



Academic Course Specification Form

استمارة توصيف المقرر الأكاديمي

القسم الخاص بالطالب Section Concerning the Student

1. Course Code:	CHEMY 103	1. رمز المقرر:
2. Course Title	Safety and Hazardous Chemicals	2. اسم المقرر:
3. College:	Science	3. الكلية:
4. Department:	Chemistry	4. القسم:
5. Academic Program:	Bachelor of Science in Chemistry	5. البرنامج الأكاديمي:
6. Course Credits:	2-0-2	6. عدد الساعات المعتمدة:
7. Course NQF Level:	5	7. مستوى المقرر وفقا للإطار الوطني للمؤهلات:
8. Notional Hours:	86	8. عدد الساعات الافتراضية:
9. NQF Credits:	9	9. عدد الساعات المعتمدة للمقرر وفقا للإطار الوطني للمؤهلات:
10. Prerequisite:	CHEMY 102	10. المتطلب السابق للمقرر:
11. Lectures Timing & Location:		11. وقت المحاضرة ومكانها:
12. General Mode of Teaching and Learning	تقليدي Traditional	12. النمط العام للتعليم والتعلم:

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Changing any elements of the form is strictly prohibited.
يرجى عدم تغيير أي عنصر من عناصر الاستمارة

13. Course Coordinator:		13. منسق المقرر:
14. Course Instructor:		14. مدرّس المقرر:
15. Office Hours and Location:		15. الساعات المكتبية ومكانها:
16. Instructor's Email:		16. البريد الإلكتروني لمدرّس المقرر:
17. Academic Year:		17. السنة الأكاديمية:
18. Semester:		18. الفصل الدراسي:
19. Textbook(s):		19. الكتب الدراسية للمقرر:
"Safety & Hazardous Chemicals Manual" Department of Chemistry, 2013, UOB		
20. References:		20. المراجع:
<ul style="list-style-type: none"> ➤ CRC Handbook of Laboratory Safety, 5th Ed. (2001), A.K. Furr (Edit.) Chemical Rubber Co. ➤ Safety in Academic Chemistry Laboratory 8th Ed., Elizabeth M. Howson Chair, ACS Committee on Chemical Safety, March 2017 ➤ Prudent Practices in the Laboratory, National (updated Ed. 2011), National Academy of Sciences USA. 		
21. Other Learning Resources Used (e.g. e-learning, field visits, periodicals, software, etc.):		21. مصادر التعلّم الأخرى (مثال: التعلّم الإلكتروني، زيارات ميدانية، دوريات، برمجيات، إلخ....)
22. Course Description (as published in the College Catalogue):		22. توصيف المقرر (حسب ما ورد في دليل الكلية):
General laboratory safety practices and management; laboratory safety equipment; Safety pictograms; NFPA diamond; first aid and emergency procedures; artificial respiration methods; personal protective equipment (PPE); hazardous chemicals and health (flammable, corrosive, carcinogenic, mutagenic, and teratogenic); self-reactive substances and mixtures; radioactive materials, material safety data sheet (MSDS), safety information and checklist.		
23. Course Intended Learning Outcomes (3 to 5 CILOs):		23. مخرجات التعلّم للمقرر (CILOs) (3 إلى 5 مخرجات تعلّمية):
1. Identify various types of hazards; chemical, biological and fire hazards		
2. Evaluate with some guidance the need to mitigate toxic waste.		
3. Identify various general and personal safety equipment		
4. Explain laboratory safety rules and emergency procedures and Safety Management		
5. Use basic skills to communicate safety information using words, pictures, signs. Symbols and color codes		

