

1.1.2. Board of Studies Minutes

DEPARTMENT OF PHYSICS
BOARD OF STUDIES MEETING

18 - 06 - 2015

MINUTES

The board of studies meeting of the Department of Physics was held on 18.06.2015 at 11.00 a.m. with Dr. M. Shahida Banu in the chair.

The following points were discussed.

- 1) The template and revised syllabii for I year Undergraduate, Post Graduate and M.Phil courses for the students to be admitted from the academic year 2015-16 under the CBCS were scrutinized by the Board. The same were ratified and approved.
- 2) The forthcoming pattern of examination which has a practical exam at the end of the academic year and one core paper in each of the I and II semester for the UG was also discussed in the meeting and approved by the board.

For the PG, the pattern of examination with practical exams at the end of the academic year, 15 core papers and five major electives spread over four semesters besides 2 non major electives, one each in the second and third semesters, internship at the end of second semester and four soft skills one in each semester was also discussed in the meeting and approved by the board.

- 3) The content of the two core papers for the first year of the UG curriculum was discussed and conferred were to the required standard.

The syllabi for the two new electives in PG namely, X-ray crystallography and Nanoscience and Technology were placed before the board, discussed and approved.

One new elective Research Trends in Nanoscience and Nanotechnology was introduced at the M .Phil Course, the syllabus for which was approved.

The Board appreciated the PG and M.Phil syllabus which was in line with the CSIR/NET curriculum.

- 4) The board suggested the books on Thermal Physics and Statistical Mechanics, by D. Jayaraman and K. Illangovan, Statistical Mechanics by B.K. Aggarwal and M. Eisner, and Fundamentals of Statistical Mechanics by B.B. Laud, New Age International Publications as books for study for the core paper offered in the second semester.

The textbook by Upadhyaya on Classical Mechanics which is mentioned as a reference was suggested to be included in the books for study. Reference books by Rita John on Nanoscience and Asokamani on Solid State Physics were suggested for the PG curriculum.

- 5) A few online references such as Hyperphysics and MIT online course were suggested by the members of the Board of Studies.
- 6) In Allied paper – General Physics II, in unit V, the concept of CB mode was ratified to CE mode.
- 7) The Syllabi for the skill based course MS OFFICE with full hands on experience was placed before the board and approved.
- 8) The Board suggested that the summer training in other institutes can be considered as an internship. It can be done in the department to. The internship could be software/electronics/industry related also.

With this meeting came to an end.

The following members were present in the meeting:

- 1) Dr. M. Shahida Banu (Chair Person)..... *Shahida Banu* 18/6/15
- 2) Dr. R. Meenakshi (University Nominee, CTTE College for Women) *R. Meenakshi*
- 3) Dr. P. Murugakoothan (Pachaiyappa's College) *P. Murugakoothan*
- 4) Dr. J. Senthilselvan (Nuclear Physics, University of Madras) *J. Senthilselvan*
- 5) Dr. A. V. Jhone Verjhula (Ethiraj College for Women) *A. V. Jhone Verjhula* 18/6/15
- 6) Ms.S.Abhirami (Ethiraj College for Women)..... *Ms. S. Abhirami*
- 7) Dr. Viswa Bhaskaran (Industry Nominee) *Dr. Viswa Bhaskaran*
- 8) Dr. Mrs. Raajalakshmi Aditya (Old Student, Bharathi Women's College)..... *Dr. Mrs. Raajalakshmi Aditya* 18/6/15
- 9) Mrinaleni. R. S, III B.Sc Physics (Student Representative) *Mrinaleni*
- 10) Sandhyapradeepa. K.S, II M.Sc Physics (Student Representative) *Sandhyapradeepa* 18/6/15

**DEPARTMENT OF PHYSICS
BOARD OF STUDIES MEETING**

23.04.2018

MINUTES

The Board of studies meeting of the department of physics was held on 23.04.18 at 09:30 a.m. with Dr. M.Shahidha Banu in the chair.

