

MICROBIOLOGY Departmental Report (2022-2023)

I. Department profile

Names	Designation
Dr. (Ms) Arjumanara Surti	Chairperson and Head, Department of Microbiology Associate Professor
Dr. Rajbinder Kaur Dehiya	Associate Professor
Ms. Shraddha Prabhu	Assistant Professor
Mr. Vijay Vig	Assistant Professor
Ms. Ayesha Shaikh	Assistant Professor (Ad-hoc appointment)
Ms. Swamini Patade	Assistant Professor (CHB position)
Ms. Vaibhavi Mullaserry	Assistant Professor (Ad-hoc appointment)

II. Courses taught

UNDERGRADUATE:

SEMESTER I

Course Code	Title	Credits
SBSMCB101	FUNDAMENTALS OF MICROBIOLOGY	2
SBSMCB102	BASIC TECHNIQUES IN MICROBIOLOGY	2
SBSMCBP1	PRACTICALS	2

SEMESTER II

Course Code	Title	Credits
SBSMCB201	EXPLORING MICROBIOLOGY	2
SBSMCB202	ADVANCED AND APPLIED MICROBIOLOGY	2
SBSMCBP2	PRACTICALS	2

SEMESTER III

Course Code	Title	Credits
SBSMCB301	MICROBIAL DIVERSITY, MICROBIAL TAXONOMY & INSTRUMENTATION	2
SBSMCB302	ENVIRONMENTAL MICROBIOLOGY	2
SBSMCB303	INTRODUCTION TO MICROBIAL METABOLISM AND BIOSTATISTICS	2
SBSMCBP3	PRACTICALS	3

SEMESTER IV

Course Code	Title	Credits
SBSMCB401	MEDICAL MICROBIOLOGY & IMMUNOLOGY	2
SBSMCB402	APPLIED MICROBIOLOGY	2
SBSMCB403	BASICS IN GENETICS AND MOLECULAR BIOLOGY	2
SBSMCBP4	PRACTICALS	3

SEMESTER V

Course Code	Title	Credits
SBSMCB501	MICROBIAL GENETICS	2.5
SBSMCB502	MEDICAL MICROBIOLOGY AND IMMUNOLOGY: PART-I	2.5
SBSMCB503	MICROBIAL BIOCHEMISTRY: PART-I	2.5
SBSMCB504	BIOPROCESS TECHNOLOGY: PART-I	2.5
SBSMCBP5	PRACTICALS	06
SBSAPC503	FOOD PRODUCTION AND PROCESSING (General Principles)	2
SBSAPCP503	PRACTICALS	2

SEMESTER VI

Course Code	Title	Credits
SBSMCB601	rDNA TECHNOLOGY, BIOINFORMATICS & VIROLOGY	2.5
SBSMCB602	MEDICAL MICROBIOLOGY AND IMMUNOLOGY: PART-II	2.5
SBSMCB603	MICROBIAL BIOCHEMISTRY: PART-II	2.5
SBSMCB604	BIOPROCESS TECHNOLOGY: PART-II	2.5
SBSMCBP6	PRACTICALS	06
SBSAPC603	FOOD PRODUCTION AND PROCESSING (Advanced methods, Applications and Quality Assurance)	2
SBSAPCP603	PRACTICALS	2

POST GRADUATE:**SEMESTER I**

Course Code	Title	Credits
SMSMCB101	VIROLOGY AND CELL BIOLOGY-I	4
SMSMCB102	GENETICS-I	4
SMSMCB103	MICROBIAL BIOCHEMISTRY	4
SMSMCB104	MEDICAL MICROBIOLOGY AND IMMUNOLOGY	4
	PRACTICALS	
SMSMCBP101	VIROLOGY AND CELL BIOLOGY-I	2
SMSMCBP102	GENETICS-I	2
SMSMCBP103	MICROBIAL BIOCHEMISTRY	2
SMSMCBP104	MEDICAL MICROBIOLOGY AND IMMUNOLOGY	2

SEMESTER II

Course Code	Title	Credits
SMSMCB201	VIROLOGY AND CELL BIOLOGY-II	4
SMSMCB202	GENETICS-II	4
SMSMCB203	MICROBIAL BIOCHEMISTRY	4
SMSMCB204	MEDICAL MICROBIOLOGY AND IMMUNOLOGY	4
	PRACTICALS	
SMSMCBP201	VIROLOGY AND CELL BIOLOGY-II	2
SMSMCBP202	GENETICS-II	2
SMSMCBP203	MICROBIAL BIOCHEMISTRY	2
SMSMCBP204	MEDICAL MICROBIOLOGY AND IMMUNOLOGY	2

