



Loyola College, Kunkuri
Kunkuri-496225, Jashpur, Chhattisgarh

Annual Report of Physics Department 2020-2021

Department of Physics: Department of Physics in “Loyola College Kunkuri” was established in 2005 with an ambition to pursue high level of teaching theory, practical and research. Presently the department supports undergraduate program of the institute. This department has well-equipped and spacious Lab. It has excellent infrastructure.

Vision:

1. To empower students through quality education in Physics.
2. To establish a platform for creation and distribution of knowledge through teaching and research in Physics at various levels.
3. To create a scientific society which encourages logical thinking.

Mission:

1. To impart in depth knowledge of physics.
2. To develop capability to relate and use the acquired knowledge of physics in real life.
3. To encourage academic excellence.
4. To develop attitude for life time learning.
5. To orient students towards research.

The department has qualified, experienced, energetic faculty members who are passionate about teaching

profession. In order to develop interest about physics in students mind and to motivate them to gain the knowledge, we conducted various activities in every academic year.

NAME OF DEPARTMENT: **PHYSICS**

NAME OF INCHARGE: Miss ASHA CHAUHAN
Dr. Fr. Oscar S. Tirkey
(Principal)

NAME OF OTHER MEMBERS: Mr. JASWANT KUMAR

NON-TEACHING STAFF: Mr. NAVEEN TOPPO
(Lab-assistant)

1. Activities conducted:

<i>S. No.</i>	<i>Date</i>	<i>Activity</i>	<i>Details</i>
<i>1.</i>	<i>17th of October 2020</i>	<i>Welcome of first year Students.</i>	<i>Orientation lecture (virtual) by Principal Dr. Fr. Oscar S. Tirkey.</i>
<i>2.</i>	<i>Progressive form July to January</i>	<i>Unit wise test and CET.</i>	<i>The department conducted unit wise test for all year students.</i>
<i>3.</i>	<i>Progressive from September to December</i>	<i>Seminar</i>	<i>The department conducted topic wise seminar for all students in presence of teaching staff and guest.</i>
<i>5.</i>	<i>6th February 2021</i>	<i>Skit competition</i>	<i>Skit competition organized by college on 6 February and the students of computer science theme was the social and economic influence of Covid 19 on Indians.</i>

6.	13 th February 2021	Quiz-competition	All year computer science students participated in quiz competition organized by Loyola college, kunkuri.
7.	6 th March 2021	Motivational talk	All year computer science students participated in Motivational talk By Mr. Ravi Rahi SDM, Kunkuri and Mr. Avinash Chouhan Nayab tahsildar Kunkuri organized by Loyola college Kunkuri on 6 March.

2. Workshop/conference Attended:

1. Miss Asha Chauhan attended one day National Webinar on “*Frontiers of Scanning Probe Microscopy*” organized by Department of Applied Physics, Jabalpur Engineering College, Jabalpur, Madhya Pradesh under TEQIP-III, dated on 19th September 2019.

2. Miss Asha Chauhan participated in “*First National Conference on Advanced Materials and Applications (NCAMA-2020)*” from 28/09/2020 to 29/09/2020 organized by *National Institute of Technology, Raipur, Chhattisgarh*.

3. Miss Asha Chauhan participated in “*One Week Online Short-Term Training Program On Emerging Tools and Technologies in Material Science and Engineering*” from 21/09/2020 to 25/09/2020 organized by Department of Applied Physics, Jabalpur Engineering College, Jabalpur.

4. Students Achievement:

1. Suarabh Toppo, Harsh Gupta and group of B. Sc. third year computer science students won the first prize in a *quiz competition* organized by Loyola college, Kunkuri on 13/02/2021.

2. B. Sc. Second year computer science students won the third prize in skit competition on the theme “*the social influence of covid on people*”, organized by Loyola college Kunkuri on 20/02/2021.

3. Mr. Sunit Bara of B.Sc. C.S. third year student got the “NSS outstanding award” by Mr. Chintamani Maharaj “MLA of Indian National Congress Chhattisgarh, on 26th of January 2021.

