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| **The Hashemite University****Faculty of Science** **Course Description** |

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| **Department : Chemistry** | |
| **Semester : First** | **Year : 2017-2018** |

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| Course Information | | |
| Organic Chemistry Laboratory | | Course Title |
| 110103235 | | Course Number |
| 2 | | Course Credits |
| 12:00-1:00 Sun; Tue | | Course Time |
| 16 week | | Course Duration |
| 110103232 and 110103105 | | Prerequisite(s) |
| Dr Kayed Abu-Safieh | | Instructor |
| Chem. 207 | | Office Location |
| 4499 | | Office Phone |
| 11:00-12:00 (Sun, Tue) | | Office Hours |
| kayedas@hu.edu.jo | | E- mail |
|  | | Course Web Site: |
|  | |  |
| Text Book | | |
| Selected Experiments in Organic Chemistry | | Title |
| Abdelnour, Qasem, Zahra | | Author(s) |
|  | | Publisher |
|  | | Year |
| 2nd Edition | | Edition |
|  | | References(s) |
|  | |  |
| **Evaluation Policy** | | |
| **Weight** | **Expected Date** | **Assessment Type** |
| 20% | To be announced | Midterm exam |
| 30% | During course | Reports, Quizzes |
| 50% | To be announced | Final Exam |

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| **Course Objectives** | | |
| This course is divided into two main sections. The objective of section I is to teach students the basic techniques used in Organic laboratories i.e. purification, separation, identification. Section II compromises simple, one step syntheses and chemical tests for the main classes of organic compounds. | | |
| |  | | --- | | **Intended Learning Outcomes** | | 1. Acquiring practical skills of basic techniques used in organic chemistry labs. 2. Performing one step synthesis of some organic compounds. 3. Distinguishing between classes of certain organic compounds. 4. Analyzing the othe results and reporting them | | | |
| **Teaching and Learning Methods** | | |
| Board for lectures and lab for experiments. | | |
| **Course Contents** | | | |
| **Exp. in Text** | | **Topics** | **Week** |
| 1. | | Check in and Safety Rules. | 1 |
| 13 | | Melting Points | 2 |
| 23 | | Boiling Points and Distillation | 3 |
| 35 | | Recrystallization | 4 |
| 47 | | Extraction | 5 |
| 59 | | Steam Distillation | 6 |
| 69 | | Chromatography | 7 |
| 83 | | Dehydration of Alcohols | 8 |
| 101 | | Nucleophilic Substitution | 9 |
| 113 | | Electrophilic Aromatic Substitution | 10 |
| 125 | | Alcohols and Phenols | 11 |
| 147 | | Aldehydes and Ketones | 12 |
| 175 | | The Chemistry of Amines | 13 |