



Anekant Education Society's

**Tuljaram Chaturchand College, Baramati**  
(Autonomous)

**DEPARTMENT OF PHYSICS**

(Faculty of Science and Technology)

**Minutes of Board of Studies Meeting**

**Date of Meeting: 15/03/2024**

**Venue: Department of Physics**

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March, 2024

Anekant Education Society's  
**Tuljaram Chaturchand College, Baramati**  
Department of Physics

**NOTICE**

Date: 07/03/2024

**Board of Studies Meeting**

All members of the Board of Studies in Physics are hereby informed that, as per Notice No. 471 dated 27/02/2024 issued by the college, the online/offline meeting of BOS in Physics is organized on 15<sup>th</sup> March 2024 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 Saturday, 21/10/2023 at 12.00 P.M.
2. To design and approve curriculum of T.Y.B.Sc Semester V (2022 pattern) to be implemented from the academic year 2024-2025.
3. To approve & finalize the credit structure for SYBSc & M.Sc.-II as per the credit framework of NEP-2020 to be implemented from the academic year 2024-25.
4. To design and approve curriculum of S.Y.B.Sc Semester III (2023 pattern as per NEP-2020) to be implemented from the academic year 2024-2025.
5. To design and approve curriculum of M.Sc.-II Semester III (2023 pattern as per NEP-2020) to be implemented from the academic year 2024-2025.
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 to attend the aforementioned meeting and invite you to provide your valuable inputs for designing the curriculum in accordance with the NEP 2020 guidelines.

  
Chairman

BOS in Physics  
Head

Department of Physics  
Tuljaram Chaturchand College  
Baramati (Dist-Pune)



  
Principal

Anekant Education Society's

# Tuljaram Chaturchand College, Baramati

(Autonomous)

## Department of Physics



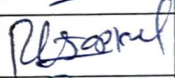


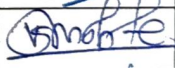


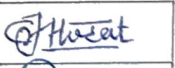



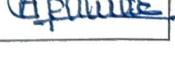
### Board of studies meeting: Schedule

Date: 15/03/2024

Time: 12:00 pm

<b>Welcome Address</b>	:	Prof. Dr. Ashok Kalange Chairman BOS, Vice Principal & Head of Department
<b>Introduction of the BOS members</b>	:	External and Internal Members
<b>Presentation of curriculum of TYBSc, Semester V, 2022 pattern</b>	:	Dr. V. S. Mohite, Member BOS, Assistant Professor
<b>Presentation of curriculum of SYBSc, Semester III, 2023 Pattern (NEP-2020)</b>	:	Dr. R.D. Kale, Member BOS, Associate Professor
<b>Presentation of curriculum of M.Sc. II, Semester III, 2023 Pattern (NEP-2020)</b>	:	Mr. S.B. Kakade, Member BOS, Assistant Professor
<b>Vote of Thanks</b>	:	Dr. R.T. Sapkal, Member BOS, Associate Professor

**Department of Physics**  
**List of Physics BoS Members 2023-2024**  
**15<sup>th</sup> March 2024 at 12.00 pm**

Sr. No.	Name	Designation	Signature
1	Prof. (Dr.) A. E. Kalange	Chainman BoS, Vice Principal & HoD	
2	Prof. (Dr.) S. S. Veer	Member, Expert from SPPU, Pune	Online
3	Prof. (Dr.) K. Y. Rajpure	Member, Expert from Shivaji University, Kolhapur	Online
4	Prof. (Dr.) K.R. Priolkar	Member, Expert from Goa University	Absent
5	Mr. Subhash Zambare	Representative From Industry, Gaser Metacoat, Pune	Absent
6	Mr. Swapnil Nardekar	Alumni and Research Scholar Jeju National University, South Korea	Absent
7	Dr. R. D. Kale	Member	
8	Dr. R. T. Sapkal	Member	
9	Dr. S. B. Kulkarni	Member	
10	Mr. S. B. Kakade	Member	
11	Dr. V. S. Mohite	Member	
12	Mrs S. E. Bhosale	Member	
13	Mr. S. S. Mhaske	Member	
14	Mr. S. M. Thorat	Member	
15	Dnyeshwari Phadatare, TYBSc	Student Representative	
16	Dhanshree Hole, MSc I	Student Representative	
17	Aditya Sorte, MSc I	Student Representative	
18	Aishwarya Pawar, MSc II	Student Representative	



