

## **PHY7202: EXPLORATION GEOPHYSICS**

**1. Course Name:** Exploration Geophysics

**2. Course Code:** PHY7202

**3. Credit Units:** 3

**4. Course Description:**

This course discusses the different methods of exploration of petroleum and other minerals.

**5. Course Objectives:**

At the end of the course, the students should be able to:

- Use mathematical methods in exploration techniques.
- Apply different methods of exploration.

## 6. Course Outline :

<b>Content</b>	<b>Hours</b>
Advanced Mathematical study of the geophysical methods of exploration for petroleum, minerals, geothermal and water.	20
Methods- seismic, gravity magnetic, electrical, electromagnetic and nuclear techniques.	15
Marine geophysics and geophysical well logging techniques	10
<b>Total</b>	<b>45</b>

## 7. Mode of Delivery:

This course will consist of lecture sessions and there will also be data analysis using theories learnt.

## 8. References:

1. C.M.R Fowler. The Solid Earth: Introduction to Global Geophysics. Cambridge Univ. Press (Textbook)
2. P.V. Sharma. Geophysical Methods in Geology. Elsevier Sci. Pub. Co.