

Department of Physics
DAV University Jalandhar
(Proceedings of Meeting)

The meeting of the Board of Studies in the Department of Physics was held on 22nd July 2021 at 1:00 PM in the Committee Room (Administrative Block), DAV University Jalandhar.

Following members were present during the meeting:

- | | |
|-------------------------|-----------------------|
| 1. Prof. Arvinder Singh | (External Expert) |
| 2. Dr. Keshav Walia | (HOD/Coordinator) |
| 3. Dr. Samriti Khosla | (Associate Professor) |
| 4. Dr. Sandeep Kumar | (Assistant Professor) |
| 5. Dr. Praveen Kumar | (Assistant Professor) |
| 6. Dr. Gurmeet Singh | (Assistant Professor) |
| 7. Dr. Daljit Kaur | (Assistant Professor) |
| 8. Dr. Mamta Rani | (Assistant Professor) |
| 9. Dr. Rama Gupta | (Assistant Professor) |

Following agenda was discussed as resolved:

Agenda 1

It was discussed and unanimously resolved to approve the proposed outline of scheme, syllabi and courses for the following programs of Batch 2021:

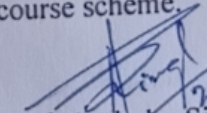
- a) B.Sc(Hons.) Physics
- b) M.Sc(Hons.) Physics
- c) PhD Physics

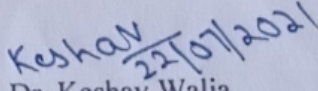
Agenda 2

As per the recommendation of UGC, the course of research and publication ethics was introduced in the PhD course work in place of PHY803 (Seminar-I).

Agenda 3

New course PHY817 Fundament of nonlinear physics was introduced in the Ph. D Physics course scheme.


 Prof. Arvinder Singh
 (External Expert)


 Dr. Keshav Walia
 (HOD/Coordinator)

Samriti Khosla
10029

Dr. Samriti Khosla
(Associate Professor)

Praveen Kumar
(10033)

Dr. Praveen Kumar
(Assistant Professor)

Daljit Kaur
10149

Dr. Daljit Kaur
(Assistant Professor)

Rama Gupta
10181

Dr. Rama Gupta
(Assistant Professor)

Sandeep Kumar
(10032)

Dr. Sandeep Kumar
(Assistant Professor)

Gurmeet Singh

Dr. Gurmeet Singh
(Assistant Professor)

Mamta Rani
10152

Dr. Mamta Rani
(Assistant Professor)

R. K. Seth
22/7/21

Dr. R. K. Seth

(Dean Academics)

DAVU/Phy/2020/15

DAV University Jalandhar
Department of Physics

Dated: 22 Feb, 2020

Sub: Minutes of Meeting of BoS (Department of Physics) held on 22-02-2020 at 11:00 AM in the committee room of DAV U

Agenda: Regarding holding of Board of Study meeting -2020.

Members Present

- | | |
|-----------------------------|--|
| 1. Prof. (Dr.) D. P. Singh | Head, Department of Physics, (GNDU)External Expert |
| 2. Dr. R. K. Seth | HoD/ Coordinator |
| 3. Dr. Samriti Khosla | Associate Professor |
| 4. Dr. Praveen Kumar | Assistant Professor |
| 5. Dr. Daljit kaur | Assistant Professor |
| 6. Dr. Mamta Rani | Assistant Professor |

A meeting was held on the above said agenda. At the outset, Dr. R. K. Seth, Coordinator/HoD of the department extended his warm welcome to the external expert and members present during the meeting.

Previous BoS 2019

BoS was held last year in 2019 and the decision to incorporation of MooC courses in the department has been taken by the then members present in the meeting BoS – March 2019. The same has been incorporated and also the same has been informed to the students of each class.

