

Skill development program

I. Report for Online In House Skill Development Programme on Enhancing E-Learning Through ICT Tools.

Department: Life Science Association

Objective:

1. To make students acquainted with ICT tools which we have been using on teaching platform.
2. Development of skill to switch from offline teaching to online teaching mode
3. Use of ICT tools from a student's perspective.
4. To resolve queries reported by students
5. To give some hands-on for topics covered during the sessions

Course coordinator: Dr. Madhu

Duration with date: 6 hrs (17/12/2020-19/12/2020)

Each day having 2 hrs session

Number of Participants: 56

Profile of Participants:

Course: B.Sc. Life science,

Year: 1st

College: Daulat Ram College

Programme Schedule:

1st Day (17th Dec. 2020)

Google classroom: Dr. Sonika Sharma, Assistant Professor, Zoology Department. (11:00 am-12:00 pm)

Google Doc and Google Slides: Dr. Jyotsna Singh, Assistant Professor, Zoology Department. (12:00 pm to 1:00 pm)

2nd day (18th Dec, 2020)

Google Drive, Google Scholar, Google Sheet, Google chrome extensions: Dr. Jyoti Taneja, Assistant Professor, Zoology Department. (11:00 am-1:00 pm).

3rd Day (19th Dec, 2020)

Google Form and Chems sketch: Dr. Aditi Puri, Assistant Professor, Chemistry Department, (11:00 am-12:00 pm)

Google Meet: Dr. Anju Jain, Assistant Professor, Zoology Department. (12:00 pm-1:00 pm)

Method of Assessment of Participants:

1. Google classroom was created using Gsuite ID and all students were asked to join the class using their Gsuite ID only.
2. For each session one or two assignment were given based on application of tool which all students needed to submit within due time.
3. Feedback form was also posted in the form of Google form on Google classroom itself, which they need to access and fill.

Feedback from Participants regarding the event:

Students showed a good indulgence towards this SDP. They feel that after attending this SDP their knowledge about ICT tools have improved. Students are enthusiastic towards learning more ICT tools and having more such SDP in future. They want to expand their knowledge. They showed their inquisitiveness to learn more ICT tools like graphic design, Podcast, Paxilabs etc.

Google classroom, Google meet, Google doc like topics were the most preferred topics among students.

II. 2021-22

Department Of Zoology, Daulat Ram College organized a Skill Development Program introducing Information and Communications Technology tools (SDP-ICT) on 24th and 25th November 2021 for the students of Zoology Hons. Ist years who joined the college on 22nd November 2021. For the Skill development program, students were invited to a Google Classroom made for them. This made them aware of the importance of their credentials G Suite ID.

Schedule of SDP November 2021 For Bsc.(Zoology)

Date	Time	Title of session	Name of resource person.
24th November	09:30am-11:00am	Google classroom.	Dr. Sonika Sharma
24th November	11:00am-12:00pm	Google Doc.	Dr. Jyotsana.
24th November	12:00pm	Google meet and google forms.	Dr. Neha Niharika.
25th November	9:30am-11:00 am	Introduction to Data presentation, use of graph pad prism.	Dr. Jyoti Singh
25th November	11:30 am	Canva.	Ms. Aashi.

On 24th November, the event was presided over by the Teacher Incharge, Dr. Jyoti Taneja with a heartfelt welcome to Dr. Meetu Khosla, coordinator of SDP. She gave her best wishes for this event. This was followed by a brief intro on official gsuite id and importance of learning skill development program on Information and Communications Technology tools. Students were informed of attending all sessions and submitting quizzes and assignments on time.

Session 1 of SDP was conveyed at 9:30 am by Dr. Sonika Sharma. The students were introduced to the classroom and the various options were discussed. The mobile view of the classroom was also explained. The facilitator also explained to the students how to respond to assignments. Along with this, students were given hands-on practice on how to upload assignments and the conversion of assignments to pdf for uploading and tracking their academic progress was also discussed. The session came to an end with a question-answer session and students were given assignments based on the skill they learnt.

Session 2 was mentored by Dr. Jyotsana on the use of google doc explaining its various features and know-abouts while in Session 3 participants were guided by Dr. Neha Niharika on the use of google forms and google meet which boosted their self-confidence in using these platforms for their daily academic assessments and records. This was an opportunity for the participants to get acquainted with these web-based programs and have real-time collaboration with their acquaintances.

Day 2 began with the introduction by Dr. Jyoti Singh on data presentation and its interpretation using graph pad prism, a commercially available scientific 2D graphing and statistics software. Last session of Day 2 was being done by Ms. Aashi, to make students familiar with Canva, a graphic design platform, used to create social media graphics, presentations, posters, documents, and other visual content.

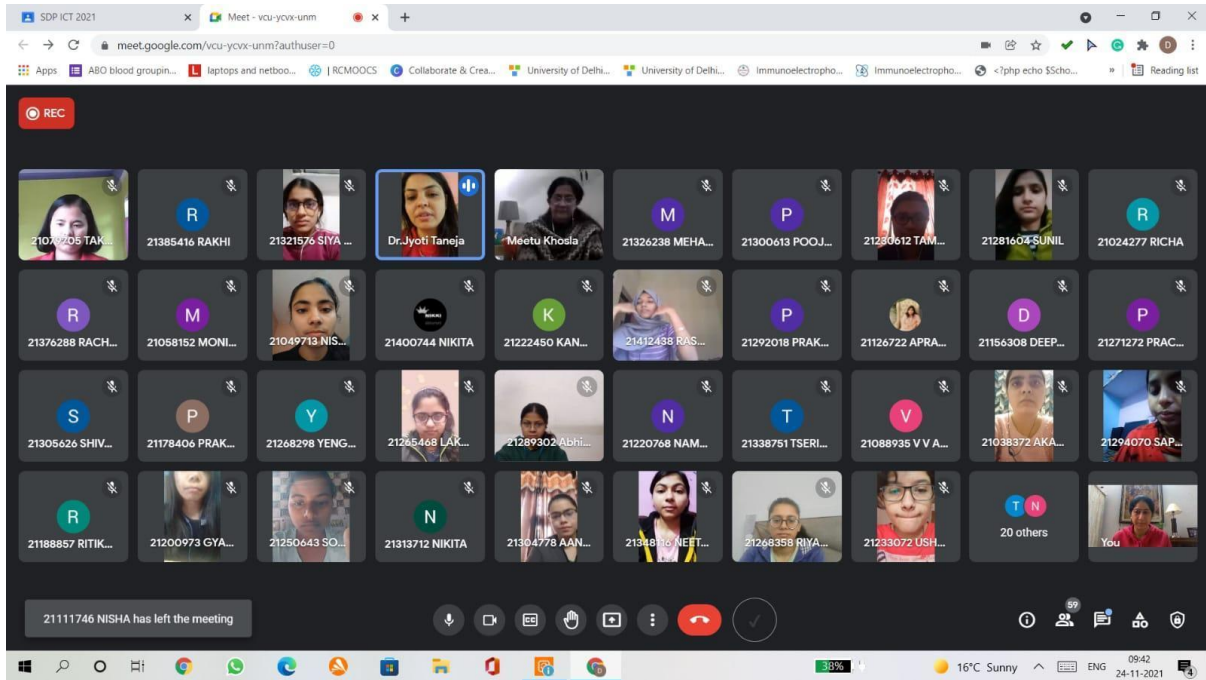
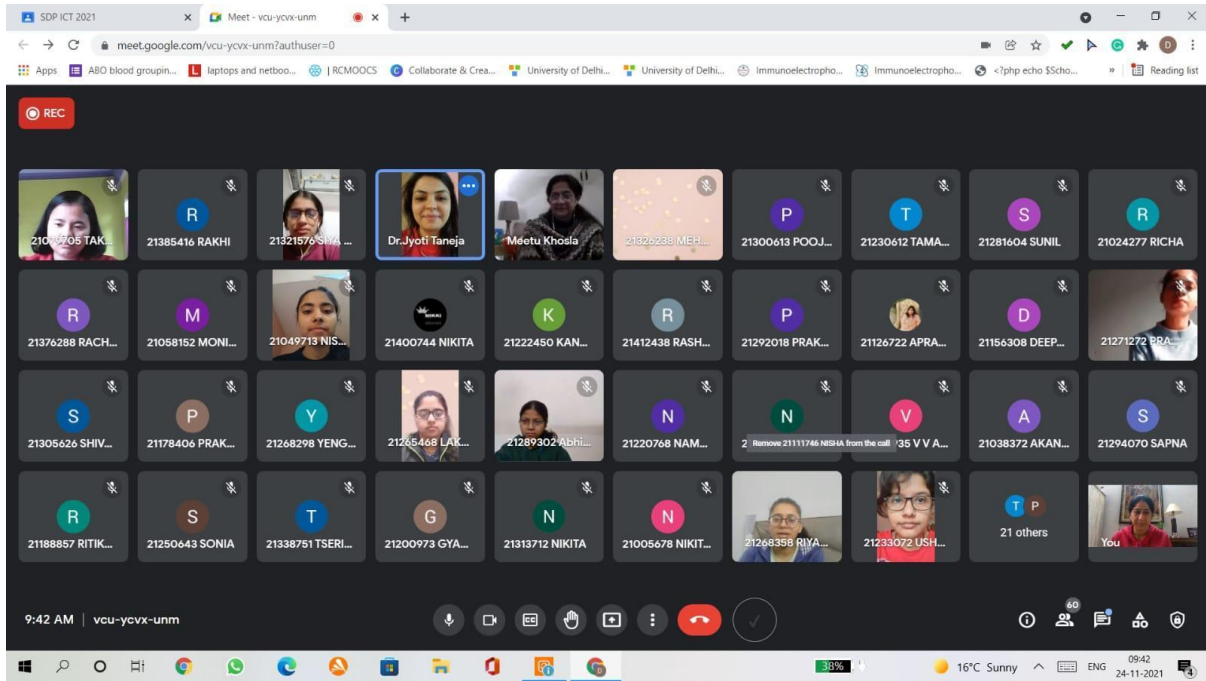
In the end, students were given a final MCQ, to know their overall learning and understanding. The overall feedback of the students was collected via google forms which were quite pleasing as they got to learn a whole new set of necessary skills in a well-organized environment.

