

NAAC Criterion-III

3.1.5: Institution has the facilities to support research



**Central University of Himachal Pradesh,
Dharamshala, Kangra**

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Central Instrumentation Facility

Keeping in mind the ever-growing research industry and to place our faculty and research scholars at the frontiers of scientific developments in different areas, the Central University of Himachal Pradesh have established a state-of-the-art Central Instrument Facility (CIF). The CIF, CUHP houses many modern instruments for research in the frontier areas of physical, environmental, biological and allied interdisciplinary sciences. All these sophisticated instruments are operated and maintained by a dedicated faculty and well qualified technical staff. This research facility is also open the researchers from institutions and industries of Himachal Pradesh and other nearby states for pursuing the collaborative research.

Objective:

1. To provide a common platform for the researchers to collaborate in interdisciplinary research problems and unearth new scientific knowledge
2. To ensure world class exposure to our faculty and research students of CUHP.
3. To continuously upgrade and maintain this research facility at par with world class research standards.
4. To ensure the optimal usage of public funds and not have multiple set-ups of same instruments in different departments of the university.
5. To develop the spirit of hand-holding and sharing of knowledge among our faculty members and researchers.



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S.N.	Instrument Name
1	Ion Chromatography
2	High-Performance-Liquid Chromatography (HPLC) Gel electrophoresis unit
3	Gas chromatography
4	FTIR
5	Laminar air flow system
6	Microscope
7	Tube furnace
8	AUTOCLAVE
9	COLORIMETER
10	GEL DOC
11	LAMINAR AIR FLOW
12	INCUBATOR
13	MICROCENTRIFUGE
14	HOT AIR OVEN
15	VORTEX
16	SPINNER MICROCENTRIFUGE
17	ELISA
18	UV-VISIBLE SPECTROPHOTOMETER
19	PCR
20	DISSECTING MICROSCOPE
21	TRINOCULAR MICROSCOPE

22	MILLIPORE
23	WATER BATH
24	MICROTOME
25	TRIPLE DISTILLATION
26	MAGNETIC STIRRER
27	DEEP FREEZER
28	WEIGHING BALANCE
29	HOT PLATE
30	COOLING INCUBATOR
31	LED SCREEN
32	PH-TDS-EC METER
33	REFRIGERATOR
34	MICROWAVE OVEN
35	ROCKER
36	AUTOCLAVE
37	COLORIMETER
38	GEL DOC
39	LAMINAR AIR FLOW
40	INCUBATOR
41	MICROCENTRIFUGE
42	HOT AIR OVEN
43	VORTEX
44	SPINNER MICROCENTRIFUGE
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54	MAGNETIC STIRRER
55	DEEP FREEZER
56	WEIGHING BALANCE
57	HOT PLATE
58	COOLING INCUBATOR
59	LED SCREEN
60	PH-TDS-EC METER
61	REFRIGERATOR
62	MICROWAVE OVEN

Central University of Himachal Pradesh
Department of Animal Science
Animal house facility

Animal Name: *Mus musculus* (Swiss albino mice)

Animal weight: 30±5 grams

Age: 8-12 weeks (Adult mice)

Mice Feed: Gulmohar brand feed for rodents are provided every day with fresh drinking water.

Experimentation: All experiment will be conducted according to CPCSEA guidelines.

Disposal of waste: After proper experimentation animals will be introduced into Incineration (the high-temperature burning of a waste).

Outline on mice experiment

- This is standard first line experimental mammal used in preclinical trials and drug delivery experiment. It is commonly used in cancer research, diabetes research, toxicology research and other disease trial.
- Changes in mouse DNA mimic changes in human DNA and vice-versa. In addition, mice exhibit behaviors that can be used as models for exploring human behavior.
- At CUHP we are going to evaluate anticancer effect of few medicinal plants against breast cancer. Breast cancer will be induced in mice through DMBA. After induction of breast cancer it will be administered with different combinations of medicinal plant extract to know its anticancer potential on *In Vivo* experimentation.



Figure-1: Animal House entrance



Figure-2: Animal House working area

Green House

Central University of Himachal Pradesh

[Established under the Central Universities Act 2009]

Executive Summary

Green house is a frame structure which covered with transparent material like glass, polyethylene and poly carbonate etc. The greenhouses are being used for growing high value vegetables, Flowers, nursery of different crops, ornamental and medicinal plants in Hilly region such as in Himachal Pradesh. The advantages of greenhouses are high productivity per unit area as the genetic potentiality of the crop can be fully exploited, off-season vegetables and nursery can be grown which fetch high prices in the market, good quality produce and it is easy to protect the crops against pests, diseases and extreme climatic conditions.

Green house will help research scholars, undergraduate and postgraduate students for smooth running of the plant-based experiments. In Central University Himachal Pradesh, Dharamshala, green houses are potential used to carry out the research experiments in different locations. Presently two Ph.D. scholars have conducted their experiment on Brussels sprout (*Brassica oleracea* var. *gemmifera*) at Krishi Vigyan Kendra, Kangra and another student conducting experiment at Choudhary Sarwan Kumar Himachal Pradesh Krishi Vishvavidyalaya, Palampur on *Petroselinum crispum* (Parsley).

