Course Description Form

Basic Course Specifications					
Course Title	:	**Advanced Offshore Operations**			
Course Code	:	**OS 416**			
Program on which the course is given	:	❒ **Bachelor**	❒ **Diploma**	☐ **Master**	☐**Pre- PhD**
Academic year	:	**2015/2016**			
Specialization (units of study)	:	Theoretical (64. hrs) Simulator (.0. hrs) Practical (..0 hrs) Credit(2H)			
Pre-Requisites	:	None			

Overall Course Objectives

On completion of this course, students should be gaining the knowledge for special types of operations that carried out in the oil and gas services industry which carried out by supply vessels and offshore units and installations such as cable laying, pipe laying, seismic survey dynamic positioning, diving operation and ROV survey which serve the industry before and during drilling and production.

At the end of this course, the student will be able to understand the operations carried out by supply vessels as:

- Seismic survey.
- Cable layering operation.
- Pipe laying operations.
- Operations to be carried out by ROV unit.
- Dynamic Positioning.
- Diving operation

Intended Learning Outcomes

Knowledge and Understanding

At the end of the course, students should be able to:

A1 Understand basics of Dynamic Positioning.
A2 Describe Positioning reference systems.
A3 Identify Dynamic Positioning principles
A4 Understand Dynamic Positioning planning.
A5 Identify different offshore operations.
A6 Understand seismic operations.
A7 Understand pipe and cable laying operations.
A8 Understand diving operations.
A9 Identify ROV (Remotely Operated Vehicle) operations.

Intellectual Skills

At the end of the course, students should be able to:

B1 Understand the theory of DP
B2 Identify the skills of seismic operations
B3 Identify the skills of Cable and pipe operations

Professional and Practical skills

At the end of the course, students should be able to:
C1 Identify pipe and cable laying procedure.
C2 Identify dynamic positioning system.
C3 Describe diving procedure.
C4 Has knowledge about all offshore operations

General and Transferable skills

At the end of the course, students should be able to:
D1 Operate DP system efficiently.
D2 Has knowledge about diving equipment.
D3 Identify ROV components.
D4 Has knowledge about offshore special operations.

Course content

Lect. #	Topic	Hrs.#	Theoretical	Practical	Simulator
1	Introduction to DP & abbreviations	4	4		
2	Examples of DP operations	4	4		
3	DP principles	4	4		
4	Positioning reference systems	4	4		
5	Cont. Positioning reference systems	4	4		
6	DP operations	4	4		
7	Revision - 7th Week Examination.	4	4		
8	Cont. DP operations	4	4		
9	DP planning	4	4		
10	Key of DP personnel	4	4		
11	Seismic marine operations	4	4		
12	Revision 12th week Exam	4	4		
13	Diving & ROV operations	4	4		
14	Cable laying operation	4	4		
15	Pipe laying operation	4	4		
16	Final Examination.	4	4		

Teaching & learning methods

Explanation of the lesson contents – discussing and asking questions to interact with students – solving examples and classroom tasks.

Facilities required for Teaching & learning methods

❒ **Projector**	❒ Overhead Slide	❒ **Books**	❒ **Video**	❒ Audio Cassette

Students Assessment Methods

Assessment Schedule

Assessment#1	Week 7
Assessment#1	Week 12
Assessment#1	Week 16

Grading Method

Attendance		
7th Week Examination	❒	**30 Marks**
12th week exam	❒	**20 Marks**
Assignments	❒	**5 Marks**
Projects		
Participation	❒	**2.5 Marks**
Oral Examination	❒	**2.5 Marks**
Final Examination	❒	**40 Marks**
		Total 100%

*Assessment criteria shall meet the standards of the STCW 78 convention "as amended""; and in the light of the related IMO model courses.

List of References

Course Notes

Description	:	Lecture notes recommended and revised by the course coordinator(s).

Essential Books

Description	:	**DP operator's handbook**

Recommended Books

Description	:	**DP operator's handbook**

Periodicals and publications

Description	:	

Others (websites, e-books…etc.)

Description	:	Nil