Number of students- 55

Date and timing of the event- 24-25th Nov. 2021, 9:30 am onwards

Link for the event recording-

Event poster and pictures-



Feedback form Summary Images

Classes | Emailing SDP.pdf - jyotitaneja | FEEDBACK FORM - Google Fo | Blank 2 | SDP REPORT.docx - Google D | +

docs.google.com/forms/d/10f5v6NUf83_jycZIBNs1gsaDS89F8_lz6LOqWU1zqKY/edit#responses

FEEDBACK FORM

Questions Responses **460** Settings

Session 5

Please respond to the following statements by using the 4-point rating scale to indicate the extent to which you agree or disagree with each statement.

4* 3* 2* 1*

Workshop objectives were stated clearly and met. The presenter(s) provided adequate time for questions and answered them satisfactorily

Please share any other comments you have regarding this workshop?

460 responses

SDP picture.pdf Show all

Classes | Emailing SDP.pdf - jyotitaneja | FEEDBACK FORM - Google Fo | Blank 2 | SDP REPORT.docx - Google D | +

docs.google.com/forms/d/10f5v6NUf83_jycZIBNs1gsaDS89F8_lz6LOqWU1zqKY/edit#responses

FEEDBACK FORM

Questions Responses **460** Settings

Please share any other comments you have regarding this workshop?

460 responses

- Good
- No comments
- Useful
- Great
- Beneficial
- NO
- It was really helpful and I have learned new things.
- It's useful
- NA

SDP picture.pdf Show all

III. 2022-23

2 Day E-SDP: Enhancing Learning Through ICT Tools

Sub-theme: Digital Literacy

Course Coordinators: Dr. Madhu & Dr. Sonika Sharma

Duration with dates: 26 and 27th November, 9am-1pm

Sr. no	Date	Time	Module/topic title Name of the Speaker	Affiliation of the Speaker
1	26 November, 2022	9:00-11:00	All about Poster's , Research article, Google Doc/Dr. Neha Niharika	Assistant Professor, DRC

2	26 November, 2022	11:00-1:00pm	About Google drive, Scholar and extensions/ Dr. Jyoti Taneja	Assistant Professor, DRC
3.	27 November, 2022	9:00-11:00 am	Introduction to Google Classroom and Spreadsheet/ Dr. Jyoti Singh	Assistant Professor, DRC

4.	27 November, 2022	11:00am- 1:00 pm	Queries- answer session and hands on assignment / Dr. Jyoti Taneja, Dr. Jyoti Singh and Dr. Neha Niharika	Assistant Professor, DRC
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Details of the course:

1) Description of the course: This Course was designed to introduce the new batch of students to the various digital tools that will facilitate their learning process. A blended mode of learning is the need of the hour and all these digital tools will empower our students and make their learning process simpler.

2) Objectives:

A. Introduction to Basic ICT tools like google docs, forms etc

B. Introduction to spreadsheet

C. Introduction to useful chrome extensions

D. Introduction to Google Classroom and google drive

E. Introduction to Research paper writing and Google Scholar

3) Topics covered:

A. All about Poster's Research articles and Google doc

B. About Google drive, Scholar and extensions

C. Introduction to Google Classroom and Spreadsheet

Number and Profile of Participants:

No. of Students	Department Year
42	Zoology First Year

Methods of Assessment of Participants:

(Test/Assignment/Project/Quiz/Presentation etc.) (Kindly provide a copy of the pre-imposed measures/instruments/scales/questionnaires used for assessment of the learning outcomes):

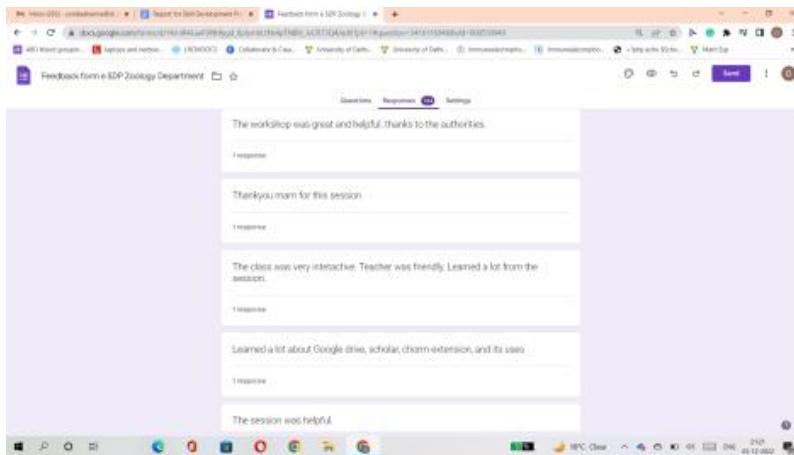
1. Students were given assignments based on the topics covered in all the sessions.
2. The students were assessed on the basis of their ability to apply the skills imparted during the sessions.

