

Department Profile:Physics

Name of the Department:	PHYSICS
Year of establishment:	B.Sc. Physics/Non-Medical-1971 M.Sc. (Physics)-2021
Names of Programs / Courses offered:	B. Sc. (Physics)&M. Sc. (Physics)
Name of Interdisciplinary courses and the departments / units involved:	NIL
Annual/Semester/Choice Based Credit System (program wise):	Annual/Semester
Participation of the department in the courses offered by other departments:	NIL
Courses in collaboration with other universities, industries, foreign institutions, etc.:	No
Details of courses / programs discontinued (if any) with reasons:	NIL

Number of teaching posts:

Designation	Sanctioned	Filled
Professors	NIL	-----
Associate Professors	-----	3
Assistant Professors	-----	4

Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph. D. Students guided for the last 4 years
Dr. Chandan	M.Sc , Ph.D., SET	Associate Professor	Condensed Matter Physics	28Years	NA
Ms. NeelamKumari	M.Sc.Gold Medalist, M.Phil. & UGC NET	Associate Professor	Electronics	25 Years	NA
Ms. Jyotsna	M.Sc.(Hons)Gold Medalist, M.Phil., NET, SLET	Associate Professor	High Energy Physics	18 Years	NA
Mr. Prashant Sharma	M.Sc., B.Ed., M.Phil.	Assistant Professor	Electronics	14 Years	NA
Mr. LavliRana	M.Sc., SET	Assistant Professor	Electronics	14 Years	NA
Mr. Suresh Kumar	M.Sc., B.Ed, M.Phil,	Assistant Professor	Electronics, Condensed Matter Physics	14 Years	NA
Dr. Rohit Sandal	M.Sc. B.Ed., UGC-NET, Ph.D.	Assistant Professor	Nuclear Physics	14 Years	NA

List of senior Visiting Faculty: NIL

Percentage of lectures delivered and practical classes handled (program-wise) by temporary faculty: NIL

Student Teacher Ratio (program-wise):

Level of Study	Ratio
M. Sc.	10:1
B.Sc.(General)	126:1

Number of academic support staff (technical) and Administrative staff (sanctioned- filled): NIL

Support Staff (Technical): 03

Type of Employment	Sanctioned	Filled
Permanent	01	01
Temporary	02	02

Administrative Staff: NIL

Qualification of teaching faculty with D.Sc./D.Litt./Ph. D. /M.Phil. /PG: Ph.D. =02, M. Phil.=4, PG= 01,

Number of faculty with ongoing projects from(a) National (b) International funding agencies and grants received: NIL

Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc and total grants received: NIL

Funding agency, etc.	Year	Name of Principal Investigator	Grant Approved	Grants Received
University Grants Commission	NIL			

Research Centre /facility recognized by the University: No

Publications:

- a. Publication per faculty:
- b. Number of papers published in peer reviewed journals (National/International):
 - (b1) National,
 - (b2) International
- c. Monographs:
- d. Chapters in Books
- e. Books edited
- f. Books with ISBN with details of publishers:
- g. Seminar/Conference (National & International)
- h. Number listed in International Database
(For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences, Directory, EBSCO hosts, Medline, etc.)
- i. Citation Index – range / average
- j. SNIP
- k. SJR
- l. Impact Factor – range
- m. h-index

Faculty	a	b1	b2	c	d	e	f	g	h	i	j	k	l	M
Dr. Chandan Bhardwaj	10	-	10	-	-	-	-	25	10- scopus	158	6.69	5.72	2.97	6
Ms. Neelam Kumari	-	-	-	-	-	-	Nuclear & Particle Physics, RD Sharma Publication ISBN-93- 81261-98-9	19	-	-	-	-	-	-
Ms. Jyotsna	-	-	01	-	-	-	-	18	-	-	-	-	-	-
Mr. Prashant Sharma	-	-	-	-	-	-	-	10	-	-	-	-	-	-
Mr. Lavli Rana	-	-	-	-	-	-	-	5	-	-	-	-	-	-
Mr. Suresh Kumar	-	-	-	-	-	-	-	6	-	-	-	-	-	-
Dr. Rohit Sandal	12	-	12	-	-	-	-	35	16- scopus	276	1.68	1.33	2.82	8

Areas of consultancy and income generated:

NIL

Faculty as members in

- a) National committees -
b) International committees -
c) Editorial Boards -

NIL

NIL

NIL

Student projects

Percentage of students who have taken up in-house projects including inter-departmental/program: 50% in PG

Percentage of students placed for projects in organizations outside the institution i.e., in Research laboratories / Industry / other agencies: NIL

Awards / recognitions received at the National and International level by Faculty and Students: NIL

Awards received by Faculty members: NIL

List of eminent academicians and scientists / visitors to the department:

