

Minutes of the Board of Studies Meeting.

To be implemented from 2021-2022 Onwards

Venue: PG Physics Lab.

Convened on 12.04.2021 at 2 PM

Members Present

1. Dr. A. Sheela Vimala Rani Head of the Dept.
2. Dr. Basherrudin Mahmud Subject Expert.
Asst. Prof., Ahmed,
School of Physics,
Madurai Kamaraj University
Madurai
3. Dr. K. Marimuthu, Subject Expert.
Asst. Prof.,
Dept. of Physics,
Gandhigram Rural Institute -
Deemed University,
Gandhigram
4. Dr. Eucharista Sylvia Subject Expert
(ABSENT).
Head & Associate Prof., Dept. of Physics,
St. Mary's College,
Thoothukudi
5. Mr. Ramprakash, Industrialist
Industrial Electronics Cop.,
Industrial Estate, Madurai.

6. Dr. R. Vishnu Pooya, Alumna
Asst. Prof.,
Dept. of Physics
The Madura College,
Madurai.

7. Dr. Malathy, Dean of Academic
Asst. Prof., Affairs
Dept. of Zoology,
Fatima College.

8. Mrs. S. Aulmoghni Packiaseli S. Aulmoghni
Associate Professor

9. Dr. Mathari Manisekar Mathari Manisekar
Associate Professor

10. Dr. L. Caroline Sugirtham L. Caroline Sugirtham
Associate Professor

11. Dr. G. Dhevasanthakumar Dhevasanthakumar
Associate Professor

12. Mrs. R. Alphonsa Fernando Alphonsa Fernando
Associate Professor

13. Dr. M. V. Keena Chandra Keena Chandra
Assistant Professor

14. Mrs. I. Piyasheela Piyasheela
Assistant Professor

15. Dr. Ancemna Joseph
Assistant Professor

Ancemna Joseph

16. Dr. M. Ragam
Asst. Professor

M. Ragam

17. Dr. G. Jenita Rani
Asst. Professor

G. Jenita Rani

18. Dr. R. Jothi Mani
Asst. Prof.

R. Jothi Mani

19. Dr. R. Niranjana Devi
Asst. Prof.

R. Niranjana Devi

Agenda for Board of Studies:

1. Preparation of Action Taken Report
2. Updation and addition of Open Educational Resources in the list of references of Courses.
3. Revision of Syllabus
4. New courses: At least one Interdisciplinary Self learning Extra credit course/semesters for UG / PG / Professional Advanced Learners to be introduced.
5. Introduction of at least one Skill Embedded Certificate / Dip / Adv. Dip. value added course

Other than the value added course that is already being offered.

6. Approval of Ph.D. Course work syllabus

7. Internships & Projects:

a) Rubrics for Internships & Projects to be passed in the Board

b) Type of projects to be decided
i) Field project /

ii) Student Project

1) Group - UG

2) Individual - PG

Minutes of the Board of studies.

1. Presentation of Action taken Report:

Action taken Report for 2020-2021
UG PHYSICS.

S.No.	Common Suggestions offered in the previous board	Action Taken for academic year 2020-21
1)	Title of 19P2CC5 - Advanced Mechanics to be changed as Applied Mechanics.	Changed.

S.No.	Common Suggestions offered in the previous board	Action taken Report for the academic year 2020-21
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2)	Types of diodes must be included in 19P4CC10 - Analog Electronics	Included.
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3)	To include specific new materials in 19P4CC11 - Materials Science	Included.
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4)	To include simulation Experiments of FET in 19P3CC9 & 19P4CC12 (May. Practical - III & IV)	Due to lockdown, it was not possible to include such new Experiments & train the students
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5)	To include uplink, downlink in 19P5CC13 Digital Electronics & Communication	Included.
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6)	To include EX-NOR in 19P6CC19	Included in OBE Syllabus to be implemented from 2020-21 onwards.
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7)	In 19P6CC20, Particle Size determination, Ultrasonics, Biomass based Experiments to be included	Particle Size determination is included. Ultrasonics not included, because
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it is not in their theory.

