Faculty of Engineering

CONTENTS

1.   INFORMATION ABOUT THE COU...

Course Code:	PTRC6107	Ter...		Level:		6 UOC
Course Name:	Petrophysics					

Course Convenor:	Dr Hamid Roshan
Contact Details	School of Minerals and Energy Resources Engineering TETB 21
Contact times	Lecture and tutori......ule There will be liv......ctures and tutorials: Lectures......ys from 14:00 to 16:10 pm Tutorials ......from 1:00 to 1300 Lectures and......be also available on M......unications will be taken p......forum
Course Tutor	TBC

1.3. Assumed Knowledge

Prerequisite: N/A

1.4. Attendance

N/A

2. AIMS, LEARNING OUTCOMES AND GRADUATE ATTRIBUTES

2.1. Course Aims

In this course, students are introduced to reservoir rock and fluid properties and learn the fundamental of well logging and log interpretation. The integration of rock properties through core analysis along with well log interpretation forms the foundation of reservoir evaluation. As part of the course, students are also introduced to real well data for quality control, analysis and interpretation.

2.2. Learning Outcomes

a) Understanding the petrophysical properties of the reservoirs
b) Obtaining knowledge of physical principles of well logging and the tools used to mea:i26u fu(nde)-2 (r-2 (t)5 ((e)-2 (nta)4q(nde)3 (v)2n(pr)4 t3 (v)2 (a (e)-22)-3 (wl)4 (e))1 (i)-1 q(nde)3 ((t)5

3.3. Other Resources (if applicable)

Bateman, R, Log Quality Control, 1984.

Bateman, R M, Open Hole Log Analysis and Formation Evaluation, International Human Resources Development Corporation, Boston, 1985.

British Petroleum Co. Ltd, Our Industry Petroleum, Jarrold & Sons, Norwich, 1977.

Clark, N, Elements of Petroleum Reservoirs, SPE Series, 1960.

CoreLab, Fundamentals of Core Analysis, 1973.

Desbrandes, R, Encyclopedia of Well Logging, 1985.

Dewan, J, Essentials of Modern Open Hole Logging, 1983.

Dresser Atlas, Well Logging and Interpretation Techniques, 1982.

Dresser Atlas, Log Interpretation Charts, 1985.

Helander, D, Fundamentals of Formation Evaluation, 1983.

Hilchie, D, Applied Open Hole Log Operations, 1982.

Lynch, E, Formation Evaluation, 1962.

Pirson, S, Geologic Well Log Analysis. Schlumberger, Log Interpretation Principles/Applications, 1989

Schlumberger, Log Interpretation Charts, 1995.

Stokes, W L, Essentials of Earth History, Prentice-Hall Inc., Englewood Cliffs, NJ, 1960.

3.4. Online Resources

Society of Petroleum Engineers:	http://www.spe.org
Australian Petroleum Production and Exploration Association:	http://www.appea.com.au
American Association of Petroleum Geologists:	http://www.geobyte.com
Petroleum Exploration Society of Australia:	http://www.pesa.com.au
American Petroleum Institute – For Petroleum Standards	www.api.org
Society of Petrophysicists & Well Log Analysts	www.spwla.org
European Association of Geoscientists & Engineers	www.eage.org
The Society of Exploration Geophysicists	www.seg.org

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4.2. Learning Activities Summary

Week

It is essential that you have access to a PC or notebook computer. Mobile devices such as smart phone and tablets may compliment learning, but access to a PC or notebook computer is also required. Note that some specialist engineering software is not available for Mac computers.

Mining Engineering Students: OMB G48/49
Petroleum Engineering Students: TETB

It is recommended that you have regular internet access to participate in forum discussion and group work. To run Moodle most effectively, you should have:

- x broadband connection (256 kbit/sec or faster)
- x ability to view streaming video (high or low definition UNSW TV options)

More informj EMC oorTV opti3 (pti-1.22 Tdtr)-1 (e)-2 t-T2.0232.415 -r7.635 108.318 53.5515 -2.0232.4

We ask that you please contact the Course Convenor immediately once you have completed the special consideration application, no later than one week from submission.

More details on special consideration can be found at www.student.unsw.edu.au/special consideration

7.8. Course Results

For details on UNSW assessment policy, please visit: www.student.unsw.edu.au/assessment

In some instances your final course result may be withheld and not released on the UNSW planned date. This is indicated by a course grade result of either:

- x WD – which usually indicates you have not completed one or more items of assessment or there is an issue with one or more assignment, or
- x WC – which indicates you

7.11. Continual Course Improvement

At the end of each course, all students will have the opportunity to complete a course evaluation form. These anonymous surveys help us understand your views of the course, your lecturers and the course materials. We are continuously improving our courses based on student feedback, and your perspective is valuable.

Feedback is given via https://student.unsw.edu.au/myexperience and you will be notified when this is available for you to complete.

We also encourage all students to share any feedback they have any time during the course – if you have a concern, please contact us immediately.

Course Convenor: _____

Course Code: _____Course Title: _____

Assignment: _____

Due Date: _____

Student Name: _____Student ID:_____

ACADEMIC REQUIREMENTS

Before submitting this assignment, the student is advised to review:

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