



Anekant Education Society's

Tuljaram Chaturchand College
of Arts, Science, Commerce, Baramati
(Autonomous)

DEPARTMENT OF PHYSICS

(Faculty of Science and Technology)

Minutes of Board of Studies Meeting No.6

Date of Meeting: 09/04/2022

Venue: Department of Physics



April, 2022

Anekant Education Society's

Tuljaram Chaturchand College, Baramati

Department of Physics

NOTICE

Date: 04/04/2022

Board of Studies Meeting

All members of the Board of Studies in Physics are hereby informed that, as per notice no.375 dated 12/03/2022 issued by the college, the online/offline meeting of BOS in Physics is organized on 09th April 2022 at 12:00 pm. in the Department of Physics. As esteemed members of the board, your presence and input during the meeting would be greatly appreciated.

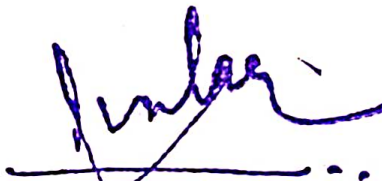
The agenda for the meeting is as follows:

1. To confirm the minutes of the previous meeting held on Wednesday, 08/12/2021
2. To design and approve course and credit structure for the B.Sc and M. Sc. programme in accordance with 2022 pattern.
3. To prepare and approve curriculum of F.Y.B.Sc, Semester-I (2022 pattern) to be implemented from the academic year 2022-2023.
4. To prepare and approve curriculum of M.Sc.-I Semester-I (2022 pattern) to be implemented from the academic year 2022-2023.
5. To prepare and approve curriculum of certificate courses for UG and PG programmes as per 2022 pattern.
6. To discuss and incorporate the relevant feedbacks of the stakeholders (students, teachers, parents, alumni and employers) in the curriculum.
7. Any other issue with the permission of the chairman.

Therefore, I kindly request you all to attend the aforementioned meeting and invite you to provide your valuable inputs for the designing the curriculum in accordance with 2019 pattern.


Chairman
BOS in Physics




Principal

Anekant Education Society's
Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati
(Autonomous)

Department of Statistics

List of Members Presented for the BOS Meeting

The following internal and external BoS members were attended the Board of Studies (Physics) meeting held on 09th April, 2022.

Sr No	Name & Address	Designation
1	Dr. Pandurang Pingale	Chairperson
2	Prof. Dr. Shivaji Veer	Member, Expert from SPPU, Pune
3	Prof. Dr. K.Y Rajpure	Member, Expert from Shivaji University
4	Prof. Dr. K.R.Priolkar	Member, Expert from Goa University
5	Mr.Subhash Zambare	Representative from industry
6	Dr. Swapnil RNardekar	Alumni and Research Scholar
7	Dr. Ashok Kalange	Member
8	Dr. Rajendra Kale	Member
9	Dr. Ramchandra Sapkal	Member
10	Dr. Sachin Kulkarni	Member
11	Prof.Dr.S.H.Pawar	Member
12	Mr. Sandip B. Kakade	Member
13	Dr. Vijay S. Mohite	Member
14	Mrs.Shubhangi Bhosale	Member
15	Dr.Swapnil Rajoba	Member
16	Miss. Dhaneshree Hole	Student Representative
17	Miss. Pawar Aishwarya	Student Representative



MINUTES OF THE MEETING

As per the Notice 375 dated 12/03/2022, issued by the college, the meeting of Board of Studies in Physics was successfully held on 9th April 2022 at 12:00 pm in the Department of Physics, T. C. College, Baramati. The meeting took place both online and offline mode, adhering to the guidelines and protocols set by the college. Under the guidance of Prof. Dr. P. C. Pingale, Chairman of the Board of Studies in Physics, the meeting commenced with a warm welcome to all the esteemed members, followed by a brief introduction of the meeting's objectives.

During the meeting, fruitful discussions were held on the items mentioned in the circulated agenda. We are pleased to inform you that the following resolutions were made during the BOS meeting.