Detailed Learning Outcomes of the Course:

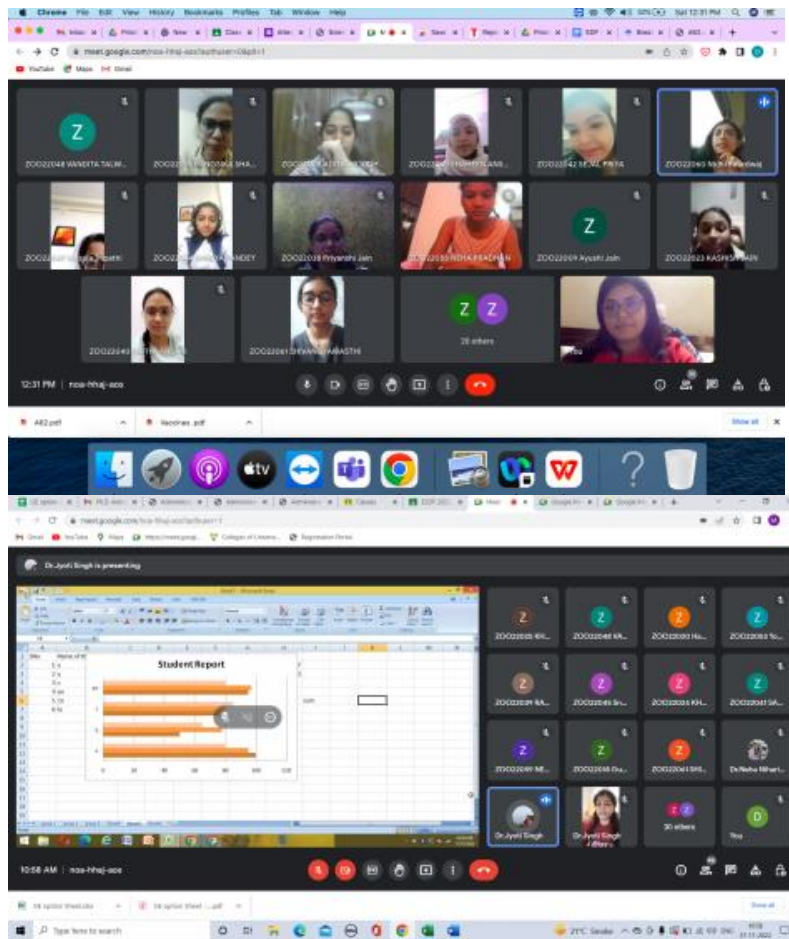
After completing the course students will be

1. able to use basic ICT tools and extensions for their projects and assignments.
2. able to use spreadsheets and charts for studies
3. able to make poster and participate in conferences

Feedback from Participants Regarding the Program:



A Few Photographs (student activity oriented photographs only/activity photos):



IV 2023-2024

Name of the Department: Zoology Department

Title of the Course: 2 Day E-SDP: Enhancing Learning Through ICT Tools

Sub-theme: Digital Literacy

Course Coordinators: Dr. Sonika Sharma

Course Co-Cordinator: Dr. Madhu

Duration with dates: 23rd and 24th August, 2023, (Time:9am-11am, 12pm-2pm)

Sr. no	Date	Time	Module/topic title	Name of the Speaker	Affiliation of the Speaker
1	23 August, 2023	9:00- 11:00	MS PowerPoint and biological illustration	Ms. Anna Senrung	Assistant Professor, DRC
2	23 August, 2023	12:00- 2:00pm	Google Meet and Google Classroom	Dr. Madhu	Assistant Professor, DRC
3.	24 August, 2023	9:00- 11:00 am	Preparation of Assignment Submission, Google Sheet and Excel	Dr. Sonika Sharma	Assistant Professor, DRC
4.	24 August, 2023	12:00-2:00 pm	Drive, Calendar, Form, Doc & Jam board.	Dr. Jyotsna Singh	Assistant Professor, DRC

Details of the course:

- 1) Description of the course: This Course was designed to introduce the new batch of students to the various digital tools that will facilitate their learning process. A blended mode of learning is the need of the hour and all these digital tools will empower our students and make their learning process simpler.
- 2) Objectives:
 - A. Introduction to Basic ICT tools like google docs, forms, calender etc
 - B. Introduction to spreadsheet

- C. Introduction to useful Biological Illustration
- D. Introduction to Google Classroom and google drive

3) Topics covered:

- A. Biological Illustration and MS Power Point presentation
- B. Preparation of Assignment Submission and Spreadsheet
- C. About Google Drive, Form, Doc, Jam Board
- D. Introduction to Google Classroom and Google Meet

Number and Profile of Participants:

No. of Students	Department	Year
32	Zoology	First Year

Methods of Assessment of Participants: (Test/Assignment/Project/Quiz/Presentation etc.)

(Kindly provide a copy of the pre-imposed measures/instruments/scales/questionnaires used for assessment of the learning outcomes):

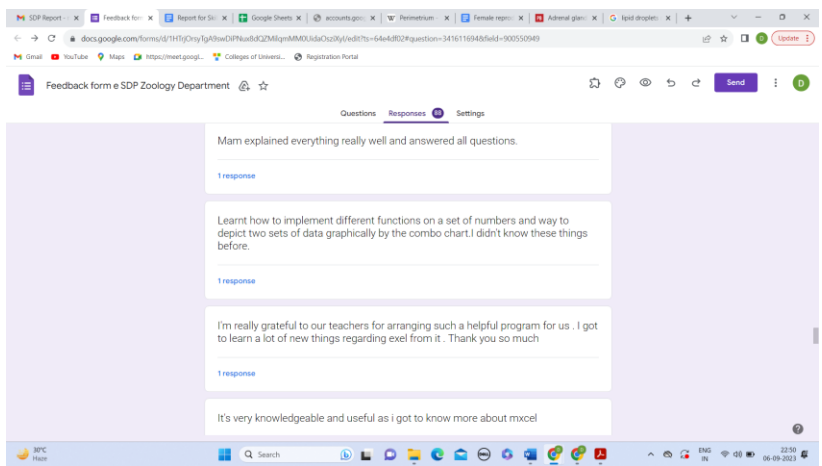
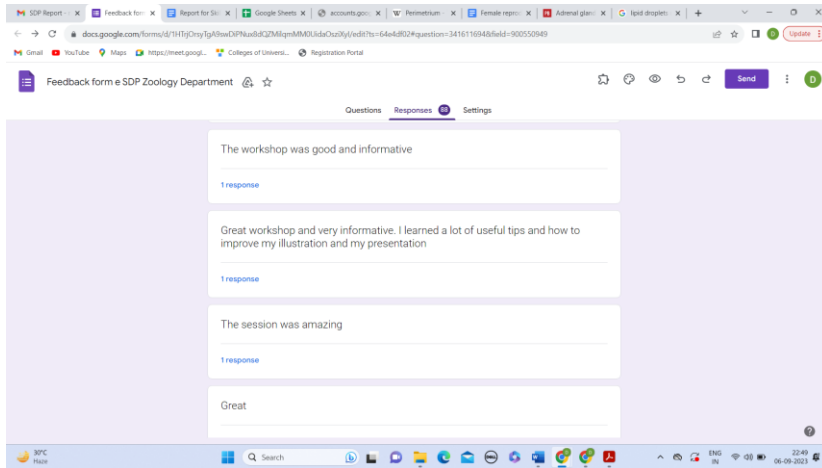
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Detailed Learning Outcomes of the Course:

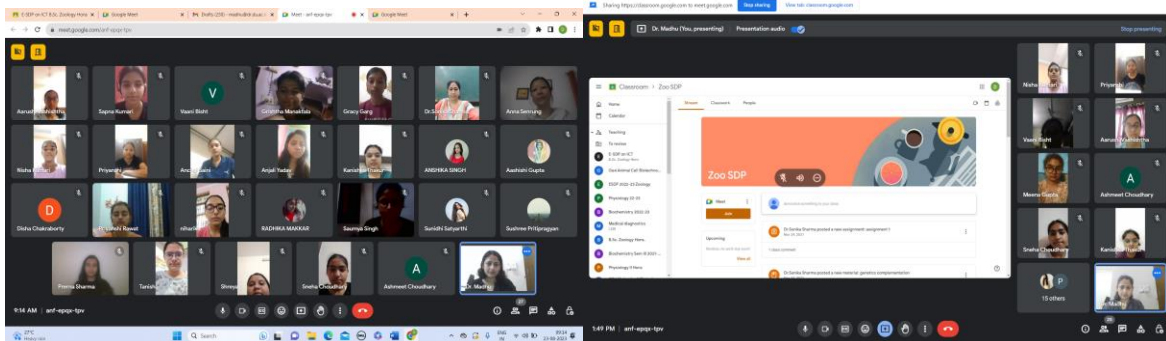
After completing the course students will be

1. able to use basic ICT tools and extensions for their projects and assignments.
2. able to use spreadsheets and charts for studies
3. able to make poster and participate in conferences

Feedback from Participants Regarding the Program:



A Few Photographs (student activity oriented photographs only/activity photos):



SDP on 'Unveiling the Animal World in Behavioural way' 23rd March 2023- 8th April 2023

Coordinators: Dr. Jyoti Singh, Dr. Neha Niharika

No. of Students participated: 34



DEPARTMENT OF ZOOLOGY
DAULAT RAM COLLEGE
NAAC Grade 'A' ACCREDITED
Gwalior

Skill Development Program
Under the aegis of IQAC
"Unveiling the Animal World in Behavioral Way".

