



DEPARTMENT OF PHYSICS
HOLY CROSS COLLEGE (Autonomous), NAGERCOIL.
 (Affiliated to Manonmaniam Sundaranar University, Tirunelveli.
 Nationally Re-Accredited with A+ grade by NAAC (CGPA 3.35))
 Kanyakumari District, Tamil Nadu, India.



Minutes of the Board of Studies meeting of the Department of Physics
held on 29.1.2021 at 10.30 am via Google Meet

Ref. No. PHY/ BOS / 2020-2021/XV

Members:

Dr. C. Nirmala Louis	-Chairperson & Head of the
Department Dr. B. Sundara Kannan	- University Nominee
Dr. I. Hubert Joe	-Subject Expert
Dr. G. Dheva Shantha Kumari	-Subject Expert
Er. Arul Jerald Prakash	-Industrialist
Ms. P. Abisha	- Alumni
Dr. Sr. Gerardin Jayam	- Member
Dr. V. Shally	- Member
Dr. M. Priya Dharshini	- Member
Dr. A. Lesly Fathima	- Member
Dr. R. Krishna Priya	- Member
Ms. M. Abila Jeba Queen	- Member
Dr. S. Sonia	- Member
Ms. S. Virgin Jeba	- Member
Ms. P. Aji Udhaya	- Member
Sr. S. Sebastiammal	- Member
Ms. S.J. Jenepha Mary	- Member
Miss. Alphonse Anjaly Rani C	- Student Representative
Miss Shalfia Judit. A.S	- Student Representative

Agenda

1. Prayer
2. Welcome by the Chairperson
3. Reading of the minutes of the previous meeting
4. Restructuring / Revision of Curriculum of UG
5. UG Syllabus for Semester III and IV
6. Restructuring / Revision of Curriculum of PG
7. PG Syllabus for Semester III and IV
8. Classification of New Courses
9. Classification of courses as Employability / Entrepreneurship / Skill Development
10. Classification of courses as Local / National / Regional / Global
11. Classification of courses as Crosscutting Issues Gender Equity / Environment and Sustainability / Human Values / Professional Ethics
12. Conduct of UG and PG Practical Examination
13. Recommendation of books and journals for UG and PG
14. Conduct of seminars / workshops in collaborations with Government Agents / Universities / NGOs.
15. Suggestion for innovative teaching and evaluation techniques for UG and PG
16. New measures to be undertaken by the department
17. Feedback and action taken
18. Next Meeting of BoS
19. Any other.

The Board of Studies meeting commenced with a prayer by Dr. M. Priya Dharshini. The members of the board, the Chairperson, Subject experts, Industrialist, Alumna and faculty of

the Department, were present for the meeting.

Chairperson's Address

The Chair Person and Head of the Department, Dr. C. Nirmala Louis, welcomed the members and introduced them while briefing on the agenda for the conduct of this meeting. The following items in the Agenda were discussed by the members of the Board.

Item 01/BoS21.01/03: Reading of the minutes of the previous meeting held on 20.1.2020

Dr.A. Lesly Fathima read the minutes of the previous meeting which was approved by the members after incorporating the modifications/ suggestions given by the Academic council.

Item 02/BoS21.01/04: Restructuring / Revision of Curriculum of UG

The overall structure of the curriculum framed in 2020 was accepted by the board with the following modifications.

- I. The core and Elective courses were changed.
- II. Instead of 4 Elective papers, one of the elective papers was changed into project.
- III. Practical examinations will be held only at the end of the even semesters.
- IV. Four hours NMEC syllabus was reduced into two hours in I and II semester.
- V. Add on courses were introduced in I, II, III and IV semester.
- VI. Credits for Major and Allied practicals were reduced into 2 based on the norms "The credits should not exceed the hours allotted"

Courses offered for the students of B.Sc. Physics are given in the following structure

Semester	Course	Subject code	Paper	Hours/ week	Credit
I	Part I	TL2011/ FL2011	Language: Tamil/French	6	4
	Part II	GE2011	General English	6	4
	Part III	PC2011	Major Core I - Mechanics	4	4
		PC20P1	Major Practical I - Physics Lab I	2	-
		AP2011	Allied I- Allied Physics I for Mathematics	4	3
		AP20P1	Allied Practical – General Physics Lab	2	-

