

	<p>Ministry of Higher Education and Scientific Research - Iraq</p> <p>University of Warith Al_Anbiyaa.... College of Engineering Oil and Gas Department</p>	
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## MODULE DESCRIPTION FORM

### نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	<b>Health, Safety, and Environment</b>		Module Delivery
Module Type	Basic		<input checked="" type="checkbox"/> Theory <input type="checkbox"/> Lecture <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	<b>ENG325</b>		
ECTS Credits	4		
SWL (hr/sem)	<b>100</b>		
Module Level	UGIII	Semester of Delivery	
Administering Department	OGE	College	College of Engineering
Module Leader	Sabah Rasoul Al-Jabiri		e-mail
Module Leader's Acad. Title	Professor	Module Leader's Qualification	Ph.D.
Module Tutor	NA	e-mail	E-mail

Peer Reviewer Name		e-mail	
Scientific Committee Approval Date	01/06/2023	Version Number	1.0

### Relation with other Modules

العلاقة مع المواد الدراسية الأخرى

Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

### Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

<b>Module Aims</b> أهداف المادة الدراسية	Students will learn about major occupational safety and health hazard in in the workplace and across oil industrial sectors. In addition, students learn how to evaluate exposure, assess prevent and control hazards related to mechanical systems, falling, impact, acceleration, temperature extremes, pressure, electricity, fire, industrial hygiene, confined spaces, radiation, noise and vibration.
<b>Module Learning Outcomes</b> مخرجات التعلم للمادة الدراسية	<ol style="list-style-type: none"> <li>1- Complete information about health and safety of employees and protection of the environment.</li> <li>2- Awareness of best practices to follow at work to cause minimum pollution to the environment.</li> <li>3- Knowledge of certain precautionary measures while working and handling machinery or other equipment to prevent occupational hazards.</li> <li>4- The necessary information to handle waste material in a controlled manner so as to minimize negative impact to the environment.</li> <li>5- The required skill and capability to devise, implement and manage safety and health management systems in the organization.</li> </ol>
<b>Indicative Contents</b> المحتويات الإرشادية	Introduction to HSE What is Occupational Safety and Health Safety Models Occupational Safety and Health Principles

	Occupational Safety and Health Basic Definitions Types of Hazards Overview of Risk Assessment Hierarchy of Controls Safety Regulations, Roles and Responsibilities for Safety
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### Learning and Teaching Strategies

#### استراتيجيات التعلم والتعليم

<b>Strategies</b>	Design Thinking is part of the broader project-based learning educational model. It uses a creative, systematic approach to teach problem-solving. Students progress through the stages of Discovery, Ideation, Experimentation, and Evolution in search of innovative solutions to vexing problems. The learning process integrates many activities: observation, collaboration, fast-learning, visualization of ideas, and rapid prototyping. The integration of research, development, and evaluative activities, makes it particularly useful for all courses, particularly for those with complicated, multi-faceted, and trans-disciplinary topics.
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### Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

<b>Structured SWL (h/sem)</b> الحمل الدراسي المنتظم للطالب خلال الفصل	48	<b>Structured SWL (h/w)</b> الحمل الدراسي المنتظم للطالب أسبوعيا	3
<b>Unstructured SWL (h/sem)</b> الحمل الدراسي غير المنتظم للطالب خلال الفصل	52	<b>Unstructured SWL (h/w)</b> الحمل الدراسي غير المنتظم للطالب أسبوعيا	3
<b>Total SWL (h/sem)</b> الحمل الدراسي الكلي للطالب خلال الفصل	100		

## Module Evaluation

## تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5, 10	LO #1, 2, 3
	Assignments	2	10% (10)	2, 11	LO # 1,2,3
	Projects	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO # 4,5
Summative assessment	Midterm Exam	2 hr	10% (10)	7	LO # 1-3
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

## Delivery Plan (Weekly Syllabus)

## المنهاج الاسبوعي النظري

	Material Covered
Week 1	Introduction to Health, Safety, and environment.
Week 2	What is Occupational Safety and Health
Week 3	Safety Models
Week 4	Equipment and energy hazards.
Week 5	Fire and explosion hazards.
Week 6	Pressure, temperature and radiation hazards.
Week 7	Working area and height hazards.
Week 8	Construction and maintenance hazards.

<b>Week 9</b>	Risk Assessment
<b>Week 10</b>	Hierarchy of Controls
<b>Week 11</b>	Safety Regulations, Roles and Responsibilities
<b>Week 12</b>	Waste management.
<b>Week 13</b>	Handling drilling fluid products and cuttings
<b>Week 14</b>	Drilling fluid compatibility and storage guidelines
<b>Week 15</b>	Waste management disposal
<b>Week 16</b>	Preparatory week before the final Exam

### Learning and Teaching Resources

#### مصادر التعلم والتدريس

	Text	Available in the Library?
<b>Required Texts</b>		
<b>Recommended Texts</b>		
<b>Websites</b>	<ul style="list-style-type: none"> <li>➤ Occupational Safety and Health Act (OSHA) and Regulation, MDC Publishers Sdn. Bhd, 2008 Edition</li> <li>➤ Guidelines for Hazard Identification, Risk Assessment and Risk Control, DOSH Malaysia, 2008.</li> <li>➤ Neff, J.M., S. McKelvie and R.C. Ayers, Jr. 2000. Environmental impacts of synthetic based drilling fluids. Report prepared for MMS by Robert Ayers &amp; Associates, Inc. August 2000. U.S. Department of the Interior.</li> <li>➤ THE CLAREMONT COLLEGES, ENVIRONMENTAL HEALTH AND SAFETY (EHS) HANDBOOK FOR EMPLOYEES, The Claremont Colleges Services Environmental Health and Safety 2021-2022 Academic Year (Revised 1/6/2021)</li> </ul>	

### Grading Scheme

## مخطط الدرجات

Group	Grade	التقدير	Marks (%)	Definition
<b>Success Group</b> (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
<b>Fail Group</b> (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

**Note:** Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

