

Course Description Form

1. Course Name: Practical Biology	
2. Course Code:	
3. Semester / Year:1-2 2023/2024	
4. Description Preparation Date:2024-2023	
5. Available Attendance Forms: Daily attendance	
6. Number of Credit Hours (Total) / Number of Units 1.30 Hours (Total) 30 week	
7. Course administrator's name (mention all, if more than one name)	
me: Zainab Nizar jawad nab.n@uokerbala.edu.iq :Email:	
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

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Knowledge	Definition of Biology, Biological Kingdom.	Delivering the lecture through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test with surprise written examination and reports
2	2	Knowledge	Prokaryotes and eukaryotes.	Delivering the lecture through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test with surprise written examination and reports
3	2	Knowledge	The cell: Introduction, structure and function to the organelle.	Delivering the lecture through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test with surprise written examination and reports
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.	Delivering the lecture through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test with surprise written examination and reports

5	2	Knowledge	The tissue (types and properties).	Delivering the lec through the blackboard modern means presentation with interactive participation students and an explana of laboratory experim and slides presentation	Oral test w surprise written exa and reports
6	2	Knowledge	Classifia tion tissue.	Delivering the lec through the blackboard modern means presentation with interactive participation students and an explana of laboratory experim and slides presentation	Oral test w surprise written exa and reports
7	2	Knowledge	Nucleic acid, DNA structure, properties.	Delivering the lec through the blackboard modern means presentation with interactive participation students and an explana of laboratory experim and slides presentation	Oral test w surprise written exa and reports
8	2	Knowledge	RNA structure, properties.	Delivering the lec through the blackboard modern means presentation with interactive participation students and an explana of laboratory experim and slides presentation	Oral test w surprise written exa and reports
9	2	Knowledge	Transprt ation of biological wastes International Transport Regulations The Basic Triple Packaging System	Delivering the lec through the blackboard modern means presentation with interactive participation students and an explana of laboratory experim and slides presentation	Oral test w surprise written exa and reports
10	2	Knowledge	Overvie w of biological safety and security equipment	Delivering the lec through the blackboard modern means presentation with interactive participation students and an explana of laboratory experim and slides presentation	Oral test w surprise written exa and reports
11	2	Knowledge	Introduction to Biosafety and Security • Key components of Biorisk Management • Components of	Delivering the lec through the blackboard modern means presentation with interactive participation students and an explana of laboratory experim and slides presentation	Oral test w surprise written exa and reports

			safety in all laboratories Universal safety precautions		
12	2	Knowledge	<i>Biosafety</i> training	Delivering the lec through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test w surprise written exam and reports
13	2	Knowledge	<i>Biosafety</i> training	Delivering the lec through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test w surprise written exam and reports
14	2	Knowledge	biosafety rules simulation 3D	Delivering the lec through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test w surprise written exam and reports
15			examination	Delivering the lec through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	
16	2	Knowledge	Replication of DNA	Delivering the lec through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test w surprise written exam and reports
17	2	Knowledge	Transcription, protein synthesis and type of mutation.	Delivering the lec through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test w surprise written exam and reports
18	2	Knowledge	Division Cell (Mitosis and meiosis)	Delivering the lec through the blackboard modern means presentation with interactive participation students and an explanation	Oral test w surprise written exam and reports

				of laboratory experiment and slides presentation	
19	2	Knowledge	Mitosis	Delivering the lecture through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test with surprise written examination and reports
20	2	Knowledge	Gametogenesis	Delivering the lecture through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test with surprise written examination and reports
21	2	Knowledge	Spermatogenesis and oogenesis	Delivering the lecture through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test with surprise written examination and reports
22	2	Knowledge	Introduction of bacteria (Shape, arrangement, size, gram stain).	Delivering the lecture through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test with surprise written examination and reports
23	2	Knowledge	Bacterial staining techniques, Gram stain	Delivering the lecture through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test with surprise written examination and reports
24	2	Knowledge	Media and nutritional requirement	Delivering the lecture through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test with surprise written examination and reports
25	2	Knowledge	Introduction of Viruses	Delivering the lecture through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test with surprise written examination and reports

26	2	Knowledge	Introduction of Parasite	Delivering the lecture through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test with surprise written exams and reports
27	2	Knowledge	Introduction of Mycology.	Delivering the lecture through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test with surprise written exams and reports
28	2	Knowledge	Sterilization and disinfecting	Delivering the lecture through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test with surprise written exams and reports
29	2	Knowledge	Eye infections, Bacterial eye infection, Fungal eye infection. Parasitic eye infection, Viral eye infection.	Delivering the lecture through the blackboard modern means presentation with interactive participation students and an explanation of laboratory experiment and slides presentation	Oral test with surprise written exams and reports
30			Examinations		

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

Assist prof Dr: Zainab Nizar Jawad