	Part IV	APS201	Addon Course - Professional English for Physical Sciences-I	2	2	
		PNM201	Non Major Elective (NMEC) – Physics in Everyday Life I	2	2	
		SEC201/ SEC202	SEC (Skill Enhancement Course) – Meditation and Exercise / Computer Literacy	2	2	
	Part V	FCV201	Foundation Course I – Values for Life	-	-	
		STP201	Student Training Programme (STP) – Clubs and Committees/NSS	-	-	
II	Part I	TL2021/ FL2021	Language: Tamil/French	6	4	
	Part II	GE2021	General English	6	4	
	Part III	PC2021	Major Core II – Properties of matter and Sound	4	4	
		PC20P1	Major Practical I - Physics Lab I	2	2	
		AP2021	Allied II – Allied Physics II for Mathematics	4	3	
		AP20P1	Allied Practical – General Physics Lab	2	2	
	Part IV	APS202	Addon Course- Professional English for Physical Sciences-II	2	2	
			PNM202	Non Major Elective (NMEC)– Physics in Every Day Life II	2	2
			SEC201/ SEC202	SEC (Skill Enhancement Course) – Meditation and Exercise / Computer Literacy	2	2
		Part V	FCV201	Foundation Course I – Values for Life	-	1
SLP201			SLP(Service Learning Programme) - Community Engagement Course	-	-	
STP201			STP (Student Training Programme) – Clubs and Committees/NSS	-	-	
			TL2031/ FL2031	Language: Tamil/French	6	4
III		Part I	TL2031/ FL2031	Language: Tamil/French	6	4
		Part II	GE2031	General English	6	4
		PC2031	Major Core III – Heat and Thermodynamics	4	4	

	Part III	PC2032	Major – Elective - I (a) Non Conventional Energy Sources	4	4	
		PC2033	(b) Fundamentals of Physics - I			
		PC2034	(c) Microprocessor Fundamentals			
		PC20P2	Major Practical II - Physics Lab II	2	-	
		AP2031	Allied I – Allied Physics I for Chemistry	4	3	
		AP20P1	Allied Practical – General Physics Lab	2	-	
	Part IV	APS203	Addon Course- Professional English for Physical Sciences-III	2	2	
		FCV202	Foundation Course II – Personality Development	-	-	
	Part V	SLP201	SLP(Service Learning Programme) - Community Engagement Course	-	2	
		SLP202	SLP Extension Activity (RUN)	-	-	
		STP201	STP (Student Training Programme) – Clubs and Committees / NSS	-	-	
	IV	Part I	TL2041/ FL2041	Language: Tamil/French	6	4
			Part II	GE2041	General English	6
Part III		PC2041	Major Core IV – Optics and Spectroscopy	4	4	
		PC2042	Major – Elective - III (a)Computer Programming in C++	4	4	
		PC2043	(b) Medical Physics			
		PC2044	(c) Optoelectronics			
		PC20P2	Major Practical II - Physics Lab II	2	2	
		AP2041	Allied II – Allied Physics II for Chemistry	4	3	
Part IV		AP20P1	Allied Practical – General Physics Lab	2	2	
		APS204	Addon Course- Professional English for Physical Sciences-IV	2	2	
Part V		FCV202	Foundation Course II – Personality Development	-	1	
		SLP202	SLP Extension Activity (RUN)	-	2	
			STP201	STP (Student Training Programme) - Clubs and Committees/NSS	-	2
			PC2051	Major Core V – Classical and Statistical Mechanics	6	5

