







Course Specification of Biology

	I. Course Identification and General Information:						
1	Course Title:	Biology					
2	Course Number & Code:		I	FR112			
			C.]	H		Tot	
3	Credit hours:	Theoret ical	Practica l	Traini ng	Seminar	al	
		2	1	-	-	3	
4	Study level/ semester at which this course is offered:	First Year - First Semester					
5	Pre –requisite (if any):			None			
6	Co –requisite (if any):			None			
7	Program (s) in which the course is offered:	Bac	chelor of V	eterinary	Medicine	;	
8	Language of teaching the course:		Englis	sh langua	ge		
9	Location of teaching the course:	Faculty of Veterinary Medicine Building			ding		
1	Prepared by:	Dr. Basheer Ahmed Mufreh					
1	Date of approval:						

II. Course description:

Biology is a Facility required course, This course provides a student by basic and advanced skills for understand Biology at studying environment, and at home. It presents the knowledge of basic Biology concepts. The course provides the knowledge needed to operate and utilize the operating system and office software package, and to use the. Biology and further develops students' communication skills in design, describe, Draw and using a moderately advanced materials. It also provides the students with a wide range of basic concept and develops their use

نائب العميد لشئون الجودة عميد الكلية عميد مركز التطوير وضمان الجودة رئيس الجامعة د. عبدالرقيب الشامي د. ع









Experience of medical Biology, and processes to investigate the effect of varying resistance on the Science of Biology in the environment, solve simple problems on the cost of using Science of Biology appliances, using machines and Networks.

	the cost of using Science of Biology appliances, using machines and Networks.						
I	III. Intended learning outcomes (ILOs) of the course:						
Outcomes (Sub- PILOs) in: Outcomes				nded Learning s (<mark>CILOs</mark>) in: d Understanding			
	r completing this program, students will ble to:	ill be After completing this course, students was able to:					
A3 -	Identifies various causes of animal diseases, animal epidemics and how they can be diagnosed; including common and lifethreatening diseases of animals, poultry and fish.	l a 1-	components of	arrangement of the an e Biology system outs of the system.			
A4 -	Describes the foundations and procedural steps for treating all diseases that affect different animals, highlighting the medical conditions that need surgical interventions.	a 2-					
		come	es:				
Ali	gnment of Learning Outcomes of Kno As		ge and Understan ent Methods:	ding to Teaching and			
O	Course Intended Learning utcomes (CILOs) in Knowledge and Understanding	strat	Teaching egies/methods to be used	Methods of assessment			
com to: a1	Describe how arrangement of the components of an e Biology system affects the outputs of the system.	Inve Exp Ope	tures estigation clanation en question monstration	Home Work Class Work Class Active Case Studies Research Papers			

نائب العميد لشئون الجودة عميد الكلية عميد مركز التطوير وضمان الجودة رئيس الجامعة د. عبدالرقيب الشامي د. ع









الجمهورية اليمنية والمحمد التعليم العالي والبحث الدين التعليم العالي والبحث الدين المحمد العالمي والبحث الدين المحمد العالمي البيطري كلية الطب البيطري

Distinguish what is meant by Biology, relate it to an output of an Biology system a2 -	Presentation Observation. Cooperative learning workshops Pair work Group work	Group Projects Watch Video Collect sample Mid-semester exam Final exam Cooperative learning
---	---	---

(B)	Intellectual Skills:			
Aligni	ment of Course Intended Learning Outcomes (CILOs) to l	Progran	n Intended Learning Outcomes ((PILOs) in: Intellectua
Pro	gram Intended Learning Outcomes (Sub- PILOs) in Intellectual skills	C	ourse Intended Learnin Intellectu	
After	completing this program, students will be able to:	After	completing this course, stud	ents will be able to:
B2-	Predicts an appropriate medical diagnosis for the most common disease states through analysis of clinical story data and the results of medical examinations of sick animal.	b1-	Analyze Science of Bio	logy system.
В3-	Design appropriate nursing and treatment care plans for different animal diseases and determine prioritizing of therapeutic.	b2-	Explain the design of bid	ological Organization
	Teaching And Assessment Meth	ods I	For Achieving Learni	ing Outcomes:
Align	ument of Learning Outcomes of Intellectual Ski	lls to T	Teaching Methods and As	sessment Methods:
Cou	rse Intended Learning Outcomes (CILOs) in Intellectual Skills.	Teac	ching strategies/methods to be used	Methods of assess
After	completing this course, students will be able to:	Leo	etures	Home Work
b1-	Analyze Science of Biology system.		estigation	Class Work
b2-	Explain the design of biological Organization	Op De: Ob	edback en question monstration servation. operative learning	Class Active Case Studies Research Papers Group Projects Watch Video

workshops

Mid-semester exar

عميد الكلية عميد مركز التطوير وضمان الجودة رئيس نائب العميد لشئون الجودة الجامعة أ.د. القاسم د. عبدالرؤف الشوكاني أ.د. هدى العماد د. عبدالرقيب الشامي محمد عباس



c1-

c2-

parasites.







