

DEPARTMENT OF GEOPHYSICS
KURUKSHETRA UNIVERSITY KURUKSHETRA

Outline of the lessons to be delivered during the period August 11-16, 2014

Name of the Teacher: Prof. S.S. Teotia			
<i>Date</i>	<i>Paper No.</i>	<i>Topic</i>	<i>Reference</i>
11.08.2014	GP-301	Reviews of basic concepts and relations in elasticity theory	Modern Global Seismology: Lay & Wallace Introduction to Seismology by Peter Shearer
12.08.2014	GP-301	Hooke's law	Modern Global Seismology: Lay & Wallace Introduction to Seismology by Peter Shearer
14.08.2014	GP-513	Objectives of seismic signal processing	Seismic Data Analysis by Oz Yilmaz

Name Of the Teacher: Prof. Dinesh Kumar			
<i>Date</i>	<i>Paper No.</i>	<i>Topic</i>	<i>Reference</i>
11.08.2014	GP-302	Principles and Importance of Gravity Method vis-à-vis other geophysical methods	(i) Basic Exploration Geophysics: Robinson (ii) Introduction to Geophysical Prospecting: Dobrin & Saviet
12.08.2014	GP-302	Concept of Geoid, Spheroid, Variations of Gravity	----- do-----
13.08.2014	GP-506	Need to study seismology, Earthquake Hazard & society, Indian Scenario	(i)Earthquake Hazard Analysis: L. Reiter (ii)An introduction to seismology, earthquakes and Earth structure: Stein & Wysession
14.08.2014	GP-506	Characteristics of earthquake strong ground motions, parameters of SGM, Need and importance of simulating SGM	-----do-----

Name of the Teacher: Prof. R.C. Patel			
<i>Date</i>	<i>Paper No.</i>	<i>Topic</i>	<i>Reference</i>
11.08.2014	GP-104	Introduction to Geomorphological Process and exogenic processes	1. Principle of Physical Geology by A.H. Holms 2. Principles of Geomorphology, 2nd Edition by <u>W.D. Thornbury</u>
12.08.2014	GP-104	Geological Time scale	1. A text of Geology by P.K. Mukherjee
14.08.2014	GP-104	Age of the Earth	2. Stratigraphic principles and Practice by J.M. Weller 3. Fundamentals of Geology by A.B. Roy

Name of the Teacher: Prof. B.S. Chaudhary			
<i>Date</i>	<i>Paper No.</i>	<i>Topic</i>	<i>Reference</i>
12.08.2014	GP-303	Introduction to Groundwater Geophysics	1. Groundwater hydrology (John Wiley and Sons), David K. Todd 2. Hydrogeophysics (Kluwer Publishers), Y. Rubin and S. Hubbard
13.08.2014	GP-304	Introduction to Electrical Prospecting	1. Electrical method of geophysical prospecting: Keller, G.V. and Frish Knecht, 2. Geosounding principles: Koefoed, O.
14.08.2014	GP-303	Concept of Geohydrology	1. Groundwater hydrology (John Wiley and Sons), David K. Todd 2. Hydrogeophysics (Kluwer Publishers), Y. Rubin and S. Hubbard

Name of the Teacher: Dr. R.B.S. Yadav			
<i>Date</i>	<i>Paper No.</i>	<i>Topic</i>	<i>Reference</i>
11.08.2014	GP-101	Power series method; solution of linear Differential Equations using power series method	Mathematical Physics by B.S. Rajput
11.08.2014	GP-102	History of development of Earth Sciences and its classification	Introduction to Geophysics by B.F. Howel
12.08.2014	GP-101	Legendre differential equation	Mathematical Physics by B.S. Rajput
13.08.2014	GP-101	Solution of Legendre differential equation	Mathematical Physics by B.S. Rajput
14.08.2014	GP-101	Definition of polynomial; Legendre polynomials	Mathematical Physics by B.S. Rajput

Name of the Teacher:- Ms. Manisha Sandhu			
<i>Date</i>	<i>Paper No.</i>	<i>Topic</i>	<i>Reference</i>
11.08.2014	GP-103	Computer languages and its types with examples	Fundamentals of computers by V. Rajaraman
12.08.2014	GP-103	Problems solving on computer with example and Algorithm	
13.08.2014	GP-103	Flowchart, Differences between flowchart and algorithm, computer program	
14.08.2014	GP-301	Introduction about seismology, basic laws which governs ray theory	(i) Elementary Seismology: C.F. Richter. (ii) Modern Global Seismology: Lay & Wallace.

Name of the Teacher:- Mr. Sushil Kumar			
<i>Date</i>	<i>Paper No.</i>	<i>Topic</i>	<i>Reference</i>
11.08.2014	GP-501	Electromagnetic theory- I	Applied Geophysics by W. M. Telford et al.
12.08.2014	GP-502	EM principle, Maxwell's equations	
13.08.2014	GP- 502	Electromagnetic potential and wave equations	
14.08.2014	GP- 502	Attenuation of EM field, depth of penetration, dip and tilt angles	Telford et. al: Applied Geophysics

Name of the Teacher: Mr. Pardeep Guri			
<i>Date</i>	<i>Paper No.</i>	<i>Topic</i>	<i>Reference</i>
11.08.2014	GP-303	Hydrological properties of water bearing materials	Groundwater hydrology by David K. Todd
12.08.2014	GP-102	Brief Review about the history and progress in solid earth geophysics	1. Fundamentals of Geophysics by W. Lowrie, 2. The Solid Earth by C.M.R. Fowler
13.08.2014	GP-304	Review of the method and techniques of electrical prospecting and their classifications	Fundamentals of Geophysics by W. Lowrie
14.08.2014	GP-102	Chemical composition of Earth	1. Fundamentals of Geophysics by W. Lowrie, 2. The Solid Earth by C.M.R. Fowler

Name of the Teacher: Dr. Parveen Kumar			
<i>Date</i>	<i>Paper No.</i>	<i>Topic</i>	<i>Reference</i>
11.08.2014	GP-506	Attenuation of seismic waves during its propagation through the medium	Basic Exploration Geophysics by Robinson; Introduction to Geophysical Exploration by Keary and Brooks
12.08.2014	GP-506	Various factors responsible for the wave attenuation	Basic Exploration Geophysics by Robinson, Introduction to Geophysical Exploration by Keary and Brooks
14.08.2014	GP-302	Basic Principles of Magnetic methods	Basic Exploration Geophysics by Robinson, Introduction to Geophysical Prospecting by Dobrin and Saviet
14.08.2014	GP-304	Different type of resistivity curves and vertical electrical sounding	Geosounding principles by Koefoed, O.

Name of the Teacher: Mr. Atul Jhjhria			
<i>Date</i>	<i>Paper No.</i>	<i>Topic</i>	<i>Reference</i>
11.08.2014	GP-513	Reservoir Management	Seismic Data Analysis by Oz Yilmaz
12.08.2014	GP-501	Man and Environment	Near Surface Geophysics by D. K. Butler
12.08.2014	GP-301	Earthquake parameters: Intensity and magnitude scales	Modern Global Seismology: Lay & Wallace
13.08.2014	GP-513	Geophysical method of Reservoir Surveillance	Seismic Data Analysis by Oz Yilmaz