SEMESTER III

Course Code	Title	Credits
SMSMCB301	RESEARCH METHODOLOGY	4
SMSMCB302	FOOD MICROBIOLOGY	4
SMSMCB303	ADVANCES IN BIOTECHNOLOGY-I	4
SMSMCB304	ENVIRONMENTAL MICROBIOLOGY-I	4
	PRACTICALS	
SMSMCBP301	RESEARCH PROPOSAL WRITING	2
SMSMCBP302	FOOD MICROBIOLOGY	2
SMSMCBP303	ADVANCES IN BIOTECHNOLOGY-I	2
SMSMCBP304	ENVIRONMENTAL MICROBIOLOGY-I	2

SEMESTER IV

Course Code	Title	Credits
SMSMCB401	TOOLS AND TECHNIQUES: BIOMOLECULAR ANALYSIS	4
SMSMCB402	PHARMACEUTICAL MICROBIOLOGY	4
SMSMCB403	ADVANCES IN BIOTECHNOLOGY-II	4
SMSMCB404	ENVIRONMENTAL MICROBIOLOGY-II	4
	PRACTICALS	
SMSMCBP401	DISSERTATION SUBMISSION AND PRESENTATION	2
SMSMCBP402	PHARMACEUTICAL MICROBIOLOGY	2
SMSMCBP403	ADVANCES IN BIOTECHNOLOGY-II	2
SMSMCBP404	ENVIRONMENTAL MICROBIOLOGY-II	2

III. BOS composition

Dr. Arjumanara Surti - Chairperson, Board of Studies
Dr. Rajbinder Kaur Dehiya -Senior Teacher
Dr Anuradha Pendse -The Vice-Chancellor's nominee
Dr. Vikrant Bhor -Subject Expert (outside the Parent University)
Dr. Annamma Odaneth -(outside the Parent University)
Dr Manju Sharma -(outside the Parent University)
Dr Girish Mahajan - Representative from industry
Ms. Martina Gomes- Postgraduate alumnus

Other Members of Faculty –

Ms. Shraddha Prabhu
Mr. Vijay Vig
Ms. Ayesha Shaikh
Ms. Swamini Patade
Ms.Vaibhavi Mullaserry

IV. Dates of BOS meetings -8th OCTOBER 2022 and 10th JUNE 2023

V. Activities Conducted by the department:

1. Microbes celebrate - Flavours of India (Fermented food recipe Competition and poster exhibition)

Date - 17th August 2022 (9:30 am to 12:30 pm)

Number of students involved - 36



2. 'Stress management' by Joshua Tivade, (Consultant psychologist at Accenture)

Guest/Speaker –Mr. Joshua Tivade, a consultant psychologist at Accenture.

Date - 20th August, 2022

Number of students involved – 100 participants



SOPHIA COLLEGE (AUTONOMOUS)
Department of Microbiology
Under the aegis of STAR STATUS

Organizes A Session on 'Stress Management'

By:
Mr. Joshua Tivade
Consultant psychologist at Accenture

REGISTER → <https://forms.gle/CL9NFnZ7jLsArco9H1E>

Date and Date: Saturday, 20th August 2022 Time: 11:30 am
Venue: AV Hall

E certificate will be provided to all participants.



3. 'Organized 'CrossScope – A series of career guidance sessions.

Date- 10th December 2022 till 28th January 2023.

- **Session 1-** Entrance and Competitive exams- "Yes you can", by Dr. Vishal Kadu, Assistant Professor, Sathaye College.

Date and time of event – 10th December, first lecture for UG students – 11.30am to 12.15pm, second lecture for PG students – 12.30pm to 1.15pm.

[Session 1- Competitive exams](#)



- **Session 2-** Opportunities in healthcare by Mr. Syed Samiullah, Head of operations, Professional Info Tech, Coimbatore.

Date of the event – 22nd December 2022

session 1 - Medical transcription, Medical coding and Medical billing.

session 2- Clinical research, Pharmacovigilance and food safety.

[Session 2 - Opportunities in health care](#)



- **Session 3-** Avenues in the medical field- Radiation Oncology, by Ms. Jeevanshu Jain, Medical Physicist –C, Department of Radiation Oncology, ACTREC, Tata Memorial Centre.

Date of event – 14th January, 2023. Time 6-7pm. Platform – Zoom

[Session 3 - Avenues in Medical Field: Radiation Oncology](#)



- **Session 4-** Bioanalytical Science – A roadway to diverse opportunities, by Dr. Naomita Dhume, Coordinator and HOD of Bio Analytical Science at G.N Khalsa College.

Date of event – 20th January 2023, 11.30 am- 12.30 pm



- **Session 5-** Art in Human reproduction – contribution of an embryologist by Dr. Vijay Mangoli, Embryologist.

Date of event – 28th January, 2023, time – 12.30pm to 1.15 pm

[Session 5 - Embryology](#)



4. Ananya

Activity - Flash Mob - A mental health portrayal of today's youth.