BoS 2020

The following have been decided:

1. The term "Interdisciplinary Course - I" at page 2 be replaced by "Generic Elective-I" of MSc Scheme.
2. The term "Interdisciplinary Course - II" at page 5 be replaced by "Generic Elective-II" of MSc Scheme.
3. The Course PHY 629 (Course Name: Solar Cell: Fundamentals and Applied Aspects) of credit 4 in the basket Departmental Elective III at Sr. No. 2, Semester IV of MSc class be incorporated in the basket Generic Elective-II. The Course PHY 629 (Course Name: Solar Cell: Fundamentals and Applied Aspects) of credit 4 in the basket Departmental Elective III at Sr. No. 2, Semester IV of MSc class be deleted from the Departmental Elective III at Sr. No. 2, because same to be incorporated in Generic Elective-II.
Introducing the Course PHY 629 (Course Name: Solar Cell: Fundamentals and Applied Aspects) in Generic Elective-II would be more beneficial for the students due to availability of more options in Generic Elective -I.
4. The revisions in PHY 232A, Course name : Elements of modern physics, BSc (Phy) Sem IV
The topics related to Nuclear Physics in Unit 3 and unit 4 be deleted.

MLK

DP Singh

RK Seth

Samriti Khosla

Praveen Kumar

Daljit Kaur

The contents of the syllabus in PHY 232A are revised and the new course code is PHY 232B with course name "Elements of modern physics" and contents comprising all the four units along with references are attached herewith.

The new contents incorporated are as follows:

"Topics related to atomic models, old quantum theory, hydrogen spectra, x-ray spectra have been added in Unit 1 and unit 2".

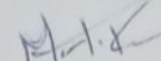
The topics of basics of atomic spectra, initial models of atom given by Thomson, Rutherford, Bohr and Sommerfeld, Frank-Hertz experiment, correspondence principle, X-rays etc. are not being studied by the students throughout the graduation, but these topics are a very important part of the curriculum and the same becomes the basis of study Schrodinger theory of hydrogen atom and spectroscopic term states, LS and jj coupling schemes in course of Quantum Physics."

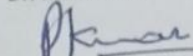
5. The contents of the syllabus of the course code PHY 282 (Course name: Basics of Quantum Mechanics) running in BSc (Computer Science Sem IV) needs certain revision and the same has been revised (The new course code PHY 282A) as the contents of the course matches with the PHY 232B (Elements of modern physics, BSc (Phy) Sem IV) to make it more informative for the benefit of students.
6. The revisions in Course code PHY341, Course Name : MATLAB LTP Cr : 2, 0, 0 2
MATLAB course curriculum is designed to make students familiar with the MATLAB software. Though the students earn credits in the said course, but practically inculcated knowledge about the course is almost negligible. For better understanding of the said course, the significance should be given to the practical aspect rather than the theoretical (which simply imparts the student only subjective knowledge without giving them the practical aspect of this software) keeping in view the career of the students. Therefore, the said course be revised in terms of its LTP distribution, so as to keep the total credits (2) of the course by giving 4 hours to practical in a week.

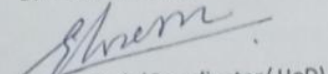
The new course code is

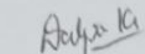
Course code PHY342, Course Name: MATLAB LTP Cr : 0, 0, 4 2

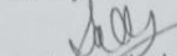
In the end, Dr. R. K Seth extended thankful remarks to the members present.

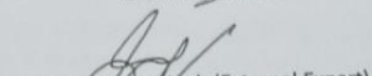

Dr. Mamta Rani


Dr. Praveen Kumar


Dr. R. K Seth (Coordinator/ HoD)


Dr. Daljit kaur


Dr. Samriti Khosla


Prof. (Dr.) D.P. Singh (External Expert)

Physics

DAVU/phy/2019/98

DAV University Jalandhar Department of Physics

Sub: Minutes of Meeting of BoS (Department of Physics) held on 30-03-2019 at 12:30 PM in the committee room of DAV U

Members Present

- | | |
|--|---------------------|
| 1. Prof. (Dr.) Ravi Kumar | External Expert |
| 2. Dr. R. K. Seth | HoD/ Coordinator |
| 3. Dr. Samriti Khosla | Associate Professor |
| 4. Dr. Keshav Walia | Assistant Professor |
| 5. Dr. Sandeep Kumar | Assistant Professor |
| 6. Dr. Gurmeet Singh | Assistant Professor |
| 7. Dr. Rama Gupta | Assistant Professor |
| 8. Dr. Praveen Kumar (special Invitee) | Assistant Professor |

After discussion and deliberation about introducing the MooC courses in UG and PG in the Department of Physics, the following has been resolved by the Members, Board of Studies.