Biomass plant required to introduce Biomass Experiments

8) In 19PGCL4 optics- Included.
Book, Reference Books
By Jenkins & White
& Ghatak &
Loganathan to
be included.

9) Suggested to have will be given
windmill construction as project work

For Physics.

1) Title of the foll. Title changes
papers are to be as
Changed.

	old	new
i) 19PG1PB - Mathematical Physics - I		- Advanced Mathematical Physics.
ii) 19PG3P11 - Solid state Physics - I		- Condensed Matter Physics
iii) 19PG4PB - Solid state Physics II		- Advanced Condensed Matter Physics
iv) 19PG4PH - Molecular Spectroscopy.		- not changed.

2) Suggested to buy Digital Polarimeter for practicals

Request given to the management

3) To include dynamic Scattering method in 19PG4PE2A

Not included because the syllabus is already heavy.

4) 19PG4PE2A Suggested to change the title

Title: not changed because, Material Science seems to be more appropriate

5) To include ray astronomy in 19PG4PE2B (Astro Physics)

Not-included. Because the syllabus is already sufficient for 4 hours / week

6) To buy data logger for telescope

will be done in future.

4) Change of Course Title:

S.NO.	Old Course Code	New Course Code	Old Course Title	New Course Title	Need for Change
1)	19PG2 P6	19PG2 P7	Principles in Advanced Mathematical Physics	Advanced Mathematical Physics	Principles not relevant for this paper

2, Updation of Open Educational Resources in the list of references of each course

S.NO.	Course Code	Course Title	Details of updation
1)	19P3CC8	Solid state Physics	Relevant video modules are appended in the & Communication references
2)	19P4CC11	Materials Science	
3)	19P5CC13	Digital Electronics	
4)	19P5CC14	Optics	
5)	19P6CC17	Thermodynamics & Statistical Mechanics	
6)	19P6CC18	Modern Physics	
7)	19P6ME2	Medical Physics	
8)	19P6ME3	Opto Electronics	

3) Revision of Courses.

S.No.	Course Code	Course Title	No. of Units Revised	Title of Revision	% of Revision	Need	Relevance	Scope
1)	19P3 CC8	Solid State Physics	Unit - III	X-ray Diffraction & Reciprocal Lattice	20 %	To update diff. principle relevant to SSCP	National & Global S.D.	Emp & S.D.
2)	19P4 CC11	Materials Science	Unit - III	Nanomaterials	20 %	To update recent develop. about nano materials	National & Global S.D.	Emp & S.D.

4) New Courses introduced

S.No.	Course Code	Course Title	Relevance To				Scope for			Need for Introduction
			L	R	N	G	EM	EP	SD	
1)	21PG1 P4	Applied Optics	-	-	Y	Y	Y	-	Y	To update as per NET Syllabus
2)	21PG2 P10	Instrumentation & Micro Controller	-	-	Y	Y	Y	Y	Y	

5) Introduction of Skill Embedded Certificate / Diploma / Adv. Diploma Value added Course other than the value added course that is already being offered

NOT APPLICABLE

6) Approval of Ph.D. Course Work Syllabus.

Syllabus for Research Methodology (21PHDRM03) and Research and Publication Ethics (21PHDREP04) are common for all scholars.

Course Work paper & Core-papers for each scholar are as follows.

PhD Scholar	Course Work Paper	Core Paper
A. Joana Preethi & T. Sharmili R. Meera Naachiyar & S. Hafsin Hameed	21PHDCWP01 FM Nanostructures for Energy Storage App. 21PHDCWP01 Solid State Physics	21PHDCPP02 Nanoscience Applications 21PHDCPP03 Materials Science

7) Rubrics for Internship & Project

S.No.	C1	C2	CIA TOTAL	EXTERNAL
1)	20 Mks	20 Mks	40 Mks	60 Mks.