HIGHLIGHTS:

1. Social behaviour of insects.
2. Habitat selection of insects and the effect of external factors on their growth.
3. Nesting pattern in Birds.
4. Use of pesticides as control measures and determination of L50 & LD50.

Registration Link: <https://forms.gle/uz7F9dPrmz3x8535>

Registration fee ₹500 only

From: 23rd March onwards
OPEN FOR ALL !!

Bank Details for payment:
Account holder name: Principal, Daulat Ram College
Bank account no: 12280200010004
IFSC Code: IDIB00011731
MICR Code: 110020084

Prof. Sonika Bary (Principal)
Dr. Madhu (TIC)
Prof. Sonika Nanda (Vice-Principal)
Dr. Jyoti Singh
Dr. Neha Niharika (Co-ordinator)
Prof. Rajni Khatun (IQAC Coordinator)
Prof. Meenu Khosla (SDP Coordinator)

23rd March 2023, Student development program

Inaugural talk
"Darwinian concept for evolution of sexual selection"
Prof. Ashok K. Singh



"Time will neither Wait for You nor for Me: Clock-controlled Behaviours in Nature and Lab"
Prof. Vinod Kumar








The course highlights types, mechanisms and importance of the biological rhythms and biological clocks in the living organisms and will help the learners to understand and appreciate the different types of animal behaviours, The practical aspect of course will help students to design and analyse the research hypothesis/study critically.

V. Names of the Collaborating Departments: Department of Zoology

Title of the Course: Hands on training in Life Sciences: Tools and Techniques

Course Coordinator: Dr. Jyoti Taneja, Co-Coordinator: Dr. Sonika Sharma

Duration with dates: 5 days- 13.07.22, 14.07.22, 15.07.22, 18.07.22, 19.07.22

Workshop Schedule

Inaugural Ceremony - 13 July 2022 at 9:30 AM

SNo.	Date	Theme	Topic	Resource person	Affiliation	Time
1	13-Jul-22	Medical Diagnostics	BP measurement	Mr. Amit		10AM-12:00 PM
			Hb estimation	Dr. Madhu		12:00 PM-1:00 PM
			Differential leucocyte count (DLC)	Dr. Sonika Sharma		2:00 PM-3:30 PM
			Chick windowing			
2		Developmental biology		Dr. Pallavi		3:30 PM-4:30 PM

3	14-Jul-22	Cell Biology	Study of mitosis	Dr. Jyoti Singh	9:30 AM-11:00 PM
			Study of X inactivation in human cheek cells	Ms. Kungreiliu Pannel	11:00 AM-I:00 PM
			Principle of fixation and staining	Dr. Pallavi	1:30 PM-3:30 PM
4		Developmental biology	Observation of chicken embryonic development.	Dr. Pallavi	3:30 PM-4:30 PM
	15-Jul-22				
5		Molecular Biology	Primer designing	Dr. Sonika Sharma	9:30 AM -11:00 AM
			Polymerase Chain Reaction (PCR)	Dr. Neha Niharika	1 1:00 AM-12:30 PM
			DNA estimation	Dr. Sunita k. Yadav	1:30 PM-3:30 PM
6		Developmental biology	Chick windowing and observation of chicken embryonic development.	Dr. Pallavi and Dr. Jyoti Taneja	3:30 PM-4:30 PM
7	18-Jul-22	Biochemistry	Qualitative assay of protein	Dr. Madhu	9:30 AM-11:00 AM
			Enzyme activity bioassay kinetics and achromic point determination	Dr. Jyoti Taneja	11:00 AM-I:00 PM
			Amino acid separation by Paper chromatography	Mr. Amit Singh Dhaulaniya	1 :30 PM-2:30 PM
8		Developmental biology	Chick windowing and observation of chicken embryonic development.	Dr. Pallavi	3:30 PM-4:30 PM

	19-Jul-22				
9		Ecology	Dissolved oxygen measurement		9:30 AM -11:30 AM
			in the water	Dr. Meenakshi Thakur	
			Turbidity and transparency study In pond	Mr. Amit	11:30 AM-12:30 PM
			Study of phytoplankton and Zooplankton	Ms. Kungreiliu Panmei	1 :30 PM-3:30 PM
10		Developmental biology	Real-time observation of embryonic development	Dr. Pallavi Sethi	3:30 PM-4:30 PM

Details of the course:

- 1) Description of the course: The aim of the course is to provide students with a multi-disciplinary perspective to facilitate their skills in research. The comprehensive course structure encompasses valuable wet lab skills and instrumentation knowledge that will strengthen their conceptual understanding and bridge the gap of online education. The course will expose them to fundamental concepts and basic practicals to cover topics spanning life science essential course tools and techniques. Theoretical Knowledge is not complete without practical skills and the practical aspect of the course will help students to work in research labs and understand the basic life science practical experiments exposure to fill the gap in practical knowledge and would be beneficial in their future endeavors (M.Sc./ Research/other higher studies).
- 2) Objectives: To provide Hands on-training on Life Sciences Tools and Techniques

At the end of the course, the student should be able to:

- 3) Perform basic life science wet lab experiments and use of instruments
- 4) Have basic understanding of life science lab instruments and techniques in practical context
- 5) To keep pace with the new and essential technologies and expanding information in the field.
- 6) Basic medical diagnostic skills to provide better employability opportunities to graduate students.
- 7) Hands on experience of latest techniques that are in current usage in advanced research laboratories and diagnostics

Topics covered:

- **Introduction to Biology:** To learn use of microscope and micropipette, Principles of fixation and staining, Paper chromatography
 - **Medical Diagnostics techniques:** Measurement of Blood pressure, Estimation of Hemoglobin, Differential leucocyte count
 - **Cell Biology, Molecular Biology and Biochemical techniques:** Study of mitosis and meiosis, Study of X inactivation in human cheek cells, Quantitative and qualitative estimation of protein, Enzyme activity bioassay kinetics and achromic point determination, Primer designing and Polymerase Chain Reaction (PCR), DNA estimation
 - **Practical methods in Ecology:** Study of Pond water ecosystem
 - **Key experiments in Developmental Biology:** Chick windowing method and Observation of early embryonic development

Speakers in the course:

SNO.	Name	Affiliation
1	Mr. Amit	Department of Zoology, DRC
2	Dr. Madhu	Department of Zoology, DRC
3	Dr. Sonika Sharma	Department of Zoology, DRC
4	Dr. Pallavi	Department of Zoology, DRC
5	Dr. Jyoti Singh	Department of Zoology, DRC
6	Ms. Kungreiliu Panmel	Department of Zoology, DRC
7	Dr. Meenakshi Thakur	Department of Zoology, DRC
8	Dr. Neha Niharika	Department of Zoology, DRC
9	Dr. Sunita k. Yadav	Department of Zoology, DRC
10	Dr. Jyoti Taneja	Department of Zoology, DRC

Number and Profile of Participants:

No. of Students	Department	Year

16	Zoology	Second year
9	Biochemistry	Second year
11	Life Sciences	Second year

Methods of Assessment of Participants: (Test/Assignment/Project/Quiz/Presentation etc.)

1. Continuous evaluation based on performance and activity during the training period.
2. Assignments taken via Google classroom including practical based questions.
3. Self practice of chick windowing and visualize developmental stages in Developmental biology.

Detailed Learning Outcomes of the Course:

1. Students learned and familiarized with laboratory experiences.
2. Hands-on experience of all subject practicals which were missed in online education.
3. Firstly ever performed Chick windowing and real time observation of chick embryonic development.
4. Lab manual for Life science Tools and technique was made available for the students.