1. The MooC Course will be applicable to elective subjects offered for UG and PG classes.
2. The Students of UG and PG classes may opt any relevant course from the list of NPTEL (SWAYAM) courses available on its official website <http://nptel.ac.in> (or list of SWAYAM courses as listed in the website <https://swayam.gov.in>)
3. The students cannot opt a course, which is being offered by the department in electives in that particular class/ semester.
4. The student (s) will submit the application for opting MooC course to the HoD/ Coordinator of the department. The HoD/ Coordinator of the department will forward the application to the Dean (Academics) office for permitting the students (s) to register after duly verification and recommendation from the concerned teacher taking the elective course of that particular class.
5. The students can opt only theory course of equal credits as of the elective course being offered in the class.
6. The online courses will be taken as per the following norms:

Program	No. of courses/ Credits allowed
UG	Up to 4 credits (one course maximum in a semester)
PG	Up to 4 credits (one course maximum in a semester)

Sey
10029

Rama Gupta

Keshav

Praveen

Gurmeet Singh

Sandeep

Ravi Kumar

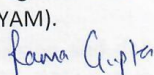
Samriti Khosla
10140

The credit for the courses opted by the students would be as follows:

Duration of course (weeks)	Credits
8-12	4

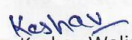
7. The grades/ marks along with copy of the certificate obtained by the student (s) from NPTEL (SWAYAM) will be submitted to the Examination Branch (through the teacher concerned taking the elective course of that particular class) for entering the marks/ grades of the subject passed in the DMC.

Note: The students are advised to visit the website of NPTEL (SWAYAM) for opting a particular course after following the procedure as per DAV University guidelines and are responsible for their registration as well as other terms and conditions to be fulfilled as laid down by NPTEL (SWAYAM).

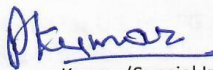

Dr. Rama Gupta



Dr. Gurneet Singh


Dr. Sandeep Kumar

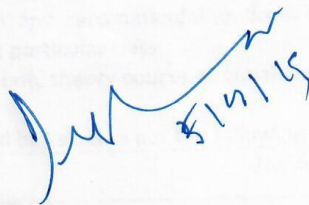

Dr. Keshav Walia


Dr. Samriti Khosla


Dr. Praveen Kumar (Special Invitee)


Dr. R. K. Seth (Coordinator/ HoD)


Prof. (Dr.) Ravi Kumar (External Expert)


5/11/15


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DAV University, Jalandhar
Department of Physics

BOS Minutes of Meeting

The meeting of the board of studies in Physics was held on 14 May, 2018 at 11:00 AM in committee room, DAV University, Jalandhar

Following members were present in the meeting:

1. Dr. Rajiv Kumar, HOD, Department of Physics, Convener
2. Dr. Samriti Khosla (Associate Professor)
3. Dr. R.K. Seth (Associate Professor)
4. Dr. Sandeep Kumar (Assistant Professor)
5. Dr. Keshav Walia (Assistant Professor)

Special Invitees

1. Dr. Praveen Kumar (Assistant Professor)
2. Dr. Rama Gupta (Assistant Professor)

External experts

1. Dr R K Moudgil, Prof and Chairman, Department of Physics, KU Kurukshetra
2. Dr Inderpreet Kaur- Sr Scientist, CSIO, Chandigarh. (Could not attend).

The agenda was discussed at length and the following was resolved:

1. Revision of course scheme of Pre PhD course work

a. TWO NEW COURSES have been introduced

- I. ADVANCED COMPUTATIONAL TECHNIQUES PHY815
- II. ADVANCED CHARACTERIZATION TECHNIQUES PHY816

2. Revision of Syllabus of Pre PhD course work

The name of "Nanomagnetism and Spintronics" was changed to "Spintronics: Physics and Technology" in view of some changes in the course content.