Media Lab Report

Introduction:

Recording of lectures (video and audio recording of lectures) have become an increasing trend across Educational Institutions in India in the beginning of the year 2020 due to the rapid spread of COVID-19, when Educational Institutions were forced to resort to Online Mode of Teaching. As a consequence of which lecture recording is increasing for a number of reasons including changing pedagogical models of delivery, availability of lecture-capture systems, and students themselves recording lectures. Hence, there is an increasing requirement for the University to provide guidance and to clarify the regulatory position regarding audio and video recording of lectures and the circulation of the same. The recording of lectures can provide a useful resource for students, including but not limited to: revisiting particularly difficult points that they may have missed or misunderstood; writing more detailed notes following a lecture; for those students who have particular educational needs; for those students who could not have real time access to lectures owing to but not limited to poor internet connection, technical and technological reasons.

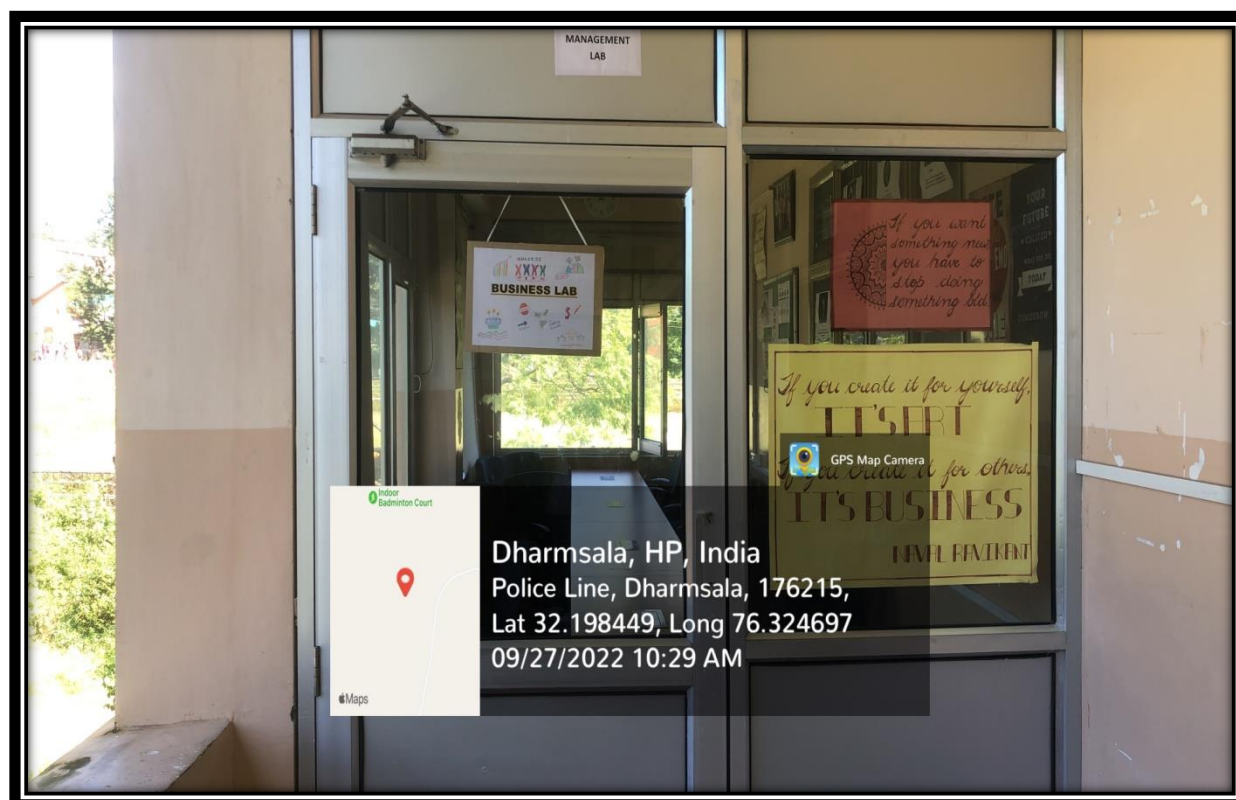
About the School of Journalism, Mass Communication & New Media

The School of Journalism, Mass Communication & New Media, is a vibrant space for young minds to realize their full potential in the career of their choice. The department has a dynamic work culture where students and teachers work in unison to create a teaching-learning environment full of growth opportunities. The school has faculty with diverse backgrounds and industry experience allowing us to provide students with a blend of theory & practical leading to their overall professional development. In terms of research output, we are amongst the best departments in the country. The school

Business Lab

Our Business lab has been established to foster the research and academic environment. The lab is utilized by MBA students, research scholars and faculty members. It was established in year 2020. The lab is equipped with software R for data analysis. Beside office computers, the Lab facilitates and encourages the use of personal laptops. Software installed in the business lab helps users to learn data analytics and problem-solving skills.

