**University: Alqadisiya University**

**College: College of Biotechnology**

**Department:Medecal Biotechnology**

**Stage:First stage**

**Lecturer name:** **Mohammed Al-Askeri**

**Academic Status: lecturer**

**Qualification:PHD**

**Place of work: Alqadisiya University**



**Republic of Iraq The Ministry of Higher Education**

**& Scientific Research**

**Course Weekly Outline**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course Instructor** | Dr.Mohammed Al-Askeri | | | | |
| **E\_mail** | Type your mail as [example mail@yahoo.com](mailto:examplemail@yahoo.com) | | | | |
| **Title** | Introduction to Biotechnology | | | | |
| **Course Coordinator** | Type here the came of course coordinator | | | | |
| **Course Objective** | Understand what is Biotechnology and how it was developed.  - Appreciate the importance of biotechnology in our lives  - Introduce biotechnology techniques and their use. | | | | |
| **Course Description** | This module is a mandatory course for the Biotechnology students.Biotechnology is defined as the use of living organisms or their products to enhance our lives  and our environment. It is an introductory course and offers a broad view of biotechnology including an integration of historical and modern topics in biotechnology | | | | |
| **Textbook** | Biotechnology: An Introduction, 2005  Author(s)/Editor(s): Susan R. Barnum  Publisher: Thomson Books/Cole  ISBN: 0-534-49296-7 | | | | |
| **References** | Type here the reference (title,author,edition,publisher,year) | | | | |
| **Course Assessment** | Term Tests | Laboratory | Quizzes | Project | Final Exam |
| As (35%) | As (15%) | As (10%) | ---- | As (40%) |
| **General Notes** | Type here general notes regarding the course | | | | |

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**Course weekly Outline**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **week** | **Date** | **Topics Covered** | **Lab. Experiment Assignments** | **Notes** |
| **1** |  | What is Biotechnology? (ancient, classical and modern) |  |  |
| **2** |  | Nature of genes, first cloning and recombinant DNA |  |  |
| **3** |  | Basic principles of recombinant DNA technology |  |  |
| **4** |  | Molecular Techniques: Constructing and screening of DNA |  |  |
| **5** |  | libraries, reporter genes and blotting. |  |  |
| **6** |  | Microbial Biotechnology |  |  |
| **7** |  | Plant Biotechnology |  |  |
| **8** |  | Animal Biotechnology |  |  |
| **9** |  | Marine Biotechnology |  |  |
| **10** |  | Genomics and Beyond |  |  |
| **11** |  | Microbial Biotechnology |  |  |
| **12** |  | Plant Biotechnology |  |  |
| **13** |  | Medical Biotechnology |  |  |
| **14** |  | DNA Profiling and molecular Forensics |  |  |
| **15** |  | Regulation, Patent and Society |  |  |
| **16** |  |  |  |  |

**Instructor Signature: Dean Signature:**