Date – 18th Jan 2023

Number of students involved – 20

Video Link: [Flash MOB Video.mp4](#)



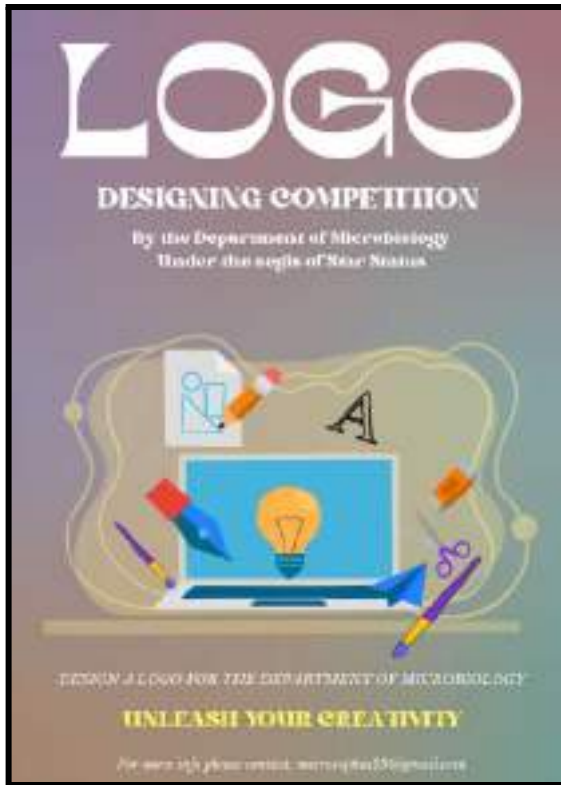
5. Logo Designing competition for Microbiology department

Date (from & to) – 21st January 2023 – 30th January 2023

Number of students involved – 05 (student volunteers), 30 (participants)

VIDEO LINK:

https://drive.google.com/file/d/1IR2ul5SMtc9JaXLnoz3Ak17-7tyYrTU/view?usp=share_link



MICROGYANI 2023 (Intercollegiate Quiz Competition)

Date (from & to) - 15th February 2023 from 10:30 am to 2:30 pm

Number of students involved - 62



7. Marathi Bhasha Din celebrated on 27th February 2023 in the microbiology lab by screening Marathi movie ‘Shambharava Sthal’ and students were asked to write their review / comments on post it in Marathi language.

Number of students involved – 27



8. Science day outreach activity (under star status): To develop interest in various fields of basic sciences and promote science education amongst school children, various experiments and other activities were organized in collaboration with the Zoology department on 28th February 2023. 7th and 8th std. students of three different schools visited college and enthusiastically participated in all the activities (hands on experiments, demonstrations, microscopy, quiz, games etc) organized by our FYBSc volunteers.

Date - 28th February 2023 (8am to 2pm)

Number of students involved - 65 participants



9. Field Visit to ACTREC

Date- 22nd August 2022

Number of students involved – 05



10. Field Visit to ACTREC open day

Date -1st December 2022

Number of students involved –16 students, 8 - MSc Part 2 and 8- TYBSc Microbiology.



11. Field Visit to Ranibaug, Byculla Zoo

Date- 1st December 2022

Number of students involved – 15



12. Field Visit to Bay view Research centre.

Date - 21/01/23

Number of students involved –42 students, 10- MSc Part 1 and 32- TYBSc Microbiology



13. Field trip to Parle G biscuit factory, Talegaon, KF bioplants, Manjiri and Go cheese factory and Bhagyalaxmi Dairy farms, Mancher

Date - 4th & 5th January 2023

Number of students involved – 47 (SYBSc, TYBSc & M.Sc Part II)



14. Field Visit to Common Effluent Treatment Plant, KoparKhairane

Date- 22nd February 2023

Number of students involved – 08



15. Field visit to BARC on occasion of National Science Day Celebration.

Date - 1st March 2023

Number of students involved – 20



16. Educational Visit to NIRRH, Mumbai

Date- 10th March ,2023

Number of students involved – 10 (MSc Part 1)

VI. Special pedagogical tools used, other than the lecture method

1. Use of multimedia like PPTs, Canva,
2. Youtube Videos and Animations
3. Virtual labs
4. Seminar presentation by students
5. Creation of infographics
6. Quizzes, Crosswords
7. Flipped Classroom
8. Role play
9. Survey based assignments /
10. Literature reviews
11. Models /Exhibitions / Poster presentations
12. Online quizzes

VII. Guidance/coaching for competitive examinations and career counselling offered to students:

1. Session on Career opportunities in the field of Clinical Research

Guest/Speaker-

- Renuka Neogi Designation: CPL Manager, India & South East Asia Cluster, Sanofi,
- Martina Gomes Designation: Head, Regulatory Affairs, India, Bayer,
- Aparna Thorat Designation: Sr. Centralized monitoring lead. IQVIA RDS.

Date - 13th August 2022 (Saturday)

2. HBNI-DAE AKAM lecture program under the aegis of DBT Star status on career opportunities in the field of Basic Sciences for Sophia College students

Date - 26th August 2022

Number of students involved - 204 participants

Feedback Link- [Feedback form - Career Opportunities in Basic Sciences \(Responses\)](#)