Hands-on Training in Life Sciences: Tools and Techniques 13 to 19 July 2022

Course Coordinator: Dr. Jyoti Taneja and Dr. Sonika Sharma

Topics covered:

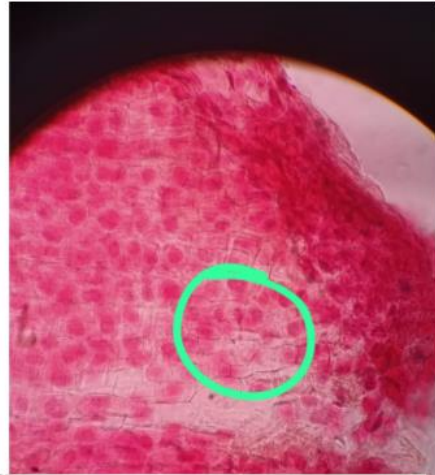
Introduction to Biology: To learn use of microscope and micropipette, Principles of fixation and staining, Paper chromatography

Medical Diagnostics techniques: Measurement of Blood pressure, Estimation of Hemoglobin, Differential leucocyte count

Cell Biology, Molecular Biology and Biochemical techniques: Study of mitosis and meiosis, Study of X inactivation in human cheek cells, Quantitative and qualitative estimation of protein, Enzyme activity bioassay kinetics and achromic point determination, Primer designing and Polymerase Chain Reaction (PCR), DNA estimation

Practical methods in Ecology: Study of Pond water ecosystem

Key experiments in Developmental Biology: Chick windowing method and Observation of early embryonic development



Speakers in the course:

Mr. Amit
Dr. Madhu
Dr. Sonika Sharma
Dr. Pallavi
Dr. Jyoti Singh
Ms. Kungreiliu Panmel
Dr. Meenakshi Thakur
Dr. Neha Niharika
Dr. Sunita k. Yadav
Dr. Jyoti Taneja



Feedback from Participants Regarding the Program: Hard copy feedback forms have been submitted.

Video 1:

<https://drive.google.com/file/d/1QaFGV2aMtTguFyeiheI8zBoGjf9UICd3/view?usp=sharing>

hhhhhhhhhhVideo 2:

<https://drive.google.com/file/d/1QbZgtBHf8CN4Yc-qJBeHyqPXEVzpVUYG/view?usp=sharing>

V. Tools and Techniques for Drosophila Maintenance

Workshop Conveners: Dr. Madhu & Dr. Sonika Sharma

Duration with dates: 26th - 30th May, 2023, 9am-4pm

Sr. no	Date	Time	Module/topic title Name of the Speaker	Affiliation of the Speaker
1	26 May, 2023	9:00 am - 4:00 pm	Introductory Lecture by Dr. Chitra Bhasin (Rtrd. Associate Professor, DRC), Introduction to the life cycle of Drosophila and Food preparation/Dr. Sonika Sharma and Dr. Madhu	Assistant Professor, DRC, DU
2.	27th May, 2023	9:00 am - 4:00 pm	Drosophila handling, Preparation of polytene chromosome from Salivary gland of Drosophila./Dr. Madhu and Dr. Sonika Sharma	Assistant Professor, DRC, DU
3.	29th May, 2023	9:00 am - 4:00 pm	Separation of Drosophila eye pigment using TLC technique, Isolation of Genomic DNA and total protein from Drosophila/ Dr. Sonika Sharma and Dr. Madhu	Assistant Professor, DRC, DU
4.	30th May, 2023	9:00 am- 4:00 pm	Gel electrophoresis and SDS-PAGE/ Dr. Madhu and Dr. Sonika Sharma	Assistant Professor, DRC, DU

Details of the course:

Description of the course:

This workshop was organized to acquaint students with Drosophila, a well-known animal model in research and development. Students were made to learn its handling, culturing and basic molecular techniques which can be exploited by the students in their further research work.

Objectives:

- A. Introduction to the life cycle of Drosophila
- B. Culturing, handling and maintenance of Drosophila
- C. Introduction to the basic molecular techniques using Drosophila

3) Topics covered:

- A. life cycle of Drosophila, Food preparation
 - B. Handling and culturing of Drosophila
 - C. Preparation of polytene chromosome, separation of eye pigment using TLC
4. Isolation of Genomic and total protein from Drosophila
4. Agarose gel electrophoresis and SDS-PAGE

Speakers in the course:

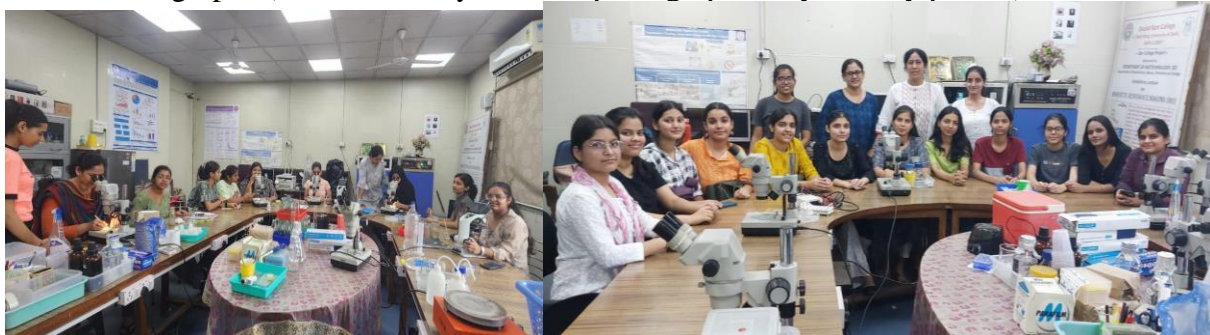
Sr. no.	Name Designation	Department/Affiliation
1.	Dr. Chitra Bhasin/ Retired Associate Professor	Zoology Department, Daulat Ram College, University of Delhi

Number and Profile of Participants:

Name of Students	Department/Year
1. Diya 2. Sheetal 3. Shobha 4. Akanksha Adhikari 5. Kritika Garg 6. Ayushi 7. Isha Dagar 8. Bharti Sharma 9. Neggat Ferdous 10. Nirjala Kumari 11. Rizul 12. Sweta Raj 13. Roshani Yadav	B.Sc. Life Sciences, 4th Semester, 2nd Year

Methods of Assessment of Participants: 1. Students were asked to submit the report about all the tools and techniques they had learnt during the workshop.

A Few Photographs (student activity oriented photographs only/activity photos):



Conference organized by the Department of Zoology, Daulat Ram College, University of Delhi

**International Conference on “Infections and Immunity”
8 - 10th to Oct. 2021**

Conference Schedule

DAY 1: 8th Oct 2021

2:00 pm: Inaugural Session	
2:00 pm	College Prayer and Lighting of Lamp
2:10 pm	Welcome of Guests and Participants
2:15 pm	Welcome Remarks by Mr. Mukul Gupta, Chairman, Governing Body, Daulat Ram College
2:25 pm	Introductory Remarks by Prof. Savita Roy, Principal, Daulat Ram College
2:35 pm	Address by Chief Guest, Dr. Balram Pani, Principal, BCAS, Dean of Colleges, University of Delhi

2:50 pm	Address by Guest of Honor, Dr. Anamika Gambhir, Dept. of Biotechnology, Govt. of India
3:05 pm	Keynote Address by Chief Guest of Conference, Dr. Seema Kapoor, Maulana Azad Medical College
3:20 - 3:30 pm	Cultural Program
Vote of Thanks	
4:00 pm: Technical Session - 1	
Session Theme: <u>Genome Surveillance of Infective Agents</u>	Session Chair: Dr. Sunita Jetly Associate Professor Department of Biomedical Sciences Acharya Narendra Dev College
4:00 - 5:00 pm	Invited Talk: Dr. Rajesh Pandey Associate Professor Principal Scientist (CSIR - IGIB), Delhi Title: SARS-CoV-2 Genomic Surveillance and its Future Applications.
5:00 - 5:30 pm	Open discussion on Theme

DAY 2: 9th Oct 2021

2:00 pm: Technical Session - 2	
Session Theme: <u>Role of Artificial Intelligence in Disease Treatment</u>	Session Chair: Dr Hare Ram Das Associate Professor Department of Zoology Zakir Husain Delhi College
2:00 - 3:00 pm	Invited Talk: Dr. Tavpritesh Sethi Associate Professor Computational Biology - IIIT Delhi Title: Artificial Intelligence for Covid-19 Solution.
3:00 - 3:30 pm	Open discussion on Theme
3:30 - 4:00 pm	e-Posters Display
Tea-Break	
4:30 pm: Technical Session - 3	