# Department of Physics

## AGENDA OF THE MEETING

**The agenda of the meeting included the following subjects:**

**The agenda for the meeting is as follows:**

1. To confirm the minutes of the previous meeting held on Saturday, 21/10/2023 at 12.00 P.M.
2. To design and approve curriculum of T.Y.B.Sc Semester V (2022 pattern) to be implemented from the academic year 2024-2025.
3. To approve & finalize the credit structure for SYBSc & M.Sc.-II as per the credit framework of NEP-2020 to be implemented from the academic year 2024-25.
4. To design and approve curriculum of S.Y.B.Sc Semester III (2023 pattern as per NEP-2020) to be implemented from the academic year 2024-2025.
5. To design and approve curriculum of M.Sc.-II Semester III (2023 pattern as per NEP-2020) to be implemented from the academic year 2024-2025.
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.

# MINUTES OF THE MEETING

As per the Notice No. 471 dated 27/02/2024 issued by the college, the meeting of Board of Studies in Physics was successfully held on 15<sup>th</sup> March, 2024 at 12:00 pm in the Department of Physics, T. C. College, Baramati. The meeting took place in both online and offline mode, adhering to the guidelines and protocols set by the college. The meeting was held under the guidance of Prof. Dr. Ashok Kalange, 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 BOS meeting held on Saturday, 21/10/2023 at 12.00 P.M.**

Prof. Dr. Ashok Kalange read the minutes of the BOS meeting held on 21<sup>st</sup> October 2023 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 unanimously.

**2. To design and approve curriculum of T.Y.B.Sc. Semester V (2022 pattern) to be implemented from the academic year 2024-2025.**

The board carefully designed and deliberated upon the curriculum of TYBSc Semester-V (2022 pattern) and was unanimously accepted for implementation from the academic year 2024-25. Curricula of following courses were finalised.

**Course structure for TYBSc Semester V, Physics (2022 Pattern)**

Class	Pattern	Sem	Paper Code	Title of Paper	Paper	Credits
TYBSc Physics	2022	V	USPH 351	Mathematical Methods of Physics-II	Theory	3
			USPH 352	Solid State Physics	Theory	3
			USPH 353	Classical Mechanics	Theory	3
			USPH 354	Atomic and Molecular Physics	Theory	3
			USPH 355	Elements of Material Science	Theory	3
			USPH 356 (A)	Renewable Energy Sources	Elective Theory	3
			USPH 356(B)	Physics and Technology of sensors		
			USPH 356(C)	Biophysics		
			USPH 357	Practical I	Practical	2
			USPH 358	Practical II	Practical	2
			USPH 359	Practical III	Practical	2
<b>Total credit Semester V</b>						<b>24</b>

**Resolution No. 2:** Considered and Approved.

**3. To consider and approve the course & credit structure of the second year UG and PG (Sem-III & IV) as per the guidelines of NEP 2020.**

The BoS has discussed the course structure of the S.Y.B.Sc. and M.Sc. (Sem-III & IV) as per the NEP 2020 credit structure guidelines. All BoS members unanimously finalized the course & credit structure. After careful consideration and thorough discussion, the final course & credit structure has been determined, ensuring compliance with the NEP 2020.

Resolution 03: Considered and approved as mentioned in the following table.....