V	Part III	PC2052	Major Core VI - Analog Electronics	6	5	
		PC2053	Major Core VII - Solid State Physics	5	5	
		PC20PR	Project	5	4	
		PC20P3	Major Practical III - Physics Lab III	2	-	
		PC20P4	Major Practical IV - Physics Lab IV	2	-	
		PC20P5	Major Practical V - Physics Lab V	2	-	
	Part IV	AEC201	AEC(Ability Enhancement Compulsory course): Environmental Studies	2	2	
	Part V	FCV205	Foundation Course III - Human Rights Education (HRE)	-	1	
	VI	Part III	PC2061	Major Core VIII – Relativity and Quantum Mechanics	6	5
PC2062			Major Core IX – Digital and Communication Electronics	6	5	
PC2063			Major Core X - Nuclear Physics	5	5	
PC2064 PC2065 PC2066			Major – Elective – II (a) Mathematical Physics (b) Nanophysics (c) Astrophysics	5	4	
			PC20P3	Major Practical III - Physics Lab III	2	2
			PC20P4	Major Practical IV - Physics Lab IV	2	2
PC20P5			Major Practical V - Physics Lab V	2	2	
Part IV			SEP203	Skill Enhancement Course (*SEC) – Basic Electrical Circuits and Instruments	2	2
		FCV204	Foundation Course IV – Gender Equity studies	-	1	
			TOTAL	180	150	

Self-Learning Courses- Extra Credit Courses

Semester	Course Code	Title of the Course	Credits
III /V	PC20S1	Physics for Competitive Examination – I	2
IV/VI	PC20S2	Physics for Competitive Examination – II	2

Value Added Courses

Semester	Course Code	Title of the Course	Total Hours
III /V	VAP201	Multimedia Training	30
IV/VI	VAP202	Domestic Appliance Service	30

Item 03/BoS21.01/05: UG Syllabus for Semester III and IV

The BoS members approved the Papers in Semester III and IV for UG programme.

- The following courses during the III and IV semesters are revised/ modified based on the feedback from the students & Alumni.
- The Title of the core paper 'Waves and optics' is changed into 'Optics and Spectroscopy'. Modified allied paper title as 'Allied Physics I for Chemistry' and 'Allied Physics II for Chemistry' for semester I and II respectively. The Title of the elective III paper 'Programming with C++' is changed into 'Computer Programming in C++'.
- The core paper 'Non Conventional Energy Sources' is shifted from IV semester to III semester. The elective paper 'Computer Programming in C++' is shifted from V semester to IV semester.

Sl.No.	Semester	Paper Code	Paper Title	Changes	
				Removed (if any)	Addition (if any)
1.	III	PC2031	Major Core III – Heat and Thermodynamics	-	Addition
2.	III	PC2032	Major – Elective - I (a)Non Conventional Energy Sources	-	Addition
3.	III	PC2033	Major – Elective - I (b)Fundamentals of Physics - I	-	Addition

4.	III	PC2034	Major – Elective - I (c) Microprocessor Fundamentals	-	Addition
5.	III	PC20P2	Major Practical II - Physics Lab II	-	Addition
6.	III	AP2031	Allied I – Allied Physics I for Chemistry	-	Addition
7.	III	APS203	Addon Course- Professional English for Physical Sciences-III	-	Addition
8.	IV	PC2041	Major Core IV – Optics and Spectroscopy	-	Addition
9.	IV		Major – Elective - III	-	Addition
		PC2042	(a) Computer Programming in C++		
10.	IV	PC2043	Major – Elective - III (b) Medical Physics	-	Addition
11.	IV	PC2044	Major – Elective - III (c) Optoelectronics	-	Addition
12.	IV	PC20P2	Major Practical II - Physics Lab II	-	Addition
13.	IV	AP2041	Allied II – Allied Physics II for Chemistry	-	Addition
14.	IV	AP20P1	Allied Practical – General Physics Lab	-	Addition
15.	IV	APS204	Addon Course- Professional English for Physical Sciences-IV	-	Addition
16.	I	APS201	Addon Course - Professional English for Physical Sciences-I	-	Addition
17.	I	PNM201	Non Major Elective (NMEC) – Physics in	Revised	-

			Everyday Life I		
18.	II	APS202	Addon Course- Professional English for Physical Sciences-II	-	Addition
19.	II	PNM202	Non Major Elective (NMEC)- Physics in Every Day Life II	Revised	-

Item 04/BoS21.01/06: Restructuring / Revision of Curriculum of PG

The overall structure of the curriculum framed in 2020 was accepted by the board with the following modifications.