1. To confirm the minutes of the previous meeting held on 08/12/ 2021.

Dr. P. C. Pingale read the minutes of the BoS meeting held on 08/12/ 2021 and put forward to the BoS members for the approval.

Resolution No. 1: The minutes of the previous Board of Studies meeting were approved and confirmed.

2. To design and approve course and credit structure for the B.Sc and M. Sc. programme in accordance with 2022 pattern.

The Chairman of BoS Dr. P. C. Pingale has provided an overview of the 2022 pattern and emphasized its significance in curriculum development. The members discussed key features and any potential challenges associated with its implementation. A detailed discussion took place regarding the course and credit structure of the B.Sc, F.Y.B.Sc. and M.Sc. programmes.

The Chairman presented a proposal for the course and credit structure. The proposal included a breakdown of required courses, elective options, and credit hours for each program.

Course Structure for B. Sc. Physics



Class	Pattern	Sem	Course Code	Course Title	Course Type	No. of Credits
FYBSc						
FYBSc	2022	I	USPH111	Mechanics and Properties of Matter	Theory	2
FYBSc	2022	I	USPH112	Electromagnetics	Theory	2
FYBSc	2022	I	USPH113	Practical- I	Practical	2
FYBSc	2022	II	USPH121	Heat and Thermodynamics	Theory	2
FYBSc	2022	II	USPH122	Physics Principles and Applications	Theory	2
FYBSc	2022	II	USPH123	Practical - II	Practical	2
FYBSc	2022	II	CC	Certificate Course	CC	2
SYBSc						
SYBSc	2022	III	USPH231	Mathematical Methods of Physics-I	Theory	3
SYBSc	2022	III	USPH 232	Electronics/Instrumentation	Theory	3
SYBSc	2022	III	USPH233	Practical-I	Practical	2
SYBSc	2022	IV	USPH241	Oscillations, Waves and Sound	Theory	3
SYBSc	2022	IV	USPH242	Optics	Theory	3
SYBSc	2022	IV	USPH243	Practical-II	Practical	2
SYBSc	2022	IV	CC	Certificate Course	CC	2
TYBSc						
TYBSc	2022	V	PHY351	Mathematical Methods of Physics-II	Theory	3
TYBSc	2022	V	PHY 352	Solid State Physics	Theory	3
TYBSc	2022	V	PHY 353	Classical Mechanics	Theory	3
TYBSc	2022	V	PHY 354	Atomic and Molecular Physics	Theory	3
TYBSc	2022	V	PHY 355	Elements of Material Science	Theory	3
TYBSc	2022	V	PHY 356(A)	Renewable Energy Sources	Elective Theory	3
			PHY 356(B)	Physics and Technology of Sensors		
			PHY 356(C)	Biophysics		
TYBSc	2022	V	PHY357	Practical-I	Practical	2
TYBSc	2022	V	PHY358	Practical-II	Practical	2
TYBSc	2022	V	PHY359	Practical-III	Practical	2
TYBSc	2022	VI	PHY 361	Classical Electrodynamics	Theory	3
TYBSc	2022	VI	PHY 362	Quantum Mechanics	Theory	3
TYBSc	2022	VI	PHY 363	Thermodynamics and Statistical Physics	Theory	3
TYBSc	2022	VI	PHY 364	Nuclear Physics	Theory	3
TYBSc	2022	VI	PHY 365 (A)	Electronics-II	Theory	3
			PHY 365 (B)	Advanced Electronics		
TYBSc	2022	VI	PHY 366 (A)	Solar Energy Conversion Devices	Elective Theory	3
			PHY 366 (B)	Sensors and its Applications		



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			PHY 366 (C)	Physics of Nanomaterials		
TYBSc	2022	VI	PHY367	Practical IV	Practical	2
TYBSc	2022	VI	PHY368	Practical V	Practical	2
TYBSc	2022	VI	PHY369	Project	Project	2