S.Y.B.Sc. Course & credit structure as per NEP-2020 (2023 pattern)					
Sem	Course Category	Course Code	Course Title	Theory / Practical	Credits
III	Major mandatory	PHY-201-MJM	Mathematical methods in Physics	T	2
	Major mandatory	PHY-202-MJM	Analog electronics	T	2
	Major mandatory	PHY-203-MJM	Basic Optics	T	2
	Major mandatory	PHY-204-MJM	Practical -III	P	2
	Minor	PHY-211-MN	Thermometry	T	2
	Minor	PHY-212-MN	Minor Practical	P	2
	Open Elective	PHY-216-OE	Astronomy-III	T	2
	Vocational Skill Course (VEC)	PHY-221-VSC	Data Analysis and Graphing Software	T	2
	Ability Enhancement Course (AEC)	MAR-231-AEC HIN-231-AEC SAN-231-AEC	भाषिक उपयोजन व लेखन कौशल्ये हिंदी भाषा कौशल प्राथमिक संभाषणकौशल्यम्	T	2
	Field Project	PHY-235-FP	Field Project	P	2
	Co-curricular course (CC)	YOG/PES/CUL/NS S/NCC-239-CC	To be selected from basket	T	2
	Generic IKS	GEN-245-IKS	General IKS	T	2
<b>Total Credits (Semester-III)</b>					<b>24</b>
IV	Major mandatory	PHY-251-MJM	Waves and Oscillations	T	2
	Major mandatory	PHY-252-MJM	Digital Electronics	T	2
	Major mandatory	PHY-253-MJM	Advanced Optics	T	2
	Major mandatory	PHY-254-MJM	Practical-IV	P	2
	Minor	PHY-261-MN	Atoms and Molecules	T	2
	Minor	PHY-262-MN	Minor Practical	P	2
	Open Elective	PHY-266-OE	Astronomy-III	T	2
	Skill Enhancement Course (SEC)	PHY-276-SEC	Python Programming for Physics	P	2
	Ability Enhancement Course (AEC)	MAR-281-AEC HIN-281-AEC SAN-281-AEC	लेखन निर्मिती व परीक्षण कौशल्ये हिंदी भाषा संप्रेषण कौशल प्रगत संभाषणकौशल्यम्	T	2
	Community Engagement Project	PHY-285-CEP	Community Engagement Project	P	2
	Co-curricular course (CC)	YOG/PES/CUL/NS S/NCC-289-CC	To be selected from basket	T	2
<b>Total Credits (Semester-IV)</b>					<b>22</b>
<b>Cumulative Credits- Semester III + IV</b>					<b>46</b>

**M.Sc. II Course & credit structure as per NEP-2020 (2023 pattern)**

Sem	Course Type	Course Code	Course Name	Theory/ Practical	No. of Credits
III	Major (Mandatory)	PHY-601-MJM	Statistical Physics	Theory	4
	Major (Mandatory)	PHY-602-MJM	Solid State Physics	Theory	4
	Major (Mandatory)	PHY-603- MJM	Practical Lab-V	Practical	2
	Major (Mandatory)	PHY-604-MJM	Practical Lab-VI	Practical	2
	Major (Elective)	PHY-611-MJE (A)	ETP-I	Theory	2
		PHY-612-MJE (A)	ETP-I Practicals	Practical	2
		PHY-611-MJE (B)	Laser	Theory	2
		PHY-612-MJE (B)	Laser Practicals	Practical	2
		PHY-611-MJE (C)	Energy Studies-I	Theory	2
		PHY-612-MJE (C)	Energy Studies-I Practicals	Practical	2
	Research Project	PHY-621-RP	Research Project-I	Project	4
<b>Total Credit Semester-III</b>					<b>20</b>
IV	Major (Mandatory)	PHY-651-MJM	Nuclear Physics	Theory	4
	Major (Mandatory)	PHY-652-MJM	Material Science	Theory	4
	Major (Mandatory)	PHY-653- MJM	Physics Laboratory-VII	Practical	2
	Major (Elective)	PHY-661-MJE (A)	ETP-I	Theory	2
		PHY-661-MJE (A)	ETP-I Practicals	Practical	2
		PHY-662-MJE (B)	Nanotechnology	Theory	2
		PHY-662-MJE (B)	Nanotechnology Practicals	Practical	2
		PHY-662-MJE (C)	Energy Studies-II	Theory	2
		PHY-662-MJE (C)	Energy Studies-II Practicals	Practical	2
	Research Project	PHY-681-RP	Research Project-II	Project	6
<b>Total Credit Semester-IV</b>					<b>20</b>
<b>Cumulative Credits Semester III and IV</b>					<b>40</b>

**Resolution No. 3:** Considered and Approved.

**4. To design and approve curriculum of S.Y.B.Sc. Semester III (2023 pattern as per NEP-2020) to be implemented from the academic year 2024-2025.**

The BOS has discussed the course and credit structure of the SYBSc as per the NEP 2020 credit structure guidelines. This preliminary draft was then shared with all BOS members for their input and suggestions to enhance its quality. During the meeting, Mr. S.B. Kakade 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. 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.