5. Any other Innovative practices:

1. Orientation of Faculty Memberse on Skill Development Scheme:
Dr. Fr. Oscar S. Tirkey (Principal) conducted an Orientation lecture on “*Skill Development Scheme*” under the guidance of Sant Gahira Guru University on 19/09/2019.

2. Guest Lecture: Miss Asha Chauhan, Mr. Jaswant Kumar and Mr. Naveen Toppo attended a guest lecture on “Motivational Talk” by Registrar of Sant Gahira Guru university by Mr. Vinod Kumar Ekka on 23/12/2019.

6. Faculty Profile:

<i>S.No.</i>	<i>Name of Faculty</i>	<i>Academic Qualification</i>	<i>Teaching Experiences</i>	<i>Teaching Classes</i>
1.	<i>Dr. Fr. Oscar S. Tirkey (Principal)</i>	<i>M.Sc., M.Phil, PhD</i>	<i>20</i>	<i>B.Sc.-I, II,III</i>
2.	<i>Asha Chauhan</i>	<i>M.Sc., SET</i>	<i>6</i>	<i>B.Sc.-I, II,III</i>
3.	<i>Jaswant Kumar</i>	<i>M.Sc.</i>	<i>1</i>	<i>B.Sc.-I, II,III</i>
4.	<i>Naveen Toppo</i>	<i>Diploma in electronics</i>	<i>7</i>	<i>Practicals</i>

7. Degree College Course:

<i>S. No.</i>	<i>Year</i>	<i>Course Code/Paper</i>	<i>Title</i>
1.	<i>First Year</i>	<i>20P/ paper</i>	<i>First Mechanics, Oscillations and properties of matter.</i>
2.	<i>First Year</i>	<i>20P/ paper</i>	<i>Second Electricity, Magnetism, Electromagnetic theory, Vector algebra</i>
3.	<i>Second Year</i>	<i>20P/ paper</i>	<i>First Thermodynamics, Kinetic theory and Statistical physics</i>
4.	<i>Second Year</i>	<i>20P/ paper</i>	<i>Second Waves, Acoustics and Optics.</i>
5.	<i>Third Year</i>	<i>20P/ paper</i>	<i>First Classical mechanics, Quantum Mechanics, Atomic and Molecular physics, Nuclear physics</i>
6.	<i>Third Year</i>	<i>20P/ paper</i>	<i>Second Solid state physics, Solid state device and Electronics, "C" language</i>
7.	<i>All year students</i>	<i>Practical</i>	<i>Physics practical for all year students related to their subject.</i>

- The syllabus covers almost all basic, theoretical and practical knowledge, so the students could acquire effective knowledge and implement in their life and relate with indoor-outdoor phenomenon.

8. Department Highlights:

- Total no. of Faculty member: 04
- Total no. of Students in B.Sc. First C.S.: 42
- Total no. of Students in B.Sc. Second C.S.: 52
- Total no. of Students in B.Sc. Third C.S.: 44
- Well equipped spacious laboratory with sophisticated test and measuring instruments and equipments such as Spectroscope, Cathode Ray Oscilloscopes, Function Generators, Galvanometer, Dielectric, Planck's Constant, Four probe, Hall effect, Transistor, PNP diodes, Tunnel Diode, and Hysteresis loop.

Mr. Sunit Bara of B.Sc. C.S. third year student got the “NSS outstanding award” by Mr. Chintamani Maharaj “MLA of Indian National Congress Chhattisgarh”.



Lecture on “Orientation of Faculty Members on Skill Development Scheme” by Principal Dr. Fr. Oscar S. Tirkey.



**“Motivational Talk” by Registrar of Sant Gahira Guru university
Mr. Vinod Kumar Ekka.**



Seminar by Ayushi Nayak on *programming in “C” Language.*



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Motivational talk By Mr. Ravi Rahi SDM, Kunkuri and Mr. Avinash Chouhan Nayab tahsildar Kunkuri organized by Loyola college Kunkuri.

