# TEMPLATE FOR COURSE SPECIFICATION

| HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW |
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**COURSE SPECIFICATION**

| This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification. |
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| 1. Teaching Institution | Al-Nahrain University |
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| 2. University Department/Centre | Department of Chemistry |
| 3. Course title/code | Safety/first stage |
| 4. Modes of | presence |
| 5. Semester/Year | 2022/2023 - First semester |
| 6. Number of hours tuition (total) | 45 |
| 7. Date of production/revision of this specification | 5/10/2022 |
| 8. Aims of the Course | |
| Introduce students to all basic concepts related to occupational safety in laboratories and factories | |
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| 9· Learning Outcomes, Teaching ,Learning and Assessment Methode |
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| A- Cognitive goals .  A1 - Introducing students to all the basic concepts related to occupational safety A2. Increase awareness and education of students in all matters of occupational safety  A3 - Occupational safety in industrial units |
| B. The skills goals special to the course.  B1 - Teach the student to take all safety measures in laboratories  B2 - Develop the student's skills to conduct on-site assessment of laboratories and factories  B3 - Teaching the student how to identify the risks of working in factories and how to overcome them |
| Teaching and Learning Methods |
| Lectures, discussion during the lecture, presentation of specialized films and pictures that enhance the student's understanding of his subject matter, and the student presents a project that is a case study of safety issues that he presents as a presentation in front of his colleagues. |
| Assessment methods |
| Two semester exams, short exams and a seminar at the end of the semester |
| C. Affective and value goals  C1- To develop the student's knowledge of safety matters  C2- It is possible for the student to teach others about safety matters  C3 - ways to reduce accidents  C4- Study the causes of accidents |
| Teaching and Learning Methods |
| Lectures and multiple visual and visual illustrations |
| Assessment methods |
| Two semester exams, short exams and a seminar at the end of the semester |

| D. General and rehabilitative transferred skills(other skills relevant to employability and personal development)  D1- Teaching the student to take all safety measures in laboratories  D2 - Develop the student's skills to conduct on-site assessment of laboratories and factories  D3 - Teaching the student how to identify the risks of working in factories and how to overcome them |
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| 10. Course Structure | | | | | |
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| Week | Hours | ILOs | Unit/Module or Topic Title | Teaching Method | Assessment Method |
| 1 | 3 | Introduction  Safety…..  Meanings | Introduction  Safety…..  Meanings | lecture | Semester exam and short exams  Oral exam |
| 2 | 3 | Safety...Glossary of Terms | Safety...Glossary of Terms |  |  |
| 3 | 3 | Safety...Glossary of Terms,Toxicological chemistry | Safety...Glossary of Terms,Toxicological chemistry |  |  |
| 4 | 3 | Toxicological chemistry,  Fire or Burning | Toxicological chemistry,  Fire or Burning |  |  |
| 5 | 3 | Fire or Burning | Fire or Burning |  |  |
| 6 | 3 | Hazard and Risk | Hazard and Risk |  |  |
| 7 | 3 | Hazard and Risk,  Chemical Information data | Hazard and Risk,  Chemical Information data |  |  |
| 8 | 3 | Mid. course exam/1 | Mid. course exam/1 |  |  |
| 9 | 3 | Chemical Information data,  Laboratory Safety | Chemical Information data,  Laboratory Safety |  |  |
| 10 | 3 | Laboratory Safety | Laboratory Safety |  |  |
| 11 | 3 | Managing Chemicals | Managing Chemicals |  |  |
| 12 | 3 | Working with Laboratory Equipment,  Working with Chemicals | Working with Laboratory Equipment,  Working with Chemicals |  |  |
| 13 | 3 | Managing Chemical Waste | Managing Chemical Waste |  |  |
| 14 | 3 | Safety & Health in Chemical Industries | Safety & Health in Chemical Industries |  |  |
| 15 | 3 | Safety & Health in Chemical Industries | Safety & Health in Chemical Industries |  |  |

| 11. Infrastructure | | |
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| 1. Books Required reading: | | Lisa Moran and Tina Masciangioli**....**'Chemical Laboratory Safety and Security |
| 2. Main references (sources) | | Nicholas P. Cheremisinoff "Handbook of Hazardous Chemical Properties" |
| A- Recommended books and references (scientific journals, reports…). | |  |
| B-Electronic references, Internet sites… | | * http://www.acs.org/content/acs/en.html |
|  | 12. The development of the curriculum plan | |
|  | | Update the information according to the development books and articles. | | --- | | |