The members of the board suggested the following ratifications for the M.Sc Physics Syllabus:

1. Molecular Spectroscopy paper has been shifted to II Semester from IV Semester as an elective paper.
2. Nano Science and Naho Technology has been shifted to IV Semester from II Semester.
3. Electromagnetic Theory II has been introduced as a core paper in II Semester.
4. Name change for Condensed Matter Physics paper to Solid State Physics.
5. In Statistical Mechanics paper, topic Maxwell-Boltzmann Statistics to be removed.
6. In Quantum Mechanics I paper, rearrangement of Unit I suggested. Topic Connection formula was suggested to be removed.
7. In Quantum Mechanics II paper, topic Identical Particles and their Properties to be included in Unit I and topic Plane Wave Solutions for KG Equation to be included in Unit IV.
8. Name change for Microprocessor and Microcontroller Architecture and Applications paper to Microprocessor 8085 and Microcontroller 8051. Headings for Unit IV & Unit V to be revised.
9. Objectives for all papers to be revised.
10. Editions of Reference books to be updated.
11. In question paper pattern for section A marks allotment to be corrected to $10 \times 2 = 20$ marks.

The members of the board suggested the following ratifications for the M.Phil Physics Syllabus:

1. In Research Methodology paper Unit II to be renamed as thesis writing
2. In Unit III, the topic Skewness to be included.
3. The topic in Unit V, the topic e-mail to be replaced by e-resources for research.
4. In the Material Science paper, topics from the book by V.Raghavan and Calister to be included.
5. In Material Science paper rearrangement of Units has been suggested.
6. In Crystal Growth and Characterization paper, names for Units to be included.
7. The title for the paper Applications of Molecular Spectroscopy to be changed to Advanced Molecular Spectroscopy.
8. In the question paper template, the option for Problem type questions to be removed.
9. In the paper Research Trends in Nano Science and Nano Technology, rearrangement of Unit III has been suggested.

The following members were present in the meeting:

- 1) **Dr. M. Shahida Banu**
Chair Person
Associate Professor & Head, Dept. of Physics
Ethiraj College for Women
Chennai - 08.
- 2) **Dr. C. Venkateswaran**
University Nominee
Professor and Head
Department of Nuclear Physics
University of Madras (AC TECH Campus)
Chennai - 25.
- 3) **Dr. G. Usha**
Subject Expert
Associate Professor
Department of Physics
Queen Mary's College
Chennai - 40.
- 4) **Dr. P. A. Abdullah Mahaboob**
Subject Expert
Associate Professor
Department of Physics
New College, Chennai - 14.
- 5) **Dr. A.V. Jhone Verjhula**
Assistant Professor
Dept. of Physics, Ethiraj College for Women
Chennai - 08.
- 6) **Dr. Viswa Bhaskaran**
Industry Nominee
VB Ceramic Consultant
Kottivakkam
Chennai - 45.
- 7) **Mrs. Dharma Vishwanathan**
Old Student
Assistant Professor
Department of Physics
Quaid-e-Milleth College for Women
Chennai - 02.

Shahida Banu
23/4/18

C. Venkateswaran

G. Usha
DR. G. USHA, M.Sc., M.Phil., B.Ed., Ph.D.
Associate Professor of Physics
Queen Mary's College (A)
Chennai - 600 004

P. A. Abdullah Mahaboob

AV Jhone Verjhula
23/04/18

V. Bhaskaran

Dharma Vishwanathan

DEPARTMENT OF PHYSICS
ETHIRAJ COLLEGE FOR WOMEN (AUTONOMOUS), CHENNAI – 600 008
MINUTES OF THE BOARD OF STUDIES MEETING
19.08.2019

The Board of Studies Meeting of the Department of Physics was held on 19.08.2019 at 10.00 a.m. with Dr. A. V. Jhone Verjhula in the chair.

The members of the Board suggested the following ratifications:

1. Whilst a slight variation in the CA pattern conforming with the Outcome Based Education Template (OBE) was observed, the Department of Physics would retain the old template with Section A having 7 questions of 2 marks each, Section B having 2 questions of 8 marks each and Section C having 1 question of 20 marks each, in consultation with the members of the Board.
2. To mention explicitly whether the Journals specified at the end of each paper are National or International as required by the Outcome Based Education Template (OBE).
3. To boost up the Industrial tie up to enhance the provision of more internship opportunities for the students, to cater them to pursue higher studies and JRF Programmes in the respective Industrial Institutes.
4. To include "Introduction to Ceramics" by P. W. Kingery as one of the recommended textbooks in the elective subject Materials Science in the Sixth Semester.
5. An Elective paper "Acoustical Physics" with the Course Code PH18/5E/ACP is introduced in the Fifth Semester as an optional paper to Basic Electronics and Electronic Devices.