Course Structure for M.Sc. Physics

Class	Pattern	Sem	Course Code	Course Title	Course Type	No. of Credits
MSc – I						
MSc – I	2022	I	PSPH111	Mathematical Methods in Physics	Theory	4
MSc – I	2022	I	PSPH112	Classical Mechanics	Theory	4
MSc – I	2022	I	PSPH113	Quantum Mechanics-I	Theory	4
MSc – I	2022	I	PSPH114	Electronics	Theory	4
MSc – I	2022	I	PSPH115	Electronics Laboratory-I	Practical	4
MSc – I	2022	I	PSPH116	Basic Physics Laboratory-I	Practical	4
MSc – I	2022	II	PSPH121	Physics of Semiconductor Devices	Theory	4
MSc – I	2022	II	PSPH122	Atoms, Molecules & Laser	Theory	4
MSc – I	2022	II	PSPH123	Quantum Mechanics-II	Theory	4
MSc – I	2022	II	PSPH124	Classical Electrodynamics	Theory	4
MSc – I	2022	II	PSPH125	Electronics Laboratory-II	Practical	4
MSc – I	2022	II	PSPH126	Basic Physics Laboratory-II	Practical	4
			CC	Certificate Course	--	2
MSc – II						
MSc – II	2022	III	PSPH231	Statistical Physics	Theory	4
MSc – II	2022	III	PSPH232	Solid State Physics	Theory	4
MSc – II	2022	III	PSPH233	Experimental Techniques in Physics-I	Theory	4
MSc – II	2022	III	PSPH234 (A)	Nano Technology-I	Elective Theory	4
			PSPH234 (B)	Energy Studies-I		
			PSPH234 (C)	Biophysics-I		
			PSPH234 (D)	Physics of Thin Film-I		
			PSPH234 (E)	Electronic Instrumentation-I		
			PSPH234 (F)	DFT-I		
			PSPH235	Special Lab-I	Practical	
			PSPH-236	Special Lab-II	Practical	
MSc – II	2022	III	CC	Certificate Course	--	2
MSc – II	2022	III	SD	Skill Development Course	--	2
MSc – II	2022	IV	PSPH241	Nuclear and Particle Physics	Theory	4
MSc – II	2022	IV	PSPH242	Material Science	Theory	4
MSc – II	2022	IV	PSPH243	Experimental Techniques in Physics-II	Theory	4
MSc – II	2022	IV	PSPH244 (A)	Nano Technology-II	Elective	4



			PSPH244 (B)	Energy Studies-II	Theory	
			PSPH244 (C)	Biophysics-II		
			PSPH244 (D)	Physics of Thin Film-II		
			PSPH244 (E)	Electronic Instrumentation-II		
			PSPH244 (F)	DFT-II		
MSc – II	2022	IV	PSPH245	Special Lab-III	Practical	4
MSc – II	2022	IV	PSPH246	Project	Project	4
MSc – II	2022	IV	SD	Skill Development Course	--	2

Resolution No. 2: The course and credit structure for the B.Sc and M. Sc. programme in accordance with 2022 pattern has been unanimously approved by all members of the BOS.

3.To prepare and approve curriculum of F.Y.B.Sc, Semester-I (2022 pattern) to be implemented from the academic year 2022-2023.

The Board of Studies (BoS) members meticulously designed and crafted the curriculum for Semester-I of the F.Y.B.Sc Physics program well in advance of the BoS meeting. This preliminary draft was then shared with all BoS members for their input and suggestions to enhance its quality. During the meeting, Dr.R.D.Kale presented the curriculum of F.Y.B.Sc course-by-course basis, and the recommendations and valuable insights provided by the BoS members were thoughtfully incorporated into the curriculum.

In light of the constructive suggestions offered by the BoS members, the curriculum structure underwent necessary corrections. After thorough deliberation and careful consideration, the curriculum of following courses was presented for approval during the BoS meeting.

Class	Pattern	Sem	Course Code	Course Title	Course Type	No. of Credits
FYBSc						
FYBSc	2022	I	USPH111	Mechanics and Properties of Matter	Theory	2
FYBSc	2022	I	USPH112	Electromagnetics	Theory	2
FYBSc	2022	I	USPH113	Practical- I	Practical	2

Resolution No. 3: The curriculum for F.Y.B.Sc, Semester-I (2022 pattern) has been unanimously approved by all members of the BoS.



