ali	Osmat 3	1/2
32	Ilma Khan	7 1 44 44 1 = 1	RINCIPAL
	Iqra Abbasi	Ogna-	MINCIPALIFI

34	krishnapal solanki	Kawishapa
35	Prashant chauhan	Ralb
36	Rohit panwar	Colonia
37	Nikita solanki	(A)
38	Mahesh baghel	Malice
39	Vijay mujalde	1 14.7011
40	Birja waskle	Bom
41	Rekha rawat	Ban
42	Renuka Patel	Renyto
43	Ranu gavliya	(P) 22
44	Rameshwar Dangi	RED
45	Kamal Dangi	Law
46	Sangeeta chouhan	Tygeta
47	Sadhana randhawa	Salvy
48	Raj Nandini Patel	RaJ.
49	Saniya ali	Rus
50	Naman Achale	4

And

Resource Person Mr. Durgesh Yadav



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