To facilitate support for students to comply with curriculum activities like assignments preparations for seminars, and browsing information on contemporary issues, the lab also facilitates ideating and discussion. The students are given training in communication, confidence-building, career development, CV writing and self-awareness. This lab is also used to conduct Personality Development for Students, Skill Building Programmes, Developing Communication Skills in Students, and Interview Guidance / Group Discussions.



UNIVERSITYART GALLERY-HIMADRI

DEPARTMENT OF VISUAL ARTS

Himadri is an art Gallery of the Central University of Himachal Pradesh was set up in the premises of the Sapt Sindhu Parishad –II, Dehra Gopipur. It is place where visual arts students are showcasing their artworks including painting, sculptures, installations, etc..It has been closely connected with the progress of the visual arts students by regularly holds lecture programmes, demonstrations, conducts workshops & discussions on various forms of art and issues, laying stress on education for both the academically inclined and those who are unaware from the art.

Visual arts department of Central University of Himachal Pradesh organized its 1st Annual art exhibition at Sapt sindhu parishad, Dehra Gopipur, Himachal Pradesh scheduled on 13 April 2022. This annual art exhibition organized by the department is a great step to showcase the works of the students and promote the culture of contemporary art in the campus. The exhibition displayed the works of bachelors of visual arts up till the works of the Ph.D. scholars in the department.

There were a wide range of works displayed in the exhibition which shows the diversity of materials students at the university work and experiment in. The exhibition was astonishingly beautiful, and people responded accordingly. Answering to a call comparable to “If you build it they will come,” the crowds descended on this spectacular display. Artists, students, as well as others, appear to care passionately about how the works turned out to be, what it can address, and its ability to communicate the highest values of life in a non representational visual language. Paintings were of various types and genre, from bold strokes in some and thin fine and patient strokes in others, this was a kind of fusion which is a rare sight to catch.

The works exhibited are the prime example of experimentation and execution of skills as we can see the work displayed in Fig.1 by masters final year Shekher Panchanl his works are about creating a sense of beauty and aesthetics by creating a collage, his art practice focuses on the found objects such as paper bags, torn cloth fabrics, paper, cotton, paint, metal etc. the way he arranges the material gives a soothing calmness to the viewers visual.

“It takes a very long time to become young” a very famous quote by Picasso, which reminds us of the painting in the fig.4, made by the master final year student Ishu, deformed, yet balanced paint like a child, his working style is very personal to his journey, his strokes are bold and full of energy but one can easily see the ease in his painting, the longer someone looks at it the more his paintings will unfold them, the more you feel the more you can see, these are not just mere brush strokes but life is breathing in his work of art, this particular painting reminds me of the day of judgement where Archangel Raphael is blowing his trumpet and calling all the creatures to Jerusalem, while all sort of creatures are being unleashed from the hell the dark background compliments the focus on the subjects.

The painting reminds me of the text from Dante Alighieri, a 13th century Italian poet; these lines were taken from one of his most celebrated work, Divine comedy- Inferno.“The infernal storm, eternal in

its rage, sweeps and drives the spirits with its blast; it whirls them, lashing them with punishment. When they are swept back past their place of judgement then come the shrieks, laments, and anguished cries; there they blaspheme God's almighty power.” Ishu works are multi-disciplinary and he tries to explore various mediums to work with.

“Migration is an expression of the human aspiration for dignity, safety and a better future. It is part of the social fabric, part of our very make-up as a human family” - Ban Ki-Moon
Same way each student and professor of the Visual arts department has migrated to Dehra from all parts of the Nation. This emotion of leaving our home town in search of education is shown in the works of Master previous year student Pragati Goswami in fig. 7. In this work she tries to show with the help of the map a connection with the place she was from the Agra to Himachal Pradesh, the shoes and string depicts the journey of the young girl away from her home, the tangled string of thread shows the difficulties she is facing in a new town. The loose end of the string represents that the journey is not complete yet and there is a long way to go to reach destination to achieve what we want.

One should know the roots of the place where we belong. Thangka art evolved in the 7th century in Nepal and from there they went to places where Tibetan Buddhism was practiced including Mongolia, Ladakh, Sikkim, Arunachal Pradesh and parts of Himalayan India. Historically, thangkas were used as teaching aids. A lama or teacher would travel giving talks on Buddha's life and teachings. He would carry with him painted scrolls to convey spiritually significant events, aspects of different deities, or Buddhist concepts. Thangka paintings are important tools to depict Buddha and his teachings as well as that of other deities and bodhisattvas. The most prominent subject is the Bhavacakra (Wheel of Life) which is how the Art of Enlightenment is visually represented. We can see in fig. 8 where students of the Visual arts department have made thangka art which depicts the life and teachings of buddha.

From traditional paintings to contemporary works were put on display at the gallery, this gave different kinds of flavours to the viewer to enjoy. An art exhibition is essentially the best way to establish the fundamentals for branding, self-understanding, networking, future development, public awareness, breaking ground, and so on.

Himadri Art Gallery has offered a platform for aspiring artists, who have always availed the opportunities provided by the gallery to interact with the artist and academicians at various levels. The gallery has continued to be a centre of activity for the budding artists, art experts, art-lovers and the public.