- i. The core and Elective courses were changed.
- ii. Practical examinations will be held only at the end of the even semesters.
- iii. Credits for Major practical's were reduced into 3 based on the norms " The credits shouldnot exceed the hours allotted "
- iv. In Non Electronics practical's five more experiments were included.
 - LASER diffraction: single slit, double slit, holes pattern slit, mesh and grating.
 - Elastic Constant - Elliptic Fringes Method
 - Gaussian Nature of Laser Beam and Evaluation of beam spot size.
 - Fibre Optical communication – Numerical aperture, various types of losses.
 - Measurement of Laser Beam Divergence and spot size

Courses offered for the students of M.Sc. Physics are given in the following structure

Semester	Subject code	Title of the paper	Hours/week	Credits
	PP2011	Core I – Classical Mechanics	6	5
	PP2012	Core II - Mathematical Physics	6	5
	PP2013	Core III – Quantum Mechanics-I	6	5
	PP2014	Elective I – (a) Advanced Nuclear Physics (b) Molecular Physics (c) Numerical methods	6	4
	PP2015			
	PP2016			

I	PP20P1	Practical I - Advanced Physics Lab - I (General Physics)	3	-
	PP20P2	Practical II - Advanced Physics Lab - II (Programming with C++)	3	-
	CEC201	Community Engagement Course	-	-
II	PP2021	Core IV - Electromagnetic Theory	6	5
	PP2022	Core V - Quantum Mechanics-II	6	5
	PP2023	Core VI - Condensed Matter Physics-I	6	5
	PP2024	Elective II - (a) Experimental design (b) Introductory Astronomy, Astrophysics & Cosmology (c) Laser Physics	6	5
	PP2025			
	PP2026			
	PP20P1	Practical I - Advanced Physics Lab - I (General Physics)	3	3
	PP20P2	Practical II - Advanced Physics Lab - II (Programming with C++)	3	3
	LST202	Life Skill Training (LST) - I	-	1
	CEC201	Community Engagement Course	-	2
III	PP2031	Core VIII - Electronics	6	5
	PP2032	Core IX - Condensed Matter Physics-II	6	5
	PP2033	Project	6	5
	PP2034	Elective III - (a) Biophysics (b) Microprocessor and Microcontroller (c) Solar Energy Utilization	6	4
	PP2035			
	PP2036			
PP20P3	Practical III- Advanced Physics Lab - III (Electronics)	3	-	
PP20P4	Practical IV - Advanced Physics Lab - IV (Microprocessor and Micro Controller)	3	-	
	PP2041	Core X - Nuclear and Elementary Particle Physics	6	5

IV	PP2042	Core XI - Spectroscopy	6	5
	PP2043	Core VII - Thermodynamics and Statistical Mechanics	6	5
	PP2044 PP2045 PP2046	Elective IV - (a) Materials Physics and Processing Techniques (b) Advanced Nanophysics (c) X-ray Crystallography	6	5
	PP20P5	Practical III- Advanced Physics Lab – III (Electronics)	3	3
	PP20P6	Practical IV – Advanced Physics Lab – IV (Microprocessor and Micro Controller)	3	3
	LST204	Life Skill Training (LST) – II	-	1
	STP201	Summer Training Programme	-	1
		TOTAL	120	90+5

Self-Learning Courses- Extra Credit Courses

Semester	Course Code	Title of the Course	Credits
III	PP20S1	Physics for Lectureship Examination – I	2
IV	PP20S2	Physics for Lectureship Examination – II	2

Summer Training Programme

Semester	Name of the course	Total hours	Credit
III/IV	Computer Hardware –H20STP	30	1

Item 05/BoS21.01/07: PG Syllabus for Semester III and IV

The BoS members approved the Papers in Semester III and Semester IV for PG programme.

i. The following courses during the III and IV semesters are revised/ modified based on the feedback from the students & Alumni.

ii. The Title of the core paper 'Integrated Electronics' and Nuclear and Particle Physics were changed into 'Electronics' and Nuclear and Elementary Particle Physics respectively. Modified elective paper title as 'Materials Physics and Processing Techniques' and 'Advanced Nanophysics'.

