

# Rajarshi Shahu Mahavidyalaya, Latur (Autonomous)

# Department of Physics and Electronics

# Structured Work Plan for Teaching

Academic Year: 2025-26

Name of the Teacher: Dr. Dayanand V. Raje

# Details of Classes to be taught:

Class	Sem	Course Title	Course Type	Course Code	No. of Credits	Total Teaching Hrs
B. Sc. I	I	Mechanics and Properties of Matter-I	DSC	101PHY1101	03	45

# Summary of Lesson Plan:

Unit and Chapter to be Covered	Expected No. of Lectures	Date	Academic activities to be Organized	No. of Test/Assignment	
Unit I: Gravitation	11	07/07/2025 To 28/07/2025	Problems to solve	CATI	
Unit II: Elasticity 12 29/07/2025 To 29/08/2025		29/07/2025 To 29/08/2025	Formation of Physics Students Association: 2025-26	CATII	
Unit III: Surface Tension	11	02/09/2025 To 19/09/2025	Inauguration of Physics students Association	CATIII	
Unit IV: Viscosity	11	22/09/2025 To 10/10/2025	Lecture on research of Nobel Laureates	SEE	

Teacher

Department of Physics & Electronics
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Principal
PRINCIPAL
Rajarshi Shahu Mahavidyalaya. Latur
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Academic Year: 2025-26

Name of the Teacher: Dr. Dayanand V. Raje

### Details of Classes to be taught:

Class	Sem	Course Title	Course Type	Course Code	No. of Credits	Total Teaching Hrs
B.Sc.	Ш	Mathematical Physics and Transducers-VI	DSC	201PHY3102	03	45

#### Summary of Lesson Plan:

Unit and Chapter to be Covered	Expected No. of Lectures	Date	Academic activities to be Organized	No. of Test/Assignment
Unit I: Vector Analysis	12	23/06/2025 To 22/07/2025	Problems/ Examples to solve	CATI
Unit II: Complex variables	10	23/07/2025 To 20/08/2025	Formation of Physics Students Association	CAT II
Unit III: Fourier Series and Laplace transform	12	21/08/0225 To 22/09/2025	Inauguration of Physics Students Association	CAT III
Unit IV: Transducers	11	23/09/2025 To 08/10/2025	ICT based teaching/Lecture on Research Nobel Laureates	SEE

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Academic Year: 2025-26

Name of the Teacher: Dr. Dayanand V. Raje

### Details of Classes to be taught:

Class	Sem	Course Title	Course Type	Course Code	No. of Credits	Total Teaching Hrs
M.Sc.II Physics	Ш	Nuclear and Particle Physics VIII	Major	601PHY3102	03	45

### Summary of Lesson Plan:

Unit and Chapter to be Covered	Expected No. of Lectures	Date	Academic activities to be Organized	No. of Test/Assignment	
Unit I: The Constitution of Atomic nucleus and Nuclear Reactions	12	25/06/2025 To Carrier guidance 24/07/2025		CAT I	
Unit II: Nuclear Models	11	28/07/2025 To 25/08/2025	Formation of Physics Students Association	CAT II	
Unit III: Detection of Nuclear Radiation and Charged Particle Accelerators	11	28/08/2025 To 18/09/2025	Inauguration of Physics Students association/Posters presentation	CAT III	
Unit IV: Elementary 11 Particles		22/09/2025 To 09/10/2025	Lecture on Research Nobel Laureates	SEE	

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Name of the Teacher: Dr. Dayanand V. Raje

#### Details of Classes to be taught:

Class	Sem	Course Title	Course Type	Course Code	No. of Credits	Total Teaching Hrs
B.Sc.I	I	Physics Workshop Skills	SEC	101PHY1601	02	30

#### Summary of Lesson Plan:

Unit and Chapter to be Covered	Expected No. of Lectures	Date	Academic activities to be Organized	No. of Test/Assignment	
Unit I: Measuring Units and Mechanical Skills	7	11/07/2025 To 08/08/2025	Carrier Guidance	CATI	
Unit II: Multimeters and its applications	8	23/08/2025 To 12/09/2025	Handling of Measuring Instruments	CAT II & CAT III	
Practical	15	29/09/2025 To 10/10/2025	To perform the Experiments for Skills	SEE	

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# Department of Physics and Electronics

## Structured Work Plan for Teaching

Academic Year: 2025-26

Name of the Teacher: Dr. Dayanand V. Raje

# Details of Classes to be taught:

Class	Sem	Course Title	Course Type	Course Code	No. of Credits	Total Teaching Hrs
BA II	Ш	Physics of daily Life	GE/OE	201PHY3401	02	30

### Summary of Lesson Plan:

Unit and Chapter to be Covered	Expected No. of Lectures	Date	Academic activities to be Organized	No. of Test/Assignment
Unit I: Physics in Earth's atmosphere	8	11/07/2025 To 01/08/2025	Motivation to Study Physics for Daily Life	CATI
Unit II: Physics in Human body	7	02/08/2025 To 23/08/2025	02/08/2025 Knowledge of To Rainbow /	
Unit III: Physics in Sports	7	29/08/2025 To 19/09/2025		CAT III
Unit IV: Physics in Technology	8	20/09/2025 To 10/10/2025	Handling of Telescope, Microscope etc.	SEE