Session Theme: <u>Vaccine Design and Efficacy of Immune System</u>	Session Chair: Prof. Seema Makhija Professor Department of Zoology Acharya Narendra Dev College
4:30 - 5:30 pm	Invited Talk: Dr. Amrendra Kumar Research Scientist Department of Pathology, Ohio State University, USA Title: Semi Invariant Natural Killer T-cells in Pulmonary tularemia: An Approach to Rational Vaccine Design
5:30 - 6:00 pm	Open discussion on Theme

DAY 3: 10th Oct 2021

2:00 pm: Technical Session - 4	
Session Theme: <u>Infections: Bacterial, Viral and Parasitic</u>	Session Chair: Dr. Indrakant Singh Associate Professor Department of Zoology Deshbandhu College
2:00 - 3:00 pm	Invited Talk: Dr. Manu Anantpadma Study Director National Institute of Allergy and Infections National Institute of Health MD, USA Title: Emerging viruses and future strategies for interventions
3:00 - 3:30 pm	Open discussion on Theme
Tea-Break	
4:00 pm: Technical Session - 5	
Session Theme: <u>COVID Treatment and Management</u>	Session Chair: Dr. Padamshree Mudgal Associate Professor Department of Biochemistry Daulat Ram College
4:00 - 5:00 pm	Invited Talk: Dr. Praveen Gupta M.D. (Medicine), D.M. (Neurology) Director & HOD, Neurology- FORTIS Memorial Research Institute Gurugram Title: COVID-19 and its Management
5:00 - 5:30 pm	Open discussion on Theme

6:00 pm: Valedictory Session	
6:00 pm	Saraswati Vandana
6:05 pm	Welcome of Invited Guests
6:15 pm	Conference Report, Release of Conference Proceedings Booklet
6:25 pm	Concluding Remarks by Guest of Honor, Prof. Rita Singh, Division of Molecular Endocrinology and Reproduction, Dept. of Zoology, University of Delhi
6:40 pm	Concluding Remarks by Chief Guest, Prof. Suman Kundu, Director South Campus, University of Delhi
7:00 pm	Valedictory Address by Prof. Savita Roy, Principal, Daulat Ram College
7:30 pm	Award Ceremony
7:35 pm	Vote of Thanks

Conference Report

The 3 days online International Conference on “Infections and immunity” was organized on 8-10th October 2021, by the Department of Zoology, Daulat Ram College , University of Delhi, Delhi. Convenors, Dr. Jyoti Taneja and Dr. Sonika Sharma welcomed all eminent guests and participants from India and abroad which consisted of Dr. Parveen Gupta, Dr. Manu Anantpadma Dr. Amrendra Kumar, Dr. Tavpritesh Sethi, Dr. Rajesh Pandey, and Prof. Daman Saluja. The chief guest Prof. Balram Pani, Dean of Colleges, and, Prof. Suman Kundu, Director South Campus, University of Delhi conveyed their best wishes. The guest of Honor, Dr. Anamika Gambhir, Scientist DBT, and Prof. Rita Singh Department of Zoology, University of Delhi made the audience aware of the various funding schemes, programs, Fellowships, and national facilities supported by the department for students and scientists and gender-based difference in COVID-19 due to hormones & immunity, respectively 126 Participants from all over India with backgrounds in various fields like Academics, Research, and Medical Practitioner’s attended the session where 32 % participants were faculties, 29% Researchers, 14% PG students, and 25% UG students participated from eminent institutes like CSIR-IGIB, All India Institute of Medical Sciences (AIIMS), Delhi, Dr. BR Amebdker Center for biomedical research, Indian institute of public health, Banglore, ICAR- National Institute of Veterinary Epidemiology Disease Informatics, Indian Institute of Technology Guwahati , various college of University of Delhi and many more.

The mesmerizing recitation by Dr. Seema Kapur won everybody’s heart. She recited :

वो राह थी जिसपर चली, वह नीव थी गहरी बड़ी!

वो दौलत राम से दूर थी, पर उसके धड़कनों की नूर थी। यह राह शिशु से अग्रिम हुई, एक शहर में पूरित हुई!
यह जंग है अब तक नयी, मैं सोच मे हैं पड़ गई। इन्फेक्शन इम्यूनिटी की जंग में, इस से सही अवसर नहीं!

नतमस्तक हो ईश की अर्चना करे, इस समन्जस्य के इस समय हर वृक्ष को कोविड से परे, इस धरा को हरा करे!

The conference helped the participants in elaborate learning of various aspects of the immune system covering vast topics on all 3 days. It came as a plethora of opportunities for students to learn and explore the industrial applications in development of vaccines against SARS-CoV2 and other viruses like Ebola in this pandemic striving world.

Explaining the synopsis of Nature & bounty, rendered to all living beings, Mukul Gupta, Chairman, Daulat Ram College said INFECTION IS THE MOTHER OF IMMUNITY BUILD UP THROUGH CREATION OF ANTIBODIES.

Observing the synergy of the undergraduate students creativity and talent quotient in poster presentation, the poster presentation awards were divided into 2 categories namely, Research scholars or post-graduate category and undergraduate category. The selected 35 posters were scrutinized by Prof. Ravi Toteja, ANDC college, DU and Prof. D S Arya, AIIMS, Delhi. The abstract book was released virtually in which a total of 50 abstracts were incorporated. The full-length articles after peer-review by the editorial board and chief editors would be published in a special thematic issue of Chemical Biology Letters on "Infections and Immunity" giving a big opportunity of recognition for students to showcase their creative, scientific skills.

The conference successfully came to an end with warm feelings of gratitude for everyone's immense support and participation especially Prof. Savita Roy, Principal, Daulat Ram College, University Of Delhi and Dr. Sarita Nanda, Vice Principal, Daulat Ram College, University Of Delhi. Thereafter the session was concluded by these blissful words

ॐ

सर्वे भवन्तु सुखिनः सर्वे सन्तु निरामयाः ।

सर्वे भद्राणि पश्यन्तु मा कश्चिद्दुःखभाग्भवेत् ।



Department of Zoology, Daulat Ram College, University of Delhi

Second Call for Virtual International Conference on INFECTIONS AND IMMUNITY

DATE: 8-10 October, 2020

MAJOR THEMES

- Genetic architecture of infectious agents
- Ecology of emerging viruses
- Possible role of Artificial Intelligence in Immunology
- Infections and vaccines
- Covid infections and vaccines

REGISTRATION DETAILS

Faculty Research Scholars: **1000 INR**
 Foreign Nationals: **50 USD**
 UG/PG Students Participation: **500 INR**
 Attendees only: **200 INR**

RANK DETAILS

Account No.: 17401000010004
 Account Name: Principal, Daulat Ram College
 Name: Indian Express Bank
 Branch name: University Branch
 IFSC Code: IOIB000104
 MICR Code: 110020084

CALL FOR PAPERS

Abstract Format

Times New Roman, spacing: 1, word limit: 250
 Title of paper: Size 14, Bold, Capitalize each word correctly. Authors and affiliations: The affiliation should include address of the institute where the work was carried out (line 1,2). Address, email and phone number of corresponding author: line 1,2,3,4 word: 4-8

PRESENTATION FORMAT

- Power size: W:50 cm,H:50cm, Portrait
- Save your PPT into PDF format (size limit of 10 MB)

Click here to register
<https://forms.gle/9Hw9NcALJd6dP3W>

KEY NOTE SPEAKERS

Dr. Rajesh Prasad, Dr. Tanayashankar Mishra, Dr. Anandh Kumar, Dr. Manoj Kumar, Dr. Pankaj Singh
 Dr. Smita Ghosh, Dr. Anshu Sharma, Prof. Sushil Ray
 Dr. Anil Kumar, Dr. Vinay Kumar, Dr. Rajesh Kumar, Dr. Anand Kumar, Dr. Anand Kumar

How would you rate the expertise of the resource persons on the subject?



Science Publishing Quality Leads

Infections and Immunity

A special thematic issue meant to cover the various aspects of emerging infectious diseases, problems, and solutions to deal with possible infections of future.

