

**Tentative Schedule for Course 1.7**  
**Planning and implementation of Provincial Hydrogeological Surveys**

**Day 1 ( September 2013)**

<b>Time</b>	<b>Activity</b>	<b>Presenter</b>
09:00 – 09:15	Opening ceremony and welcome	Abrar/ Director Qader
09:15 – 09:45	History of hydrogeological surveys in Afghanistan in the past. Methods, organizations, responsibilities	Prof. Eqrar
09:45: – 10:00	Discussion	
10:00 – 10:30	Break	
10:45 – 11:40	What is a hydrogeological map? International approaches to hydrogeological mapping	D. Banks.
11:30 – 12:00	Discussion, ( D. Banks, Prof Eqrar)	
12:00 – 13:00	<b>Practical</b> Examination of some international hydrogeological maps; prognosis based on Cambridge to Maidenhead map	D. Banks / Prof Eqrar
13:00- 13-45	Lunch	
14:00- 15:00	Types of existing data: Topographical, Metrological, Surface water , Ground water data, Remote sensing data, Other data Using Soviet hydrogeological and topographical maps	D. Banks.
15:00-15:10	Tea	
15:10- 15:30	<b>Practical</b> Understanding and extracting data from Soviet maps	D. Banks / Prof Eqrar

**Day 2 ( September 2013)**

<b>Time</b>	<b>Activity</b>	<b>Presenter</b>
08:00 – 09:00	<b>Practical:</b> Understanding and extracting data from Soviet maps (Continued)	D. Banks / Prof Eqrar
09:00 – 09:30	<b>Lecture:</b> Assessing aquifer properties from sparse data	D. Banks.
09:30 – 10:00	Break	
10:00 – 13:00	<b>Workshop:</b> Aquifer designation according to IAH guidelines	D. Banks / Prof Eqrar / Eng. Hassan / Eng. Ehsan
13-13:45	Lunch	
13:00-14:00	<b>Workshop:</b> Aquifer designation according to IAH guidelines	D. Banks / Prof Eqrar / Eng. Hassan / Eng. Ehsan
14:00-15:30	<b>Lecture:</b> Data Entry and quality control	D. Banks.
14:30-15:30	<b>Practical:</b> Data Entry and quality control	D. Banks.

**Day 3 ( September 2013)**

<b>Time</b>	<b>Activity</b>	<b>Presenter</b>
08:00 – 08:30	Participants describe how they have been involved in hydrogeological surveys in the past. Lessons, experiences, equipment, data collected and data used, worth sharing!	All participants voluntary- chaired by Prof Eqrar.
08:30 – 09:30	<b>Lecture:</b> Field surveys	D. Banks
09:30 – 10:00	Break	
10:00 – 13:00	<b>Practical:</b> Using hydrogeological survey data. Maimana Airport case study	D. Banks / Prof Eqrar
13-13:45	Lunch	
14:00-15:00	<b>Discussion:</b> Using hydrogeological survey data. Maimana Airport case study	D. Banks / Prof Eqrar
15:00 – 15:30	<b>Lecture:</b> Sustainability and recharge	D. Banks

**Day 4 ( September 2013)**

<b>Time</b>	<b>Activity</b>	<b>Presenter</b>
08:00 – 09:30	How to prepare an implementation plan for hydrogeological surveys for two new provinces in Afghanistan. Plan, details descriptions, budgets, staff, logistics, duration, sampling and analysis etc.	Prof. Eqrar
09:30- 10:00	Discussions.	Hassan, Jawed.
10:00- 10:15	Break	
10:00 – 13:00	Tutorial: 3 groups. Prepare surveys plans for province A, B and C, incl. staffing, schedules, budgets, approvals, etc.	Eqrar
13-13:45	Lunch	
14:00-14:30	Presentation of plans from three groups.	Participants
14:30- 15:30	Discussions and consensus of recommended approaches	Prof Eqrar

**Day 5 ( September 2013)**

<b>Time</b>	<b>Activity</b>	<b>Presenter</b>
8:00 – 08:45	How can geophysical surveys be used in provincial surveys	Ehsanullah Bayat
08:45- 10:00	DACAAR's experiences from field surveying in Faryan	Eng. Hassan / Jawed
10:00- 10:15	Break	
10:30 – 11:15	Participants to look at methodology and advise on how to further improve the proposed methodology as prepared by NORPLAN for the project.	Prof. Eqrar
11:15-12:00	Discussions. And work through section by section for comments	Prof. Eqrar
12:00-12:20	Specific time for MoM / MoEW input to discussions	MoM / MoEW
12:20-13:00	MIS GIS unit at MRRD and how the government hope to organise data treatment in MRRD Kabul.	Prof. Zarinkhail
13-13:45	Lunch	
14:00-14:30	Course summary	

14:30- 14:450	Hand-out of certificates Closing	Dir. Qader/ Abrar