**Ministry of Higher Education and Scientific Research**

**Scientific Supervision and Scientific Evaluation Apparatus**

**Directorate of Quality Assurance and Academic Accreditation**

**Accreditation Department**

**Academic Program and Course Description Guide Academic Program and Course Description Guide**

**Academic Program and Course Description Guide**

**2024**

**Course Description Form**

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| --- |
| 1. Course Name:
 |
| Practical organic chemistry for second year students |
| 1. Course Code:
 |
| CH201 |
| 1. Semester / Year:
 |
| Annual system for the year 2023/2024 |
| 1. Description Preparation Date:
 |
| 25/2/2024 |
| 1. Available Attendance Forms:
 |
| Daily attendance |
| 1. Number of Credit Hours (Total) / Number of Units (Total)
 |
| Three hours a week/three units |
| 1. Course administrator's name (mention all, if more than one name)
 |
| Name: wissam khalifa jasim suhs sahab abdEmail: wissam.k.j@ihcoedu.uobaghdad.edu.iq , suha.s.a@ihcoedu.uobaghdad.edu.iq |
| 1. Course Objectives
 |
| **Course Objectives** | * **Learning the names of the tools used in the organic chemistry laboratory and the purpose of their use**
* **Learning the basic skills for working inside the laboratory, how to deal with chemicals, how to use equipment and tools and the right way of writing a report**
* **Learning basic techniques in the organic chemistry laboratory, such as purifying materials and methods of separating them**
* **Studying some organic compounds in terms of methods of preparation and properties**
 |
| **Teaching and Learning Strategies**  |
| **Strategy** | 1. **Lectures and discussions strategy**
2. **Presentation strategy using means of illustration, such as showing films about the experiments by displaying them on screen**
3. **Cooperative learning strategy by working in groups when conducting the experiments**
 |
| 1. Course Structure
 |
| **Week**  | **Hours**  | **Required Learning Outcomes**  | **Unit or subject name**  | **Learning method**  | **Evaluation method**  |
| **1** | **3** | **Explaining how to write a report and learning about laboratory tools, how to use them and their purpose** | **Writing a report and scientific terminology for some laboratory tools and glassware used in experiments** | **Explanation the experiment + showing a video film + conducting the experiment in practice** | **Daily and monthly tests and reports** |
| **2** | **3** | **ester** | **Aspirin** | **Explanation the experiment + showing a video film + conducting the experiment in practice** | **Daily and monthly tests and reports** |
| **3** | **3** | **ester** | **Β- naphthyl acetate** | **Explanation the experiment + showing a video film + conducting the experiment in practice** | **Daily and monthly tests and reports** |
| **4** | **3** | **aldehyde** | **acetaldehyd** | **Explanation the experiment + showing a video film + conducting the experiment in practice** | **Daily and monthly tests and reports** |
| **5** | **3** | **ketone** | **cyclohexanone** | **Explanation the experiment + showing a video film + conducting the experiment in practice** | **Daily and monthly tests and reports** |
| **6** | **3** | **Mirror silver** | **Excellence between aldehydes and** **ketones** | **Explanation the experiment + showing a video film + conducting the experiment in practice** | **Daily and monthly tests and reports** |
| **7** | **3** | **Monthly test** | **Monthly test** |  |  |
| **8** | **3** | **Best shift** | **acetoxime** | **Explanation the experiment + showing a video film + conducting the experiment in practice** | **Daily and monthly tests and reports** |
| **9** | **3** | **Iodo form** | **Iodo form Test** | **Explanation the experiment + showing a video film + conducting the experiment in practice** | **Daily and monthly tests and reports** |
| **10** | **3** | **Cannizzaro** | **Best benzoic** | **Explanation the experiment + showing a video film + conducting the experiment in practice** | **Daily and monthly tests and reports** |
| **11** | **3** | **Carboxylic** **acids** | **Acetic acid**  | **Explanation the experiment + showing a video film + conducting the experiment in practice** | **Daily and monthly tests and reports** |
| **12** | **3** | **Monthly test** | **Monthly test** |  |  |
| **13** | **3** | **alcohol** | **Studying Properties alcohol at** | **Explanation the experiment + showing a video film + conducting the experiment in practice** | **Daily and monthly tests and reports** |
| **14** | **3** | **Haled alkyl** | **n- butyl chloride** | **Explanation the experiment + showing a video film + conducting the experiment in practice** | **Daily and monthly tests and reports** |
| **15** | **3** | **Haled alkyl** | **Tertiary butyl chloride** | **Explanation the experiment + showing a video film + conducting the experiment in practice** | **Daily and monthly tests and reports** |
| **16** | **3** | **Nitra** | **α-nitro naphthalene** | **Explanation the experiment + showing a video film + conducting the experiment in practice** | **Daily and monthly tests and reports** |
| **17** | **3** | **Soaping** | **Preparing soap** | **Explanation the experiment + showing a video film + conducting the experiment in practice** | **Daily and monthly tests and reports** |
| **18** | **3** | **Animate** | **Amines** | **Explanation the experiment + showing a video film + conducting the experiment in practice** | **Daily and monthly tests and reports** |
| **19** | **3** | **Alameda** | **Al acetanilide** | **Explanation the experiment + showing a video film + conducting the experiment in practice** | **Daily and monthly tests and reports** |
| **20** | **3** | **Monthly test** | **Monthly test** |  |  |
| 1. Course Evaluation
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| Distributing the score out of 15 according to the tasks assigned to the student such as daily exams 5 points , monthly written exams 5 points and reports 5 points.  |
| 1. Learning and Teaching Resources
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| Required textbooks (curricular books, if any) | **Organic Chemistry Morrison and Boyed****Oxidation of primary alcohol to carboxylic acid****Organic Chemistry Francis carey** |
| Main references (sources) | **التجارب العملية في الكيمياء العضوية** |
| Recommended books and references (scientific journals, reports...) | **Organic Chemistry by Graham and Selmios** |
| Electronic References, Websites | https://www.organic-chemistry.org/ |