24. Course Assessment Percentages (as per Regulations of Study and Examination at the University of Bahrain):		24. أساليب التقييم ونسبها المئوية (بحسب نظام الدراسة والامتحانات في جامعة البحرين):	
Assessment التقييم	Type النوع	Percentage النسبة	Assessment Date تاريخ التقييم
Midterm I	Individual فردى	60%	
Midterm II	Individual فردى		
Quizzes	Individual فردى		
Assignments	Individual فردى		
Final exam	individual	40%	
Total	100%		
25. Description of Topics Covered		25. وصف الموضوعات التي ينبغي تناولها:	
Topic Title (e.g. chapter/experiment title) الموضوع		Description التفصيل	
Introduction to safety		General Safety practice	
General Safety Practice & Management		General Safety related to chemicals, Glassware, Lab equipment	
Laboratory Components and Safety Practice		Chemical, glassware, lab equipment's, basic lab rules	
Laboratory Chemicals		NFPA diamond and different safety pictograms	
Laboratory Glassware		Different types of glass, safety guidelines to use glassware.	
Laboratory Equipment		Heat and mass transfer equipment, pressure and vacuum systems, electrical equipment	
Basic Laboratory Rules and Regulations		Labelling and color codes, handling and storage, waste and its disposal, fire hazardous prevention.	
Hazard Communication and Color Codes		Labelling and color codes, handling and storage, waste and its disposal, fire hazard prevention	
General Safety Equipment		Lab fume hood, storage cabinets, lab refrigerators, eyewash stations, safety showers	
Personal Protective Equipment		Eye protection, hand protection, foot protection, protective clothes	
First Aid & Emergency Procedures		First aid for wounds, ingestion of chemicals, inhalation of chemicals, first aid kits, treatment of poisoned individuals	
Hazardous Chemicals & Health: Properties of Hazardous chemicals		Flammability, Corrosivity, Reactivity, and Toxicity	

Special classes of Hazardous Chemicals			Carcinogens, Mutagens, Biohazards & Infectious Waste, Radioactive Materials, Compressed Gases Asbestos-containing Materials	
26. Weekly Schedule			26. الجدول الأسبوعي	
Week الأسبوع	Date التاريخ	Topics Covered الموضوعات المتناولة	CILOs مخرجات التعلم للمقرر (CILOs)	Teaching/Assessment Mode and Method منهجية ونمط التدريس/التقييم
1		Introduction to safety.	1, 2	Traditional تقليدي Insert teaching methods
2		Chapter 1: General Safety Practice	1,2,3	Traditional تقليدي
3		Laboratory Components and Safety Practice	1,2	Traditional تقليدي
4		Laboratory Chemicals, Glassware, and Equipment	1,2,5	Traditional تقليدي
5		Basic Laboratory Rules and Regulations, Color codes	1,3	Traditional تقليدي
6		Chapter 2: General Safety Equipment	2,3	Traditional تقليدي
7		Laboratory Safety Equipment and Personal Protective Equipment	1,4	Traditional تقليدي
8		Chapter 3: First Aid & Emergency Procedures	1,4	Traditional تقليدي
9		First Aid & Emergency Procedures	1,4	Traditional تقليدي
10		Chapter 4: Hazardous Chemicals & Health: Properties of Hazardous chemicals	1,5	Traditional تقليدي
11		Chapter 4: Hazardous Chemicals & Health: Properties of Hazardous chemicals	1,5	Traditional تقليدي
12		Special Classes of Hazardous Chemicals	1,5	Traditional تقليدي

13		Material Safety Data Sheet (MSDS)	1,5	تقليدي Traditional
14		Revision and General Safety Information	1,5	تقليدي Traditional
15		Video session about safety procedures	1,5	تقليدي Traditional
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27. Academic Integrity Statement			27. بيان النزاهة الأكاديمية	
Students are to observe the highest level of honesty and academic ethics in pursuit of their academic goals as per UOB Regulations of Student Conduct and Academic Integrity, Anti-plagiarism Policies , and Students' Rights and Responsibilities Handbook . The consequences for cheating, plagiarism, unauthorized collaboration, and other forms of academic dishonesty can be very serious and will be dealt with as per the aforementioned policies and regulations.			يتعين على الطلبة الالتزام بأعلى مستويات الصدق والأمانة والأخلاق الأكاديمية في سعيهم لتحقيق أهدافهم الأكاديمية وفقاً للوائح سلوك الطلاب والنزاهة الأكاديمية، سياسات مكافحة الانتحال ، ودليل حقوق الطلبة وواجباتهم ، المعمول بها في جامعة البحرين. يمكن لعواقب الغش والسرقة الأدبية والتعاون غير المصرح به وغيرها من أشكال عدم الأمانة الأكاديمية أن تكون خطيرة للغاية وسيتم التعامل معها وفقاً للسياسات واللوائح المذكورة آنفاً.	
28. Attendance and Absence Regulations			28. نظام الحضور والغياب	
Students are required to adhere to regular attendance for class lectures and practical sessions, as determined by the nature of the course, as per Article (33) of Regulations of Study and Examination at the University of Bahrain .			يجب على الطلبة الالتزام بالحضور المنتظم للمحاضرات الصفية والعملية، حسبما تحدده طبيعة المقرر الدراسي، ووفقاً للمادة (33) من نظام الدراسة والامتحانات في جامعة البحرين .	