Sl.No.	Semester	Paper Code	Paper Title	Changes	Addition (if any)
				Removed (if any)	
1.	III	PP2031	Core VIII – Electronics	-	Addition
2.	III	PP2032	Core IX – Condensed Matter Physics-II	-	Addition
3.	III	PP2034	Elective III – (a) Biophysics	-	Addition
4.	III	PP2035	Elective III – (b) Microprocessor and Microcontroller	-	Addition
5.	III	PP2036	Elective III – (c) Solar Energy Utilization	-	Addition
6.	IV	PP2041	Core X– Nuclear and Elementary Particle Physics	-	Addition
7.	IV	PP2042	Core XI - Spectroscopy	-	Addition
8.	IV	PP2043	Core VII - Thermodynamics and Statistical Mechanics	-	Addition
9.	IV	PP2044	Elective IV – (a) Materials Physics and Processing Techniques	-	Addition
10.	IV	PP2045	Elective IV – (b) Advanced Nanophysics	-	Addition

			Nanophysics		
11.	IV	PP2046	Elective IV – (c) X-ray		Addition
			Crystallography		
12.	II	P20P1	Advanced Physics Lab –I - General Physics	Modified	

Item 06/BoS21.01/08: Classification of New Courses

New Papers Introduced for B.Sc. Physics students in the new structural revision of Curriculum

Programme	Course Code	Course Title
UG	PC2031	Heat and Thermodynamics
	AP2031	Allied Physics I for Chemistry (Allied)
	PC2032	Non Conventional Energy Sources
	PC2033	Fundamentals of Physics– I
	PC2034	Microprocessor Fundamentals
	PC2041	Optics and Spectroscopy
	PC2042	Computer Programming in C++
	PC2043	Medical Physics
	PC2044	Optoelectronics
	PC20P2	Major Practical II-Physics lab-II
	AP20P1	Allied Practical –General Physics Lab
PG	PP2031	Electronics
	PP2032	Condensed Matter Physics-II
	PP2033	Biophysics
	PP2034	Microprocessor and Microcontroller
	PP2035	Solar Energy Utilization
	PP2041	Nuclear and Elementary Particle Physics
	PP2042	Spectroscopy

PP2043	Thermodynamics and Statistical Mechanics
PP2044	Materials Physics and Processing Techniques
PP2045	Advanced Nanophysics
PP2046	X-ray Crystallography

Item 07/BoS21.01/ 09: Classification of courses as Employability / Entrepreneurship / Skill

Development

UG

Sl.No	Sem ester	Course Code	Course Title	Skill Development	Employ ability	Entreprene urship
1.	III	PC2031	Major Core III – Heat and Thermodynamics	✓		✓
2.	III	PC2032	Major – Elective - I (a) Non Conventional Energy Sources	✓		✓
3.	III	PC2033	Major – Elective - I (b) Fundamentals of Physics - I	✓		
4.	III	PC2034	Major – Elective - I (c) Microprocessor Fundamentals	✓		✓
5.	III	AP2031	Allied I – Allied Physics I for Chemistry	✓		✓
6.	III	APS203	Addon Course- Professional English for Physical Sciences-III	✓		
7.	IV	PC2041	Major Core IV – Optics and Spectroscopy	✓		✓
8.	IV	PC2042	Major – Elective - III (a) Computer Programming in C++	✓		
9.	IV	PC2043	Major – Elective - III (b) Medical Physics	✓		✓
10.	IV	PC2044	Major – Elective - III	✓		✓

			(c) Optoelectronics			
11.	IV	PC20P2	Major Practical II - Physics Lab II	✓	✓	
12.	IV	AP2041	Allied II – Allied Physics II for Chemistry	✓		✓
13.	IV	AP20P1	Allied Practical – General Physics Lab	✓	✓	
14.	IV	APS204	Addon Course- Professional English for Physical Sciences-IV.	✓		