3. Revision of Syllabi of M.Sc. (Hons.) Physics

COURSE NAME	NEW COURSE CODE
a. MATHEMATICAL PHYSICS:	PHY502C
b. QUANTUM MECHANICS-I:	PHY504A
c. QUANTUM MECHANICS-II:	PHY511A
d. PARTICLE PHYSICS:	PHY604A
e. CONDENSED MATTER PHYSICS-II	PHY611A
f. ADVANCED NUCLEAR PHYSICS:	PHY624A

Richa

Sandeep

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Sandeep

Keshav
Rama Gupta

Rajiv
14/5/18

4. Revision of syllabi of B.Sc. (Hons.) Physics

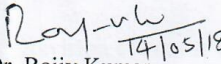
COURSE NAME

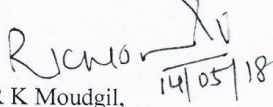
NEW COURSE CODE

a. OPTICS	PHY231A
b. ELEMENTS OF MODERN PHYSICS	PHY232A
c. SOLID STATE PHYSICS:	PHY303C
d. ELECTROMAGNETIC THEORY	PHY330A

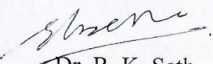
Suggestions of expert

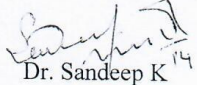
1. Lab hours of MSc Physics may be increased at least to 9 hours per week from 6 hours per week.
2. Quantum Mechanics- PHY504A following additions are suggested:
 - a. Add the topic of "Two-slit experiment with electron and EM radiation" in Unit-I.
 - b. Add "Quantum Mechanics by Bransden and Joachain" in reference books.
 - c. Add the topic: Identical particle, principle of indistinguishability and its physical consequence in Unit-I.
 - d. "Density matrix, mixed ensemble" may be removed in Unit-I.
3. Condensed Matter Physics – PHY 603, following additions are suggested
 - a. Add "Bloch's theorem –general proof, approximate solution of central equation at and near zone the boundary" in Unit-II
 - b. Elaborate Unit-IV
4. Condensed Matter Physics – PHY 611A, following additions are suggested
 - a. Elaborate Unit-I and Unit-II
5. The question papers of BSc and MSc may have 20 % problems /numerical of the total marks.

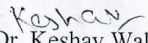

Dr. Rajiv Kumar
Convener

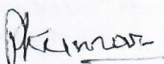

Dr R K Moudgil,
external expert

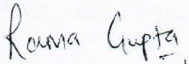
Dr. Samriti K
Associate Professor


Dr. R. K. Seth
Associate Professor


Dr. Sandeep K
Assistant Professor


Dr. Keshav Walia
Assistant Professor


Dr. Praveen K
Assistant Professor
Special Invitee


Dr. Rama Gupta
Assistant Professor
Special Invitee

Department of Physics

The meeting of the board of studies in Physics was held on 16th December 2016 in committee room, DAV University Jalandhar.

Following members were present in the meeting:

- 1) Dr. Naresh Sahajpal (Dean Academics)
- 2) Dr. S.K. Tripathi, Professor, Department of Physics, Panjab University Chandigarh (External Expert)
- 3) Dr. Rajiv Kumar (Co-ordinator)
- 4) Dr. Samriti Khosla (Associate Professor)
- 5) Dr. Keshav Walia (Assistant Professor)
- 6) Dr. Sandeep Kumar (Assistant Professor)

Following agenda was discussed and resolved:

- 1) Revised syllabi (PHY101B, PHY303B, PHY131A, PHY221A, PHY111B, PHY151B, PHY502A, PHY602A, PHY631) have been approved.
- 2) Two M.Sc students per faculty member have been suggested for carrying out the project work.
- 3) In Pre-PhD course work scheme, the additional elective paper (Common for all PhD students) has been suggested for next session. However, the course may include optional sections/units.
- 4) Inclusion of up to 30% numerical approach has been suggested.
- 5) The PhD students (experimental) need to be exposed to experimental facilities as a part of pre-PhD course work.
- 6) The course codes PHY811 and PHY812 have been suggested to be merged.

Submitted for Consideration and approval please