8) Details of proposed/signed MOUs. NOT APPLICABLE

Minutes of BOS Meeting.

B.Sc. Physics (UAPH)

- 1) The existing Syllabus content was approved & highly appreciated by the board members.
 - 2) Newly introduced self learning papers for all UG students are passed.
 - i) "Amazing Universe & Indian Space Missions (21P2SLU)" offered by Dept. of Physics
 - ii) Interdepartmental self learning papers
 - "Microprocessor & Programming (21P4SLB2)" offered by Dept. of Physics & Computer Science
 - iii) "Space Science (21P6SLM3)" offered by Dept. of Physics & Maths
- Board members suggested the syllabus for

3) above self learning paper has to be simple to motive them to opt.

3) Reference Book for self learning paper "Microprocessor & Programming" by Ramesh Gaonkar shall be appended.

4) Board suggested to introduce 'Physics for competitive Exam' as self learning paper in forthcoming years.

5) Board members approved the revision carried out in II B.Sc Core papers 19P3CC8 - Solid state Physics & 19P4CC11 - Materials Science. Reference Book by S.O. Pillai was suggested for SSP.

6) Board suggested to introduce Skill Embedded certificate course on 'Non Conventional Energy Sources'.

7) Syllabus for allied papers of BCA department on 'Digital Principles & Computer Organization' (19P4AC14)

& IT Department on "Digital Principles & Computer Architecture" (19P3ACI3) are passed.

- 8) Reference Book Malvino & Gates are recommended as Reference books in Digital Electronics & Communication (19P5CC13)

M. Sc. Physics (PAPH)

- 1) Existing Syllabus Content was approved & highly appreciated by the board members.
- 2) Self learning paper offered by Physics department to all other Science department PG Students titled on "Nanotechnology for all" is passed
- 3) New papers 'Applied Optics (21PG1P4)' & "Instrumentation and Microcontroller (21PG2P10)" are passed
- 4) Title "Principles in advanced Mathematical Physics" changed to Advanced Mathematical Physics as the term 'principles' is a misnomer in Mathematical Physics.

5) Following Reference books were suggested for Quantum Mechanics & Advanced Quantum Mechanics

- i) Principles in Quantum Mechanics - A. Shankar
- ii) Introduction to Quantum Mechanics - Powell & Crank
- iii) Quantum Mechanics: Concepts & Applications - Noureddine Zettili

6) Industrialist suggested to replace currently existing self learning papers for advanced learners titled on "Instrumentation & Experimental Methods" by paper on "Digital Signal Processing"

7) Reference Book Malvino & Gates are recommended as reference books for Applied Electronics Paper

Ph.D.

1) Research Methodology & Research & Publication Ethics papers are passed

2) Course work paper & core paper relevant to research specializations for each scholar are passed

Board Members approved & highly appreciated syllabus content.

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| 1) Dr. A. Sheela Vima Rani | A. Sheela Vima Rani |
| 2) Dr. Bashiruddin Mahmud | A. Bashir. |
| 3) Dr. K. Marimuthu | K. Marimuthu |
| 4) Dr. Eucharista Sylvia | ABSENT |
| 5) Mr. Ramprakash. | R. Ramprakash |
| 6) Dr. R. Vishnu Priya | R. Vishnu Priya |
| 7) Dr. Malathy | Malathy |
| 8) Mrs. S. Anulomphi Packiaseli | S. Anulomphi Packiaseli |
| 9) Dr. Mathavi Manisekaran | Mathavi Manisekaran |
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| 14) Mrs. I. Jeyasheela | I. Jeyasheela |
| 15) Dr. Ancemona Joseph | Ancemona Joseph |
| 16) Dr. M. Ragan | M. Ragan |
| 17) Dr. Sr. G. Jenita Rani | Sr. G. Jenita Rani |
| 18) Dr. R. Jolkimani | R. Jolkimani |
| 19) Dr. R. Nivaran Devi. | R. Nivaran Devi |

14/04/2024