**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**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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 abd  Email: wissam.k.j@ihcoedu.uobaghdad.edu.iq , [suha.s.a@ihcoedu.uobaghdad.edu.iq](mailto: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 | | | | | | | | |
| 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 | | | | | | | | |
| 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/ | | | |