PG

Sl.No	Semester	Course Code	Course Title	Skill Development	Employability	Entrepreneurship
1.	III	PP2031	Core VIII – Electronics	✓	✓	
2.	III	PP2032	Core IX – Condensed Matter Physics-II	✓		
3.	III	PP2033	Project	✓	✓	
4.	III	PP2034	Elective III – (a) Biophysics	✓		
5.	III	PP2035	Elective III – (b) Microprocessor and Microcontroller	✓		
6.	III	PP2036	Elective III – (c) Solar Energy Utilization	✓		
7.	III	PP20P3	Practical III- Advanced Physics Lab – III (Electronics)	✓		
8.	III	PP20P4	Practical IV – Advanced Physics Lab – IV (Microprocessor and Micro Controller)	✓		
9.	IV	PP2041	Core X - Nuclear and	✓		

			Elementary Particle Physics			
10.	IV	PP2042	Core XI - Spectroscopy	✓		✓
11.	IV	PP2043	Core VII Thermodynamics and Statistical Mechanics	✓		✓
12.	IV	PP2044	Elective IV – (a)Materials Physics andProcessing Techniques	✓		
13.	IV	PP2045	Elective IV – (b) Advanced Nanophysics	✓		
14.	IV	PP2046	Elective IV – (c) X-ray Crystallography	✓		✓
15.	IV	PP20P5	Practical III- Advanced Physics Lab – III (Electronics)	✓		
16.	IV	PP20P6	Practical IV – Advanced Physics Lab – IV (Microprocessor and MicroController)	✓		
17.	IV	LST204	Life Skill Training (LST) – II	✓		
18.	IV	STP201	Summer Training Programme	✓		

Item 08/BoS21.01/10: Classification of courses as Local / National / Regional / Global

The members of the Board classified the UG courses in the new structure based on local/national/global relevance.

Sl.No	Sem e ster	Cours e Code	Course Title	Local	National	Global
	III	PC2031	Major Core III – Heat and Thermodynamics		✓	
	III	PC2032	Major – Elective - I (a)Non Conventional Energy Sources			✓

	III	PC2033	Major – Elective – I (b) Fundamentals of Physics - I			✓
	III	PC2034	Major – Elective – I (c) Microprocessor Fundamentals			✓
	III	AP2031	Allied I – Allied Physics I for Chemistry		✓	
	III	APS203	Addon Course- Professional English for Physical Sciences-III			✓
	III	FCV202	Foundation Course II – Personality Development	✓		
	IV	PC2041	Major Core IV – Optics and Spectroscopy		✓	
	IV	PC2042	Major – Elective – III (a) Computer Programming in C++			✓
	IV	PC2043	Major – Elective - III (b) Medical Physics			✓
	IV	PC2044	Major – Elective - III (c) Optoelectronics			✓
	IV	PC20P2	Major Practical II - Physics Lab II	✓		
	IV	AP2041	Allied II – Allied Physics II for Chemistry		✓	
	IV	AP20P1	Allied Practical – General Physics Lab	✓		
	IV	APS204	Addon Course- Professional English for Physical Sciences-IV			✓
	IV	FCV202	Foundation Course II – Personality Development	✓		

Sl.No	Semester	Course Code	Course Title	Local	National	Regional	Global
1.	III	PP2031	Core VIII – Electronics				✓
2.	III	PP2032	Core IX Condensed Matter Physics-II				✓

3.	III	PP2033	Project		✓			✓
4.	III	PP2034	Elective III –(a) Biophysics					✓
5.	III	PP2035	Elective III – (b)Microprocessor and Microcontroller					✓
6.	III	PP2036	Elective III – (c) Solar Energy Utilization					✓
7.	III	PP20P3	Practical III- Advanced Physics Lab – III (Electronics)					✓
8.	III	PP20P4	Practical IV – Advanced Physics Lab – IV (Microprocessor and Micro Controller)					✓
9.	IV	PP2041	Core X - Nuclear and Elementary Particle Physics		✓			
10.	IV	PP2042	Core XI - Spectroscopy			✓		
11.	IV	PP2043	Core VII -Thermodynamics and Statistical Mechanics.					✓
12.	IV	PP2044	Elective IV – (a)Materials Physics and Processing Techniques					✓
13.	IV	PP2045	Elective IV – (b) Advanced Nanophysics					✓
14.	IV	PP2046	Elective IV – (c) X-ray Crystallography	✓				
15.	IV	PP20P5	Practical III- Advanced Physics Lab – III (Electronics)					✓
16.	IV	PP20P6	Practical IV – Advanced Physics Lab – IV					✓

