

Name of Programme: M. Sc. Applied Geology

Course Code: GEO-528

Title of the Course: Practical of Petroleum Geology (Skill Based Course)

No of Credits: 01

Effective from AY: 2022-23

Prerequisites for the course:	Degree of Bachelor of Science in Geology from any UGC recognized University or an equivalent examination.	
Objective:	To provide a conceptual understanding of petroleum deposits, processes involved in the formation of these deposits.	
Content:	Determination of moisture content and the porosity of rocks. Determination of direction, amount of dip and of reservoirs from the given bore hole data. Interpretative contouring method for the determination of depth of oil bearing horizons. Well-log interpretation	30 hours
Pedagogy:	Megascopic and microscopic identification of minerals/Demonstrations/Laboratory experiments/Plotting and Interpretations.	
References/Readings	<ol style="list-style-type: none">1. Mackenzie, W. S. (2015). <i>Atlas of the rock-forming minerals in thin section</i>. Routledge.2. Barker, A. J. (2017). <i>A key for identification of rock-forming minerals in thin section</i>3. Deer, W. A., Howie, R. A., and Zussman, J. (1992). <i>An introduction to the rock-forming minerals</i>. 2nd ed. Harlow, Essex, England. New York, NY. Longman Scientific and Technical.4. Khandpur, R. S. (2006). <i>Handbook of analytical instruments</i>. New York, N.Y. McGraw-Hill Education LL	
Course outcomes	<ol style="list-style-type: none">1. Students will learn the subsurface contour mapping.2. Techniques to calculate porosity and permeability of reservoir rock.3. Students will learn to interpret the well log data.	