4. To prepare and approve curriculum of M.Sc-I, Semester-I (2022 pattern) to be implemented from the academic year 2022-2023

The Board of Studies (BoS) members meticulously designed and crafted the curriculum for M.Sc-I Semester-I (2022 pattern) Physics program well in advance of the BoS meeting. This preliminary draft was then shared with all BoS members for their input and suggestions to enhance its quality. During the meeting, Dr. S.B.Kulkarni presented the curriculum on a course-by-course basis, and the recommendations and valuable insights provided by the BoS members were thoughtfully incorporated into the curriculum. During the discussion, some minor changes were suggested by the board members. The board thoroughly discussed and finalized the syllabus for the courses of M.Sc-I, Semester-I.

In light of the constructive suggestions offered by the BoS members, the curriculum structure underwent necessary revisions. After thorough deliberation and careful consideration, the curriculum of following courses was presented for approval during the BoS meeting

Class	Pattern	Sem	Course Code	Course Title	Course Type	No. of Credits
MSc – I						
MSc – I	2022	I	PSPH111	Mathematical Methods in Physics	Theory	4
MSc – I	2022	I	PSPH112	Classical Mechanics	Theory	4
MSc – I	2022	I	PSPH113	Quantum Mechanics-I	Theory	4
MSc – I	2022	I	PSPH114	Electronics	Theory	4
MSc – I	2022	I	PSPH115	Electronics Laboratory-I	Practical	4
MSc – I	2022	I	PSPH116	Basic Physics Laboratory-I	Practical	4

Resolution No. 4: The curriculum for M.Sc.-I Semester I (2022 pattern) Physics has been unanimously approved by all members of the BoS.

5. To prepare and approve curriculum of certificate courses for UG and PG programmes as per 2022 pattern.

The proposed curriculum for certificate courses for UG and PG programmes as per the 2022 pattern was presented by Dr. R.D.Kale. Members provided feedback on the proposed structure, addressing concerns and suggesting modifications. A collaborative discussion ensued to refine the proposal and ensure alignment with academic standards and institutional goals. After discussions and necessary modifications made and approve the curriculum.



Certificate Course	No. of Credits	Name of the Teacher	UG/PG
CC037: Renewable Energy Resources	2	Dr. V. S. Mohite	UG

Resolution No. 5: The curriculum for of certificate courses for UG and PG programmes as per 2022 pattern has been unanimously approved by all members of the BoS.

6. To discuss and incorporate the relevant feedbacks of the stakeholders (students, teachers, parents, alumni and employers) in the curriculum

The Chairman initiated the discussion by highlighting the importance of incorporating feedback from both Alumni and current students in the syllabus design process. The department created a curriculum feedback form and distributed it to students, teachers, parents, alumni, and employers. Subsequently, the stakeholders filled out the feedback forms. It was noted that their insights and suggestions would greatly contribute to creating a curriculum that aligns with the needs and expectations of the students. Therefore, the BOS members reviewed the feedback and suggestions given by the alumni and students and incorporated the relevant suggestions into the curriculum of F.Y.B.Sc and M.Sc. Physics

Resolution No. 6: Considered and Approved

7. Any other issue with the permission of the chairman

During discussion of the syllabus of above motioned courses, the BoS members Prof.Dr.K.Y.rajpure, Prof.Dr.Shivaji Veer and Prof.Dr.K.R.Priolkar have given suggestions regarding some new techniques to be introduced in the syllabus as per the NET / SET and Competitive Exams in Physics. Also some reference books are suggested in the UG / PG syllabi. We have made changes to the syllabi accordingly of all the mentioned courses.

Resolution No. 7: Considered and Approved



All the subjects on the agenda were discussed in the meeting, so no issue was raised by any of BOS member.

The meeting was concluded with the vote of thanks by Dr. S.B.Kulkarni


Chairman
Board of Studies


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Coordinator
Coordinator
Internal Quality Assurance Cell
Tuljaram Chaturchand College of
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Principal