**Course structure for NEP-2020 SYBSc Semester III, Physics (2023 Pattern)**

Class	Pattern	Sem	Course Type	Course Code	Course Title	No of Credits
SYBSc Physics	2023	III	Major Mandatory	PHY-201-MJM	Mathematical methods in Physics	2
			Major Mandatory	PHY-202-MJM	Analog electronics	2
			Major Mandatory	PHY-203-MJM	Basic Optics	2
			Major Mandatory	PHY-204-MJM	Practical –III	2
			Minor	PHY-211-MN	Thermometry	2
			Minor	PHY-212-MN	Minor Practical	2
			Open Elective (OE)	PHY-216-OE	Astronomy-III	2
			Vocational Skill Course (VSC)	PHY-221-VSC	Data Analysis and Graphing Software	2
			Ability Enhancement Course (AEC)	MAR-231-AEC HIN-231-AEC SAN-231-AEC	भाषिक उपयोग व लेखन कौशल्ये हिंदी भाषा : सृजन कौशल प्राथमिक संभाषणकौशल्यम्	2
			Field Project (FP)	PHY-235-FP	Field Project	2
			Co-curricular Course (CC)	YOG/PES/CUL /NSS/NCC-239-CC	To be selected from the Basket	2
Generic IKS Course (IKS)	GEN-245-IKS	Generic IKS	2			
<b>Total Credit Semester-III</b>						<b>24</b>

**Resolution No.4:** The curriculum for SYBSc Semester III NEP-2020 (2023 pattern) has been unanimously approved by all members of the BOS.

**5. To design and approve curriculum of MSc Semester III (2023 pattern as per NEP-2020) to be implemented from the academic year 2024-2025.**

The board carefully designed and deliberated upon the curriculum of MSc-II Semester-III, aligning it with the guidelines of the National Education Policy (NEP) 2020, for implementation in the academic year 2024-2025. During the discussion, certain modifications were suggested by the board members. The board thoroughly discussed and finalized the syllabus for the following courses of MSc-II Semester-III.

Finally, 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.

**Course structure for NEP-2020 MSc Semester III, Physics (2023 Pattern)**

Class	Pattern	Sem	Course Type	Course Code	Course Name	Theory/ Practical	No. of Credits
M.Sc-II Physics	2023	III	Major (Mandatory)	PHY-601-MJM	Statistical Physics	Theory	4
			Major (Mandatory)	PHY-602-MJM	Solid State Physics	Theory	4
			Major (Mandatory)	PHY-603- MJM	Practical Lab-V	Practical	2
			Major (Mandatory)	PHY-604-MJM	Practical Lab-VI	Practical	2
			Major (Elective)	PHY-611-MJE (A)	ETP-I	Theory	2
				PHY-612-MJE (A)	ETP-I Practicals	Practical	2
				PHY-611-MJE (B)	Laser	Theory	2
				PHY-612-MJE (B)	Laser Practicals	Practical	2
				PHY-611-MJE (C)	Energy Studies-I	Theory	2
				PHY-612-MJE (C)	Energy Studies-I Practicals	Practical	2
			Research Project	PHY-621-RP	Research Project-I	<del>Project</del>	4
			<b>Total Credit Semester-III</b>				

**Resolution No. 5:** The curriculum for MSc Semester-III (2023 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 stakeholders in the syllabus designing process. 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 stakeholders and incorporated the relevant suggestions into the curriculum of S.Y.B.Sc., T.Y.B.Sc., and M.Sc. Physics.

**Resolution No. 6:** Considered and approved.

**7. Any other matter with the consent of Chairperson.**

There had not been any incidental issue.

The meeting of BoS in Physics was concluded with the vote of thanks by Dr. R.T. Sapkal.

  
Chairman

Board of Studies  
Head

Department of Physics  
Tuljaram Chaturchand College  
Baramati (Dist-Pune)

  
IQAC  
Coordinator

  
Principal