1. Prof Vir Singh Rangra, Department of Physics, HPU Shimla
2. DrKuldeep Sharma, Associate Professor, Department of Physics, NIT Hamirpur
3. DrAshwaniRana, Associate Professor, Department of Electronics, NIT Hamirpur
4. Prof Mukesh Kumar Seth, Department of Bio-sciences, HPU Shimla

Seminars/ Conferences/Workshops organized and the source of funding

1. National NIL
2. International NIL

Student profile program-wise:

Name of the Course/Program	Applications received	Selected Male, Female	Enrolled		Pass percentage
			M	F	
M. Sc. 1 st Sem(Physics)	197	33	10	23	Result not Declared
M. Sc.3 rd Sem (Physics)	28	28	5	23	Result not Declared
B.Sc. 1 st Year(Physics)	128	97	62	35	Result not Declared
B.Sc. 2 nd Year (Physics)	87	87	41	46	Result not Declared
B.Sc. 3 rd Year(Physics)	57	57	22	35	Result not Declared

Diversity of students:

Name of the Course	% of students from the same State	% of students from other State	% of students from abroad
B.Sc	100	-----	-----

How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil Services and Defense Services etc.?

- i. Deepak Chopra, 2014-17, Assistant Commandant(Navy)
- ii. Shrijan Sharma, Dec-2022(GATE)
- iii. Chandan Thakur, 2015-18, Qualified JNU Entrance Examination for PhD

Student progression;

Student progression	Percentage against enrolled
UG to PG	10
PG to M.Phil.	Data Not Maintained
PG to Ph.D.	Data Not Maintained
Ph.D. to Post-Doctoral	Data Not Maintained
EmployedCampus selection Other than campus recruitment	Data Not Maintained
Entrepreneurship/ Self employment	Data Not Maintained

Details of infrastructural facilities:

Library: We have established a library in the department where the complementary copies provided by the different publishers, personal books and publications of the faculties are kept for the use of the students and faculty members. It is proposed to stock the library with UG & PG reference books in the near future.

Internet facilities for staff and students:

We have a dedicated internet facility of 10MBPS in the labs and faculty room.

Class rooms with ICT facility:

1. Two Computer Lab with 20 computers, 2 printers and UPS backup
2. One Smart Classroom with state-of-art interactive panel
3. Internet facility

Laboratories:

- The department consists of three separate laboratories for UG practical classes
- Two PG Labs

Number of students receiving financial assistance from College, University, government or other agencies:

No such data is maintained at the level of department. However, the institution provides scholarships to the eligible students as directed by the government from time to time.

Details of student enrichment programs (special lectures/workshops/seminar) with external experts:**i. Institutional Seminar on National Science Day on 28/02/2019:**

One day seminar was organized to commemorate the science day. The event was presided by byDr H S Jamwal, Principal, in the presence of special attendee DrKuldeep Sharma, Associate Professor, Department of Physics, NIT Hamirpur. Apart from paper presentation by students, the events such as declamation, quiz, cultural activities were also organized. Prof NeelamGuleria coordinated the event.

ii. Institutional Seminar on National Science Day on 28/02/2020:

DrAnjuBattaSehgal, Principal, presided over the function in which events such as paper reading, poster making, project presentation and science quiz were organized. This event took place in the graceful presence of special guest Prof Mukesh Kumar Seth, Department of Bio-sciences, HPU. Prof NeelamGuleria along with other faculty members of science faculty organized the event.

iii. Institutional Seminar on Science Day on 28/02/2022

DrAshwaniRana Associate Professor Department of Electronics NIT Hamirpur was invited as special guest on the eve of National Science Day function which was presided over by DrAnjuBattaSehgal. On this occasion the students presented their papers and participated in poster making, model presentation and quiz. The event was organized by the faculty of Physics Department under the guidance of Prof NeelamGuleria.

Teaching methods adopted to improve student learning:

- Traditional lecture method
- Practical classes
- Special classes
- Lecture using LCD projector

Participation in Institutional Social Responsibility (ISR) and Extension activities:

The Students and the Faculty members regularly participate in the Institutional Social Responsibility and Extension activities organized by the college NSS, NCC and R&R Units.

Analysis of the department:

Strength: Student-teacher relation has always been the strength of our department. Students are always encouraged to ask questions, however unreasonable it may be, and teachers always try to give agreeable answer to it. Also dedicated Faculty members, non-Teaching Staffs, moderately equipped laboratories, intelligent and hard-working students are the strengths of the department.

Weakness: With the growing number of students, we cannot give equal attention to all of them with our insufficient faculty. Also infrastructure of laboratories, shortage of space for class room are main weakness of our department.

Opportunities: Students passing with Physics go for higher studies in NIT,HPU, Punjab University,CUHP and other state universities. Few students have also joined different research centers, school services and other services.

Challenges: There is limited scope for innovation in curriculum design as the syllabus prescribed by the university is strictly followed. However, topics related to frontier areas of research are discussed through internal seminar and invited talks. This intention is threatened due to constraints of time and space. Non flexibility of curriculum is also a challenge.