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# Rajarshi Shahu Mahavidyalaya, Latur (Autonomous)

## (Department of Physics and Electronics)

### Structured Work Plan for Teaching

Academic Year 2025-26 (Even Semester)

Name of the Teacher: Dr. D. V. Raje

Details of Classes to be taught:

Class & Sem	Subject	Course Title	Course Type	Course Code	No. of Credits	Total Teaching Hrs
B.Sc. II Sem-IV	Physics	Nuclear Physics and Relativity	DSC-VII	201PHY4101	03	45

Summary of Lesson Plan:

Unit and Chapter to be Covered	Expected No. of Lectures	Date	Academic activities to be Organized	No. of Test/ Assignment	
Unit I: Nuclear Structure and General Properties of Nuclei	10	08/12/2025 To 29/12/2025		CAT I	
Unit II: Peaceful use of Nuclear Energy	12	30/12/2025 To 28/01/2026	Class test	CAT II	
Unit III: Radioactivity	12	02/02/2026 To 25/02/2026	Problem Solving Session	CAT III	
Unit IV: Special Theory Of Relativity	11	02/03/2026 To 30/03/2026		J	

Teacher

Head HEAD

Department of Physics & Electronics Rajarshi Shahu Mahavidyalaya,Latur (Autonomous) Principal PRINCIPAL

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### (Department of Physics and Electronics)

### Structured Work Plan for Teaching

Academic Year 2025-26 (Even Semester)

Name of the Teacher: Dr. D. V. Raje

Details of Classes to be taught:

Class & Sem	Subject	Course Title	Course Type	Course Code	No. of Credits	Total Teaching Hrs
B.Sc III Sem-VI	Physics	Atomic and Molecular Physics	DSC-XI	301PHY6101	03	45

Summary of Lesson Plan:

Unit and Chapter to be Covered	Expected No. of Lectures	Date	Academic activities to be Organized	No. of Test/ Assignment
Unit I: Atomic Structure and Vector Atom Model	13	08/12/2025 To 05/01/2026		CATI
Unit II: Atomic Spectra and Atoms in External Fields	12	06/01/2026 To 04/02/2026	Problems Solutions	CAT II
Unit III: Vibrational and Rotational Spectra of Molecules	10	09/02/2026 To 02/03/2026	Solving Previous Year IIT-JAM Questions	CAT III
Unit IV: Raman Effect	10	09/03/2026 To 31/03/2026		24

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(Department of Physics and Electronics)

#### Structured Work Plan for Teaching

Academic Year 2025-26 (Even Semester)

Name of the Teacher: Dr. D. V. Raje

Details of Classes to be taught:

Class & Sem	Subject	Course Title	Course Type	Course Code	No. of Credits	Total Teaching Hrs
M.Sc. I Sem-II	Physics	Atomic and Molecular Spectroscopy	MMC-IV	601PHY2101	03	45

Summary of Lesson Plan:

Unit and Chapter to be Covered	Expected No. of Lectures	Date	Academic activities to be Organized	No. of Test/ Assignment
Unit I: Atomic Spectroscopy	12	08/12/2025 To 31/12/2025	-	CATI
Unit II: Rotational and Vibrational Spectroscopy	11	05/01/2026 To 02/02/2026	Problem Solving Session	CAT II
Unit III: Raman and Electronic Spectroscopy	11	03/02/2026 To 25/02/2026	Quiz test/ Seminar	CAT III
Unit IV: Resonance Spectroscopy	11	02/03/2026 To 31/03/2026		. 1.6

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#### Structured Work Plan for Teaching

Academic Year 2025-26 (Even Semester)

Name of the Teacher: Dr. D. V. Raje

Details of Classes to be taught:

Class & Sem	Subject	Course Title	Course Type	Course Code	No. of Credits	Total Teaching Hrs
UG-I Sem-II	Physics	Physics Workshop Skill	SEC	101PHY 1601	02	30

Summary of Lesson Plan:

Unit and Chapter to be Covered	Expected No. of Lectures	Date	Academic activities to be Organized	No. of Test/ Assignment
Unit I: Measuring units and mechanical Skill	7	05/12/2025 To 27/12/2025		CAT I
Unit II: Use of Multimeters	8	02/01/2026 To 24/01/2026	Class test	CAT II
Practical (Experiments)	15	30/01/2026 To 28/03/2026	Handling the Instruments and Performing Experiments	CAT III

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Name of the Teacher: Dr. Dayanand V. Raje

## Details of Classes to be taught:

Class	Sem	Course Title	Course Type	Course Code	No. of Credits	Total Teaching Hrs
BA II	IV	Physics of Daily Life	GE/OE	201PHY3401	02	30

#### Summary of Lesson Plan:

Unit and Chapter to be Covered	Expected No. of Lectures	Date	Academic activities to be Organized	No. of Test/Assignment
Unit I: Physics in Earth's atmosphere	8	5/12/2025 To 02/01/2026	Motivation to Study Physics for Daily Life	CATI
Unit II: Physics in Human body	7	03/01/2026 To 24/01/2026	Knowledge of Rainbow / Rayleigh Scattering	CAT II
Unit III: Physics in Sports	7	30/01/2026 To 20/02/2026		CAT III
Unit IV: Physics in Technology	8	21/02/2026 To 28/03/2026	Handling of Physics Instruments like Telescope, travelling Microscope, etc.	NEA.

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