Infections and Immunity

Themes of special issue:

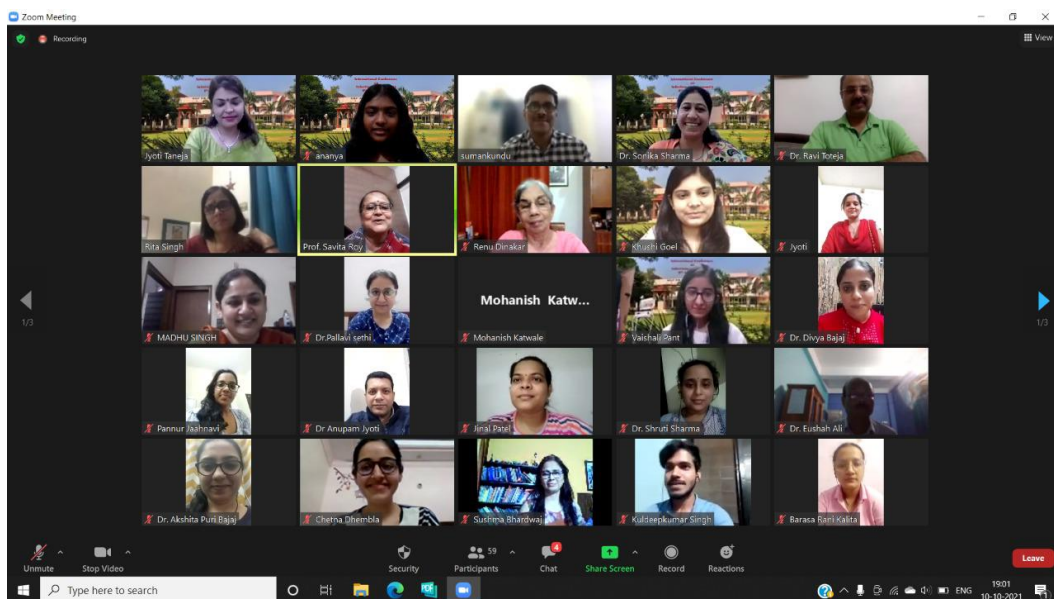
- Infectious diseases: viral and bacterial
- Genetic structure and efficacy of vaccines
- Vaccine: uptake and control
- Genetic landscape: infectious agents
- Role of artificial intelligence in vaccine development
- COVID-19: infection and management

Guest Editors

Dr. Rajesh Prasad, Dr. Anandh Kumar, Dr. Manoj Kumar, Dr. Pankaj Singh, Dr. Smita Ghosh, Dr. Anshu Sharma, Prof. Sushil Ray, Dr. Anil Kumar, Dr. Vinay Kumar, Dr. Rajesh Kumar, Dr. Anand Kumar, Dr. Anand Kumar

Amidst the present pandemic, there has been a lot of talk about the role of immunity in handling the outbreak. A sudden surge of information on various aspects of immunity

- Highlight the key factors of the conference that you would like
- 163 responses
- All was excellent.
 - Excellent explanation
 - The knowledge of the speaker was amazing
 - Presentation
 - Talk on covid 19
 - I really liked today's sessions
 - The presentation was so simple and informative
 - The theme of the conference is quite relevant to the current times



Student Training Workshop

1. Research Analysis: Tools and Techniques

A six-days Online Student Training Workshop on “Research Analysis: Tools and Techniques” was organized by The Zoology Department, Daulat Ram College, University of Delhi between 16-21 August 2021.

Dr Jyoti Taneja & Dr Sunita Yadav were the coordinators of the workshop. The course was specifically designed for undergraduate students to provide a multidisciplinary perspective to facilitate their skills in research.

The six-day workshop commenced with a warm welcome by Dr Jyoti Taneja (Coordinator) and was followed by insightful discussions on scientific temperament and research basics with the student participants. During the workshop, two sessions were conducted every day on various topics.

Day 1, session 1 - conducted by Dr Jyoti Taneja on Research Methods - Framing a well-defined and specific research question, basic understanding of qualitative and quantitative research designs, Data collection tools, and Management

Day 1, session 2 - conducted by Dr Sonika Sharma on Data Presentation - Graphical representation of statistical data

Day 2, session 1 - conducted by Dr Priya Bharadwaj on Data Analysis - Descriptive Statistics, cross-tabulation, and charts, Qualitative analysis of survey data

Day 2, session 2 - conducted by Dr Priya Bharadwaj - Data Analysis - Use of Graph Pad Prism in Modern Biostatistics

Day 3, session 1 - conducted by Dr. Sunita Yadav - Data Analysis MS Excel - Student's t-test Day 3, session 2 - conducted by Dr. Pallavi Sethi - Data Analysis - ANOVA

Day 4, session 1 - conducted by Dr Neha Niharika - Poster Presentation - Poster making for seminars/conferences

Day 4, session 2 - conducted by Dr Madhu - Publication Writing - Search tools and sites for literature review

Day 5, session 1 - conducted by Dr Meenakshi Thakur - Research Publication Writing - Review writing

Day 5, session 2 - conducted by Dr Jyotsana - Research Publication Writing - Abstract/Report writing

Day 6, session 1 - conducted by Dr Sushma Bharadwaj - Ethical and regulatory consideration in research - Referencing/citations & Plagiarism

The reading material for each lecture was provided to students daily and the understanding of learners was evaluated based on MCQ quizzes and a final MCQ test at the end of the course.

Students enthusiastically took part in all the sessions and made the training a successful event. Dr Inderkant Singh was present as a guest speaker for the valedictory session.

2. Winter workshop on 'Academic Writing'

Coordinators: Dr. Sunita K. Yadav, Dr. Jyoti Taneja

Duration: 18th Dec 2022- 15th Jan 2023 (Every Sunday: 11:00 AM- 1:30 PM)

No. of Students participated: 20

Mode of Learning: Hybrid

Objectives: Writing is a skill that can be learnt. Academic writing is a concise, clear, focused, and structured piece of writing that is supported by evidence and has a formal tone and style. Academic writing helps student to convey their understanding, makes them critical thinker, teaches them to be a professional who can write the paper in the best way possible, enhances research skills and there are many more such importance. Hence, winter workshop on academic writing is organized to impart the knowledge to achieve all these objectives.

Program Schedule

S.No	Topic	Details	Resource person	Date and Time
1.	Research methodology	Frame a well-defined and specific research question. Data collection tools and management	Dr. Jyoti Taneja	Dec 18 11 am-12 pm

2.	Data Presentation	Graphical representation of statistical data	Dr. Jyoti Singh	Dec 18 12:30 pm- 1:30 pm
3.	Science symbol usage, Grammar and plagiarism checking tools, paraphrasing tools.	Symbol usage in various science writing, Grammar correction and online plagiarism checking tools. Paraphrasing tools to change the literature language	Dr. Sunita K. Yadav	Dec 25 11 am-12 pm
	Types of academic papers	You will learn about types and outline of each paper type	Dr. Anita Garg Mangla	12:30 pm- 1:30 pm
4.	Guidance about fellowship and internship	You will learn how to apply for various Indian and International Fellowships and Internships	Ms. Shramana Ms. Khushi Ms. Khushikhandelwal	Jan 1 11 am-12 pm
5.	Flip book/Flyer designing	Digital tools for designing flip book and flyer for conferences/symposium/workshops etc.	Ms. Aashi	Jan 1 12:30 pm- 1:30 pm
6.	Power point presentation	Professional presentation of data for various oral presentations or talk in conferences/seminars	Dr. Nisha	Jan 8 11 am-12 pm
7.	Literature survey and Bibliography format	Search tools and sites for literature review and learn tools for referencing	Dr. Priya Bhardwaj	Jan 8 12:30 pm- 1:30 pm
8.	Abstract writing	Abstract writing to submit for various conference proceedings	Dr. Jyotsna	Jan 15 11 am-12 pm
9.	Valedictory session	Welcome note for Guest of honour (Dr. Rita Singh) Certificate distribution	Dr. Jyoti Taneja Dr. Sunita K. Yadav	Feb 8 11:30 pm- 12:30 pm

Assessment method: E-quiz and assignments were given after each session.