			(Microprocessor and Micro Controller)				
17.	IV	STP201	Summer Training Programme	✓			

Item 09/BoS 21.01/11: Classification of Courses as Cross-cutting issues
UG Courses

Programme	Course Code	Course Title	Environment and Sustainability	Human Values	Professional Ethics
UG	PC2032	Major – Elective - I Non Conventional Energy Sources	✓		
	APS203	Addon Course- Professional English for Physical Sciences- III			✓
	APS204	Addon Course- Professional English for Physical Sciences- IV			✓
PG	PP2034	Elective III – Biophysics	✓		
	PP2036	Elective III – Solar Energy Utilization	✓		

Item 10/BoS 21.01/12: Conduct of UG/PG practical exam

From the feedback of the stakeholders, it is suggested by the Board of studies members to have practicals during the even semester.

Item 11/BoS 21.01/13 Recommendation of books, journals for PG and research programmes

The members suggested to subscribe the following journals for the department:

- i. One or more science direct Journals
- ii. Physical Society Journals
- iii. Institute of Physics Journals

Recommended Books for B.Sc. Physics

The BoS members recommended the following books based on the modified/Revised syllabus for B.Sc. Physics

- i. Aruldhass, G. (2007). Molecular structure and spectroscopy
- ii. Ravichandran, D. (2008). Programming with C++

Recommended Books for M.Sc. Physics

The BoS members recommended the following books based on the modified/Revised syllabus for M.Sc. Physics

- ii. Mehta, V.K. (2001) Principles of Electronics.
- iii. Tayal.D.C. (2018). Nuclear Physics

Item 12/BoS 21.01/14: Conduct of seminars / workshops in collaborations with Government Agents / Universities / NGOs.

Workshops and seminars can conduct in collaboration with MOU sand Foreign Universities weresuggested.

Item 13/BoS 21.01/15: Suggestions for innovative teaching and evaluation techniques

The BoS members suggested the following methodologies to enhance teaching, learning and evaluation.

- i. Use of the participative learning techniques such as Flip Class, Group discussion, case study, jigsaw and guided Group discussion.
- ii. New mode of evaluation which rely on the creativity rather than memorizing, group activities, a rich campus experience etc. has to be incorporated in the syllabus.

Item 14/BoS 21.01/16: New measures to be undertaken by the department

- i. Organize innovative student projects
- ii. Organize programmes related to Innovations.
- iii. Frame Department Activity calendar
- iv. Form Science club

Item 15/BoS 21.01/17: Feedback and action taken

Department	Stake holders	Feedback received	Action Taken
B.Sc.	Students	Modify the syllabus in Electromagnetism and provide theory related	Syllabus was revised.

		practicals.	
	Parents	Value added courses can include.	Value added courses were offered.
	Teachers	Include Electronics related practical's in Physics Lab-II.	The Changes were executed.
	Alumni	Add spectrometer prism and grating experiments in Physics Lab-II.	Two practical's were added.
M.Sc.	Students	Microprocessor syllabus was heavy.	Reduced
	Parents	Value added courses related to computer can include.	Value added courses and internship were offered.
	Teachers	Modify non electronics in Advanced Physics Lab I.	The same was modified.
	Alumni	Include more experiments related to laser.	Included in the syllabus


