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MODULE DESCRIPTOR

Module Title

Petroleum Economics and Asset Management

Reference	ENM207	Version	5
Created	April 2017	SCQF Level	SCQF 11
Approved	June 2013	SCQF Points	15
Amended	June 2017	ECTS Points	7.5

Aims of Module

To provide the student with a working understanding of the role of Petroleum Economics in Field Development as well as through life incremental projects. The module examines these economic studies in the context of modern Asset Management based organisation for Oil and Gas facilities where multi-discipline processes are typically deployed.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

1	Apply the results and principles of Petroleum Economics Studies to determine the viability of Field Developments, and to optimise them, prior to and during production.
2	Analyse and discuss the strategic and risk management uses of Petroleum Economics.
3	Recognise and discuss the principles and current practices to conceptualise and define asset management organisational design, for new field development and key stages throughout the asset?s economic life cycle.
4	Demonstrate multidiscipline and teamwork understanding required, for defining and directing development and field operations expertise in disciplines of Petroleum, Drilling, Operations, Construction Engineering, as well as key support expertise in Human Resources Safety and Environmental Management and logistics.
5	Identify and appraise the appropriate economic assessments to be made in comparing investment in a campaign of well workovers vs. a new well and make an appropriate investment recommendation.

Indicative Module Content

Exploration and Appraisal Economics. Field Development options ? Generation and Evaluation. Operational Economics. Late Field Life Economics. Generation and modelling cash flows. Economic and Risk Indicators. Risk Management and Strategy. Interface with Technical Commercial and Financial Disciplines.

Module Delivery

This module will be delivered by means of lectures, tutorials and student-centred learning activities supplemented by industrial visits/industry speakers.

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Indicative Student Workload	Full Time	Part Time
Contact Hours	48	70
Non-Contact Hours	102	80
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	150
Actual Placement hours for professional, statutory or regulatory body		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type:	Coursework	Weighting:	50%	Outcomes Assessed:	3, 4
Description:	Involves preparation of a short report.				

Component 2

Type:	Coursework	Weighting:	50%	Outcomes Assessed:	1, 2, 5
Description:	Involves preparation of a short report presenting results and may also require use of appropriate technical applications software.				

MODULE PERFORMANCE DESCRIPTOR

Explanatory Text

In order to pass the module, students should achieve a mark of at least 40% in each component (which has a weighting of 30% or more) and an overall grade of D or greater. If a candidate attains an E, F or NS Overall Grade, the candidate is deemed to have failed the module.

Module Grade	Minimum Requirements to achieve Module Grade:
A	Greater than or equal to 70%
B	In the range 60% to 69%
C	In the range 55% to 59%
D	In the range 50% to 54%
E	In the range 40% to 49%
F	Less than 40%
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	For MSc Petroleum Production Engineering and MSc Reservoir Engineering: normally a UK honours degree, or equivalent, in Engineering or related discipline at class 2.2 or above and proficiency in English language for academic purposes (IELTS minimum score of 6.5 or equivalent)and ENM200 Subsurface, ENM201 Wells, ENM202 Facilities and ENM203 Business Essentials or an equivalent programme of study. For MSc Oil and Gas Accounting and MSc Oil and Gas Finance: none in addition to course entry requirements or equivalent.
Corequisites for module	None.
Precluded Modules	This module is not suitable for students following an MSc in Professional Studies programme unless they meet the entry qualifications stipulated in the University Regulations on admission and the prerequisites above.

INDICATIVE BIBLIOGRAPHY

1. JAHN, F., COOK, M. AND GRAHAM, M., 2008. Hydrocarbon Exploration and Production. 2nd Edition. Amsterdam: Elsevier.
2. SHIL, N C and PARVEZ, M., 2010. Life Cycle Costing: Techniques and Applications: Choosing the Most Economic Project. ISBN: 978-3639234305