Feedback: Feedback from each participants was collected post each session.

Description of workshop

The workshop started with a warm welcome by Dr. Sunita K. Yadav and Dr. Jyoti Taneja (Coordinators). The importance of academic writing workshop was discussed along with introduction of all the resource persons.

Day-1 (Dec 18, 2022)

The session 1 was presented Dr. Jyoti Taneja. She instructed the participants on various tools used in research methods. She also described how to create a clear and precise research question. In the session, various tools that are needed for data collection were

also covered. Many examples from real life were included in the presentation so that the students could effectively link the concepts.

The session 2 was led by Dr. Jyoti Singh. Using the graph prism method, she explained many methods of graphical data representation. The installation of the same and usage of them as a scientific tool by students to exhibit their research was also encouraged. Also emphasised was the significance of data presentation in research.

Day-2 (Dec 25, 2022)

The session 1 was opened by Dr. Sunita K. Yadav. She described a number of internet resources that may be used to fix grammatical errors in scientific writing. Tools for removing plagiarism were also covered, and distinctions between commercial and free software were explained, along with the benefits of each. The relevance of citation and the role of paraphrasing tools in removing plagiarism were also explained to the participants.

The session 2 was led by Dr. Anita Garg Mangla, during which she discussed various forms of scientific writing, including research articles, review articles, and case studies. She presented them with several examples.

Day-3 (Jan 1, 2023)

Session 1 was conducted by Ms. Khushi Goel, Ms. KhushiKhandelwal and Ms Shramana. They provided information to students about several fellowships and internships that may aid them in their future endeavours. The function of social media websites was also covered, including LinkedIn, Google Scholar, and others. This class also covered the value of student-teacher connection and the necessity of being active in societies while a student.

Session 2 was led by Ms. Aashi. She discussed developing flip books and flyers with the participants. These resources are crucial and support students in working productively while planning a conference or symposium.

Day-4 (Jan 8, 2023)

Session 1 was explained by Dr. Nisha. She explained to them how data are presented for various oral presentations or talks at conferences and seminars. The discussion covered the elements that should be included as well as text alignment with a number of fascinating PowerPoint features.

Session 2 was led by Dr. Priya Bhardwaj. In order to do a literature review for a piece of science writing, she taught the students about various search engines and websites. Reference tools were also discussed in the session.

Day-5 (Jan 15, 2023)

Dr. Jyotsna Singh conducted the session and instructed the students on how to write an abstract. She opened the lesson by discussing the value of the abstract in scientific writing and how to make it engaging. She also gave a brief overview of important

factors to take into account while drafting an abstract. Furthermore, explained to the students was the distinction between an abstract and a summary.

The feedback from the students for each session was overwhelmingly positive. They have asked that more workshops like this be held in the future. The workshop inspired the participants to start their own research projects and publish their findings.

Koshika, Zoology Society of Daulat Ram College, has achieved new heights of success, opportunities, and developments in the year 2022-23.

On July 27, 2022, Koshika organised a cancer awareness and screening programme in association with the Acharya Narendra Dev College, the Delhi School of Public Health, and the B.R. Ambedkar Centre of Biomedical Research. With an emphasis on the value of cancer prevention and palliative care, Dr. Pragya Singh gave an organised introduction to the environmental causes of cancer.

The session activities commenced with elections for the Koshika Student Union of 2022–2023, under the supervision of the convener and co-convener. On September 28, 2022, Koshika organised an inaugural function in the Department of Zoology. Prof. Sadhana Sharma, Dept. of Zoology, Miranda House, was invited to the inaugural function where she spoke on "New Generation Vaccines and Adjuvants." The elected Student Union Members were facilitated in the event. Henceforth, the involvement of students is continued in a range of activities such as workshops and lectures, where they have participated with great enthusiasm, persuasiveness, and learning spirit.

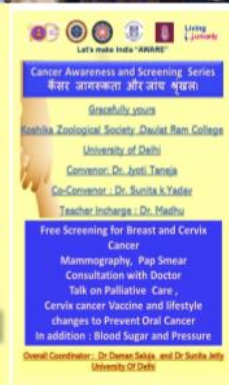
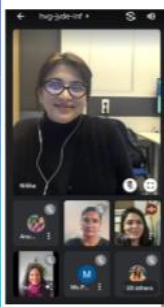
In an effort to raise the interest in scientific research, the Zoology Society also organised a 5-day online workshop on academic writing under the aegis of IQAC from 18th December 2022. Resource persons from other departments were invited to deliver the lecture on various topics related to academic writing in a structured manner.

In addition, Koshika hosted an International Webinar where speaker Dr. Nitika Taneja, an alumna of the DRC, discussed "unraveling the role of chromatin plasticity at replication forks and its consequences in developing chemoresistance". She also spoke about her own experience motivating students to pursue higher education. The event took place online on January 20, 2023, with 55 people in attendance.

In order to maintain the enjoyable part of college life, on January 30, 2023, Koshika organised a party for the fresher to welcome them and wish them success as they begin their college life.

Hence, this current year of student-oriented activities has built a culture of honesty, responsibility, and ownership within students and members.

Koshika activities: 2022-2023
Staff Advisor: Dr. Jyoti Taneja and Dr. Sunita K Yadav





Mentor-Mentee Awareness Program

The Department of Zoology, Daulat Ram College, University of Delhi organised a Mentor - Mentee awareness program on the topic 'DEMYSTIFYING THE IMPORTANCE OF SEXUAL HEALTH' on 12 October 2023. The event commenced with the lighting of the ceremonial lamp, along with the classical dance on Ganesh Vandana by Vidushi followed by a talk on 'Modulation of Neural pathways by Estrogen : Adverse Effects of Environmental Estrogens on Mental and Endocrine Health' by Prof Rita Singh, Dept of Zoology, University of Delhi. Prof. Rita Singh is an eminent personality in field of research. She is a recipient of many remarkable and prestigious awards like LE STADIUM visiting professor, INRA France, Young scientist award from DST, Crest award for cancer stem cells and many more. After this, an interactive session was held between students and Dr Puja Sharma about sexual Health and associated topics. Dr. Puja emphasised on topics like cervical cancer, sexual maturity, safe contraceptive methods, etc. Dr Puja, Obstetrics & Gynaecology, Daksh Clinic, Hauz Khas specialises in delivering comprehensive services with a primary focus on high risk antenatal care and delivery, advanced gynaecology laparoscopic surgery, cosmetic gynaecology and infertility treatment. The entertainment quotient went high when Hangsika, a member of classical dance society Anhad performed a classical dance form

Sattriya, a work prakriti darshan from the production Prakriti Purusha. Dr. Rajalaxmi M, Head PG and Research, Dept of Biochemistry & Bioinformatics, Innovation Ambassador, KAPILA Coordinator, Holy Cross College, Trichy, Tamil Nadu and Dr Kiran Rangari, Dept. of Reproductive Biomedicine, NIIHFW, New Delhi were the esteemed judges of poster competition on the topic 'DEMYSTIFYING SEXUAL HEALTH '(held in a online mode on an intercollege level). Dr. Kiran Rangari awarded the winners - Hansika BSc Life Sciences 2nd year (1st position) Sneha Kumari, BSc hons Zoology 2nd year(2nd position) Tsering Yangchen, BSc Hons Zoology 3rd year (3rd position). The event was a huge success. Total no. Of participants were nearly 289 students out of which 42 were intercollege students. Bringing together such great personalities from the field of academia and research, the event stimulated young minds with insightful sessions. We extend our gratitude to the Principal ma'am for her continuous support and for granting us the freedom to make a positive impact on society. We are thankful to the teachers who graced the event with their presence. Our heartfelt thanks to everyone for making the event a huge success. Thanks and regards! Dr. Jyoti Taneja Dr. Sunita K. Yadav Co-ordinators (Mentor-Mentee awareness program on 'Demystifying the importance of sexual health') Zoology Department

Mentor-mentee awareness program on 'Demystifying sexual health in Women'

October 12, 2023

Coordinator: Dr. Jyoti Taneja and Dr. Sunita K Yadav

