**Ministry Of Higher Education and Scientific Research**





**Mustansiriyah University/College of Science/Department of Biology**

**( Clinical Analysis )**

**Course Plan**

|  |  |
| --- | --- |
| **Course No.:1** |  |
| **Course Name: Clinical Analysis** | **Time Division:3hr.Theoretical and 2hr. Practical** |
| **Course Website:** | **Semester & Year:**   **First** , **2022 /2023** |

**Course Description**

**5 credit hours, Prerequisite [5084413]**

Clinical Analysis course give the student of Biology/ fourth class/ basic information about how body systems work in normal situation and the diseases that effects certain area in these systems mainly that caused by microorganisms (Bacteria ,Parasites ,Virus ,Fungi) and how to collect different samples from patients e.g.(Urine ,Stool ,Blood ,Sputum ,CSF, Seminal fluid…) and diagnose these infection in lab. and the antibiotic sensitivity of these microbes. Final step reporting the results ,which help doctors to give the suitable drugs that helps in controlling the infection and recovery from the disease. Other laboratory tests to blood ,semen and SCF.

**Course Intended Outcomes:**

**At the end of the Course, students are expected to learn**

* **How to identify the infectious agents that affect the body.**
* **How to collect different samples from patients.**
* **How to prepare the samples for diagnosing.**
* **How to do different biological and chemical tests on different samples.**
* **How to report the result to doctor.**

**Course Outline:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Week** | **Topes Covered**  **(Theoritical)** | **(Practical)** |  |
| 1 | **Introduction to urine analysis** | **GUE Macroscopic Examination** |  |
| 2 | **Chemical examination of Urine** | **GUE Microscopic Examination** |  |
| 3 | **Introduction to stool analysis** | **Stool Macroscopic examination** |  |
| 4 | **Microscopic examination of stool** | **Stool Microscopic examination** |  |
| 5 | **First Examination** | **First Examination** |  |
| 6 | **Blood analysis** | **Blood tests** |  |
| 7 | **Common blood tests** | **ESR & PCV tests** |  |
| 8 | **The Serological tests** | **Hb tests.** |  |
| 9 | **The Serological tests** | **WBCs Count** |  |
| 10 | **Second Examination** | **RBCs Count** |  |
| 11 | **Laboratory diagnosis of microorganisms** | **Second Examination** |  |
| 12 | **Laboratory diagnosis of cerebrospinal fluid infections (CSF)** | **Semen fluid Examination** |  |
| 13 | **Laboratory diagnosis of respiratory tract infections** | **Sputum Examination** |  |
| 14 | **Laboratory diagnosis of sexually transmitted diseases** | **Third Examination** |  |
| 15 | **Third Examination** | **Blood grouping** |  |
| 16 | **End of the course** | |  |
| 17 | **Half – year break** | |  |
| 18 |  |  |  |
| 19 |  |  |  |
| 20 |  |  |  |
| 21 |  |  |  |
| 22 |  |  |  |
| 23 |  |  |  |
| 24 |  |  |  |
| 25 |  |  |  |
| 26 |  |  |  |
| 27 |  |  |  |
| 28 |  |  |  |
| 29 |  |  |  |
| 30 |  |  |  |
| 31 |  |  |  |
| 32 |  |  |  |

**Textbooks**

1. Immunology : Overview and laboratory manual (2021)
2. Medical Microbiology ( 2021)
3. Clinical Pathology (2021)

**Suggested references:**

1. Guides to laboratory analysis
2. Medical Microbiology
3. Medical bacteriology
4. Hematology

**Marking:**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **First Semester** | | | | **Second Semester** | | | | **Final Exam** |
| **1st exam** | **2nd exam** | **Practical** | **Activity** | **1st exam** | **2nd exam** | **Practical** | **Activity** |  |
| **12** | **12** | **12** | **4** |  |  |  |  | **60** |
|  |  |  |  |  |  |  |  |  |

**Assignments and/ or Projects:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Assignment/ Project** | **Description** | **Due Date** | **Marking** |
| **Reports** | In subjects that interest the student | At semester end | 1 Mark |
| **Quizzes** | In lectures or in subjects related to study subject. | During the course | 1 Mark |

**Instructor(s) information[معلومات الأستاذ]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Section : 1** | | **Lecture Room: [301]** | **Office No.: 5** | |
| **Instructor's Name: Dr.Khetam Habeeb Rasool E-Mail**: khetamhabeeb112@yahoo.com | | | |  |
| **Office Hours:** | **: Dr. Nadheema Hamood Hussen E-Mail**:nadheema\_a@yahoo.com  **Tuesday AND Thursday : (8:30 – 2 : 00)**  **NOTES:**  **-Office Hour: Other office hours are available by appointment.**  **-The content of this syllabus not be changed during the current semester.**  **Lecturer Signature Chairman Signature** | | | |