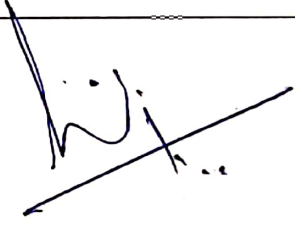
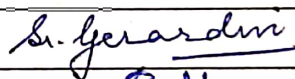
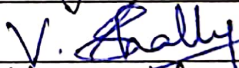
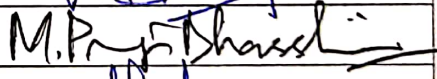
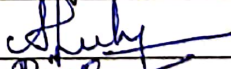

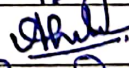
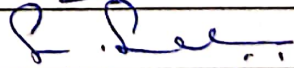
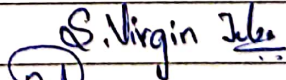

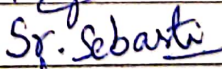
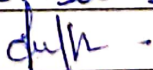
Item 16/BoS 21.01/18: Next Meeting of the BoS

The members of the board suggested to have the next meeting of BoS in the month of August,2021.

The following suggestions were given by the student representatives

- In UG Programme, core project can be included.
- The elective paper 'Computer Programming in C++' can be shifted to IV semester.

C. Alphonse Anjali Rani
Salfia Jidif

Name of the Members	Designation	Signature
Dr. C. Nirmala Louis Chairperson	Assistant Professor & Head of the Department	
Dr. B. Sundara Kannan University Nominee	Professor & Head	Absent
Dr. I. Hubert Joe Subject Expert	Associate Professor	Attendance attached
Dr. G. Dheva Shantha Kumari Subject Expert	Associate Professor	Attendance attached
Er. Arul Jerald Prakash Industrialist	Former Director, Kerala Science and Technology Museum and Priyadharshini Planetarium	
Ms. P. Abisha Alumni	Assistant Professor	P. Abisha
Dr. Sr. Gerardin Jayam	M.Phil coordinator	
Dr. V. Shally	Assistant Professor	
Dr. M. Priya Dharshini	Assistant Professor	
Dr. A. Lesly Fathima	Assistant Professor	
Dr. R. Krishna Priya	Assistant Professor	
Ms. M. Abila Jeba Queen	Assistant Professor	
Dr. S. Sonia	Assistant Professor	
Ms. S. Virgin Jeba	Assistant Professor	
Ms. P. Aji Udhaya	Assistant Professor	
Sr. S. Sebastiammal	Assistant Professor	
Ms. S.J. Jenepha Mary	Assistant Professor	

Attendance Certificate

From

Dr.I. Hubert Joe,
Associate Professor, Department of Physics,
University of Kerala, Thiruvananthapuram
Kerala, India
Mobile : 9447220563
Email : hubertjoe@keralauniversity.ac.in
hubertjoe@gmail.com


To

The Deans
Holy Cross College, Nagercoil,
Kanyakumari District, Tamil Nadu.

Dear Madam,

This is to certify that myself Dr.I. Hubert Joe, Associate Professor,
Department of Physics, University of Kerala, Thiruvananthapuram
attended the Board of Studies meeting conducted by the Department of
Physics Holy Cross College, Nagercoil, Kanyakumari District, Tamil
Nadu, via Google meet, as Subject Expert on 29.1.2021.

Sincerely,


(Signature and seal)

Dr. I. HUBERT JOE
Associate Professor
Department of Physics
University of Kerala
Kariavattom
Thiruvananthapuram-695581

Attendance Certificate

From

Dr. G. DhevaShantha Kumari,
Associate Professor, Department of Physics,
Fatima College, Madurai
MOBILE : 9442313132
EMAIL : dhevashantha@gmail.com

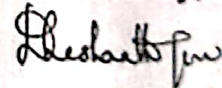
To

The Deans
Holy Cross College, Nagercoil,
Kanyakumari District, Tamil Nadu.

Dear Madam,

This is to certify that myself **Dr. G. DhevaShantha Kumari**, Associate Professor, Department of Physics, Fatima College, Madurai attended the Board of Studies meeting conducted by the Department of **Physics** Holy' Cross College, Nagercoil, Kanyakumari District, Tamil Nadu, via Google meet, as Subject Expert on 29.1.2021.

Sincerely,



(Signature and seal)