

Course Description Form

1. Course Name: biology	
2. Course Code:	
3. Semester / Year:1-2 2023/2024	
4. Description Preparation Date:2023-2024	
5. Available Attendance Forms: Daily attendance	
6. Number of Credit Hours (Total) / Number of Units 2 Hours (Total) 30 week	
7. Course administrator's name (mention all, if more than one name)	
me: Zainab Nizar jawad mail: : zainab.n@uokerbala.edu.iq	
Course Objectives .8	
Course Objectives	It includes a description of the • material, the purpose of its study and the philosophy of its teaching, as this course aims to study the principles of Biology and the most important • genetic laws and the importance of studying and classifying all living organisms and the role of primitive organisms And high-end on human health • and the study of diseases and damage to some microorganisms in the organs of the human body .Especially the eye •

9. Teaching and Learning Strategies

Strategy	1. Education Strategy Collaborative Concept Planning 2- Brainstorming education strategy. 3. Education Strategy Notes Series 4- Presentation, training, discussion research and reports
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10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Knowledge	Definition of Biology, Biological Kingdom.	Use whiteboard and display	Daily exam and oral questions
2	2	Knowledge	Prokaryotes and eukaryotes.	Use whiteboard and display	Daily exam and oral questions
3	2	Knowledge	The cell: Introduction, structure and function to the organelle.	Use whiteboard and display	Daily exam and oral questions
4	2	Knowledge	The cell : Introduction, structure and function to the organelles (Mitochondria, Free ribosomes , Rough endoplasmic reticulum, smooth endoplasmic reticulum, Golgi apparatus, Lysosomes (primary and secondary lysosomes), Microtubules ,cilia, flagella and centrioles.	Use whiteboard and display	Daily exam and oral questions
5	2	Knowledge	The tissue (types and properties).	Use whiteboard and display	Daily exam and oral questions
6	2	Knowledge	Classification tissue.	Use whiteboard and display	Daily exam and oral questions
7	2	Knowledge	Nucleic acid, DNA structure, properties.	Use whiteboard and display	Daily exam and oral questions
8	2	Knowledge	RNA structure, properties.	Use whiteboard and display	Daily exam and oral questions

9	2	Knowledge	Transportation of biological wastes International Transport Regulations The Basic Triple Packaging System	Use whiteboard and display	Daily exam and oral questions
10	2	Knowledge	Overview of biological safety and security equipment	Use whiteboard and display	Daily exam and oral questions
11	2	Knowledge	Introduction to Biosafety and Security • Key components of Biorisk Management • Components of safety in all laboratories Universal safety precautions	Use whiteboard and display	Daily exam and oral questions
12	2	Knowledge	<i>Biosafety</i> training	Use whiteboard and display	Daily exam and oral questions
13	2	Knowledge	<i>Biosafety</i> training	Use whiteboard and display	Daily exam and oral questions
14	2	Knowledge	biosafety rules simulation 3D	Use whiteboard and display	Daily exam and oral questions
15			examination	Use whiteboard and display	Daily exam and oral questions
16	2	Knowledge	Replication of DNA	Use whiteboard and display	Daily exam and oral questions
17	2	Knowledge	Transcription, protein synthesis and type of mutation.	Use whiteboard and display	Daily exam and oral questions
18	2	Knowledge	Cell Division (Mitosis and meiosis)	Use whiteboard and display	Daily exam and oral questions
19	2	Knowledge	Mitosis	Use whiteboard and display	Daily exam and oral questions
20	2	Knowledge	Gametogenesis	Use whiteboard and display	Daily exam and oral questions
21	2	Knowledge	Spermatogenesis and oogenesis	Use whiteboard and display	Daily exam and oral questions

22	2	Knowledge	Introduction of bacteria (Shape, arrangement, size, gram stain).	Use whiteboard and display	Daily exam and oral questions
23	2	Knowledge	Bacterial staining techniques, Gram stain	Use whiteboard and display	Daily exam and oral questions
24	2	Knowledge	Media and nutritional requirement	Use whiteboard and display	Daily exam and oral questions
25	2	Knowledge	Introduction of Viruses	Use whiteboard and display	Daily exam and oral questions
26	2	Knowledge	Introduction of Parasite	Use whiteboard and display	Daily exam and oral questions
27	2	Knowledge	Introduction of Mycology.	Use whiteboard and display	Daily exam and oral questions
28	2	Knowledge	Sterilization and disinfecting	Use whiteboard and display	Daily exam and oral questions
29	2	Knowledge	Eye infections, Bacterial eye infection, Fungal eye infection. Parasitic eye infection, Viral eye infection.	Use whiteboard and display	Daily exam and oral questions
30			examination		

11. Course Evaluation

5 marks are calculated on reports
5 points are calculated on daily exams
5 degrees are calculated on the daily preparation
And the rest of the grade is for the monthly exams

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Biology Books
Main references (sources)	Curriculum scheduled within the sectoral committees
Recommended books and references (scientific journals, reports...)	Biology Raven et al The cell M. Prakash

Electronic References, Websites	ncbi,google scholar,reserachgate

Assist prof: Zainab Nizar Jawad