

**Republic of Iraq**

 **The Ministry of Higher Education**

 **& Scientific Research**

**University:muthanna**

**College:Science**

**Department:Biology**

**Stage:Third**

**Lecturer name:Dr.Weam Saad**

**Academic Status:Assist.Prof**

**Qualification:PhD.Sc.**

**Place of work:college of science/muthanna university**

49

**Teaching plan for the semester form**

|  |  |
| --- | --- |
| **Course Instructor** | Dr. Weam Saad |
| **E\_mail** | Dr.weam2013@yahoo.comDr.weam2016@gmail.com  |
| **Title** | Immunology |
| **Course Coordinator** | Dr.Weam Saad |
| **Course Objective** | Teaching students the principles of Immunology as a part of biology Science.  |
| **Course Description** | This course teaches students to differentiate between active and passive immunity, cellular and humoral, antigen and antibody and to know some concepts on clinical immunology. |
| **Textbook** | Medical Microbiology,Jawetz,2010 |
| **References** |  |
| **Course Assessment** | Theo  | Practical | Midterm total mark | Final theor. | Final pract. |
| 27 | 13 | 40 | 40 | 20 |
| **General Notes** |  |

**Republic of Iraq**

 **The Ministry of Higher Education**

**& Scientific Research**



**University:muthanna**

**College:Science**

**Department:Biology**

**Stage:Third**

**Lecturer name:Dr.Weam Saad**

**Academic Status:Assist.Prof**

**Qualification:PhD.Sc.**

**Place of work:college of science/muthanna university**

**Teaching plan for the semester form**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **week** | **Date** | **Topics Covered** | **Lab. Experiment Assignments** | **Notes** |
| **1** |  | Introduction to Immunology as Science  | Introduction to Immunology as practical Science  |  |
| **2** |  | Innate Immunity | Laboratory Animals Handling |  |
| **3** |  | Cells of the immune system | Routes of injection |  |
| **4** |  | Complement System | Serum and Plasma |  |
| **5** |  | Lymphatic organs | White Blood Cells |  |
| **6** |  | Antigens | Total WBCs Count |  |
| **7** |  | Antibodies | Differential WBCs Count |  |
| **8** |  | Humoral Immune response | Phagocytosis |  |
| **9** |  | Cellular Immune response | Agglutination Test |  |
| **10** |  | Hypersensitivity | Example for Agglutination  |  |
| **11** |  | Immune Tolerance | Precipitation Test |  |
| **12** |  | Autoimmunity | Example for Precipitation |  |
| **13** |  | Vaccination | ELISA Test |  |
| **14** |  | Immunodeficiency | Biosensors |  |
| **15** |  | Midterm exam | Midterm exam |  |

 **Instructor Signature: Dean Signature:**