6. To include field trips to studios and other relevant places to augment the theoretical understanding of the elective paper Acoustical Physics introduced in the Fifth Semester through practical sessions.
7. To include one more unit with Mechanics concepts in the paper "Mechanics and Mathematical Physics " in the Fifth Semester; while the Classical Mechanics concepts and its applications in the said paper to be incorporated in the paper "Quantum Mechanics and Relativity" offered in the Sixth Semester to observe more relevance in the respective papers. The name of the suggested paper would be "Classical Mechanics Quantum Mechanics and Relativity" with appropriate rearrangement of units in the paper.
8. Ehrenfest's equations were removed from Unit IV of Heat and Thermodynamics in the Second Semester, for the benefit of the understanding of the students.
9. It was suggested by the Board to have one more theory paper in the First and Third Semesters to give more weightage to the Course and to cater to the inculcation of more Physics concepts from the students' perspectives.
10. To specifically mention about the depth of concepts (Qualitative only/ Overview) mentioned in Units II, III and IV in the elective paper "Materials Science" offered in the Sixth Semester to add more clarity to the said units from the perspective of the External Examiners and Question Paper setters.
11. To mention explicitly the different Maxwell's Equations in the paper "Electromagnetism" offered in the Sixth Semester.

With this the meeting came to an end.

MINUTES OF THE BOARD OF STUDIES MEETING 19.08.2019

The syllabus for outcome based education was scrutinized and ratified by the board of studies and the following suggestions were given for M.Sc. Physics.

1. It was suggested that MoUs can be signed with hospitals for the Medical Technology elective paper so that the students can get hands on training and certification which will help them in career placement.
2. Industrial/ field visits should be conducted for relevant papers.
3. Feedback on student performance must be collected from the Institutions / Industries / R&D labs where students take up internship.
4. Feedback on the facilities and guidance received from the Institutions / Industries / R&D labs must be collected from the students taking up the internships.
5. Data Bank of the Institutions / Industries / R & D labs where students take up internship must be created by the department.
6. Fundamentals of Nano Graphene topic to be included in Nanoscience and Nanotechnology paper.
7. Course outcomes should highlight the relevance of the pertinent topic in research.
8. The components for evaluation pattern in continuous assessment for project were suggested.
The components are
 - Selection of problem and review of Literature
 - Periodical reports & evaluation
 - Seminar
 - Internal viva voce
9. The question paper pattern should specify that section A is EITHER/ OR type choice of questions.
10. Changes for improvement of Programme Specific Outcome were suggested.

MINUTES OF THE BOARD OF STUDIES MEETING 19.08.2019

The syllabus for outcome based education was scrutinized and ratified by the board of studies and the following suggestions were given for M.Phil. Physics.

1. The components for evaluation pattern in continuous assessment for project were suggested.
The components are
 - Selection of problem and review of Literature
 - Periodical review or reports evaluation
 - Seminar
 - Internal viva voce
2. Nano Graphene topic to be included in Research Trends in Nanoscience and Nanotechnology paper.
3. Changes for improvement of Programme Specific Outcome were suggested.
4. Number of Recommended text books to be increased with the inclusion of books by foreign authors.

The following members were present in the meeting:

- 1) **Dr. A. V. Jhone Verjhula**
Chair Person
Head, Department of Physics
Ethiraj College for Women
Chennai – 08.

AV Jhone Verjhula
19/08/2019

- 2) **Dr. C. Venkateswaran**
University Nominee
Professor and Head
Department of Nuclear Physics
University of Madras (AC TECH Campus)
Chennai – 25.

C. Venkateswaran
19/8/2019

- 3) **Dr. G. Usha**
Subject Expert
Associate Professor
Department of Physics
Queen Mary's College
Chennai – 40.

G. Usha
19/8/19
Dr. G. USHA, M.Sc., M.Phil., B.Ed., Ph.D.,
Associate Professor of Physics
Queen Mary's College (A)
Chennai - 600 004

- 4) **Dr. P. A. Abdullah Mahaboob**
Subject Expert
Associate Professor
Department of Physics
New College, Chennai – 14.

P. A. Abdullah Mahaboob
19/8/19

- 5) **Dr. B. Uma**
Assistant Professor
Dept. of Physics, Ethiraj College for Women
Chennai – 08.

B. Uma
19/8/19

- 6) **Dr. Viswa Bhaskaran**
Industry Nominee
VB Ceramic Consultant
Kottivakkam
Chennai – 45.

Viswa Bhaskaran

- 7) **Mrs. Dharma Swaminathan**
Old Student
Assistant Professor
Department of Physics
Quaid-e-Milleth College for Women
Chennai – 02.

Dharma Swaminathan
19/8/19