الجمهورية اليمنية وزارة التعليم العالي والبحث ال جامعة صنعاء ب. كلية الطب البيطري

			Pair work Group work	Final exam Cooperative lear	
\ /	Professional and Practical Skills: ment of Course Intended Learning Outcomes (CILOs) to Program In Practical Sk		Learning Outcomes (P.	ILOs) in: Professional and	
	gram Intended Learning Outcomes (Sub-PILOs) in Professional and Practical Skills completing this program, students will be able to:	(CI	LOs) in Profession	Learning Outcomes all and Practical Skills rse, students will be able to:	
C2-	Practicing practical, diagnostic, clinical and research skills, including the collection of samples in various fields of veterinary medicine and related sciences, in a safe and effective manner, taking into account the ethics of the profession.	c1-	Use the microscop and parasites.	pe in diagnose the bacteria	
С3-	Reads the results of laboratory investigations and diagnostic scans and writes reports and prescriptions for all common cases in a proper way.	c2- Perform calculations on Biology			
Aliem	Teaching And Assessment Methods ment of Learning Outcomes of Professional and Practical Ski				
Aligh	Course Intended Learning Outcomes (CILOs) in Professional and Practical Skills		Teaching ategies/methods to be used	Methods of assessment	
	completing this course, students will be able to:		ectures nvestigation	Home Work Class Work	

Explanation

Open question

Demonstration

Presentation

Feedback

Class Active

Case Studies

Research Papers

Group Projects

Watch Video

General / Transferable Skills:

Use the microscope in diagnose the bacteria and

Perform calculations on Biology

عميد الكلية عميد مركز التطوير وضمان الجودة نائب العميد لشئون الجودة رئيس د. عبدالرقيب الشامى د. عبدالرؤف الشوكاني أ.د. القاسم أ.د. هدى العماد









A	Alignment of Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in: Gener Transferable skills						
	ram Intended Learning Outcomes (PILOs) in General / Transferable skills		ourse Intended Learnin General / Tran	sferable skills			
After c	ompleting this program, students will be able to:	After	r completing this course, stud	dents will be able t			
D2-	Develops his scientific, professional and research capabilities and follow what is emerging in his field of specialization and using computer applications and information and communication technology.	d1-	Calcute the value of pro	essure in Biolog			
D3-	Practices problem-solving, negotiation, supervision and veterinary medical management skills and writing research reports efficiently and professionally.	d2-	Draw Type of living tiss	sues			
	Teaching And Assessment Method	ods I	For Achieving Learn	ing Outcome			
A	Alignment of Learning Outcomes of General and Tra	nsfer	able skills to Teaching and	d Assessment Me			
Cou	rrse Intended Learning Outcomes (CILOs) in General and Transferable Skills	Tea	ching strategies/methods to be used	Methods of a			
After c	ompleting this course, students will be able to:		vestigation pen question	Class Active Research Par			
d1-	Calcute the value of pressure in Biology	Pr	esentation oservation.	Group Project Watch Video			
d2	Draw Type of living tissues	Pa	ir work oup work	Mid-semeste Final exam			

IV.	Course Conte	nt:					
1 – Course Topics/Items:							
	a – Theoretical Aspect						
Order	Topic List / Units	CILOs (symbols)	Sub-topic List	Numb er of weeks	Contact hours		
1	Introduction of Biology	a1, a2, b1, c2, d1, d2	Biology Zoology	1	2		

نائب العميد لشئون الجودة عميد الكلية عميد مركز التطوير وضمان الجودة رئيس الجامعة د. عبدالرؤف الشوكاني أ.د. هدى العماد أ.د. القاسم د. عبدالرقيب الشامي محمد عباس









الجمهورية اليمنية والمهورية العالي والبحث المجمهورية التعليم العالي والبحث المجمعة صنعاء المجمعة صنعاء كلية الطب البيطري

Ecology Biotechnology The cell The cell The cells structure composition and function Prokaryote a1, a2, b1, c2, d1, d2 Biotechnology The cells structure composition and function Desin probability Description kind of porigin Observation sample of origin origin properties Data the kingdom distributions kingdom properties ldentify kingdom continuous kingdom. Phylum a1, a2, b1, c2, d1, d2 Phylum a1, a2, b1, c2, d1, d2 Phylum Comparison between Prokaryote and Eukaryote cells Arthropoda Chordata Replication of Eukaryote cells Reduction division and Gametogenesis Types of living tissues a1, a2, b1, c2, d1, d2 Stem of cells a1, a2, b1, c2, d1, d2 Cell cell properties 1 2				Datana		
The cell Biotechnology The cells structure composition and function Prokaryote a1, a2, b1, c2, d1, d2 Biotechnology The cells structure composition and function Desin probability Description kind of p origin Observation sample of origin origin properties Data the kingdom distributions. kingdom properties Identify kingdom continuous kingdom. Phylum a1, a2, b1, c2, d1, d2 a1, a2, b1, c2, d1, d2 Phylum a1, a2, b1, c2, d1, d2 Replication of Eukaryote cells Types of living tissues a1, a2, b1, c2, d1, d2 Stem of cells Biotechnology The cells structure composition and function Desin probability Description kind of p origin Observation sample of origin Observation				Botany		
The cell The cell The cells structure composition and function Prokaryote						
Prokaryote a1, a2, b1, c2, d1, d2 By the cell al, a2, b1, c2, d1, d2 a1, a2, b1, c2, d1, d2 a1, a2, b1, c2, d1, d2 By the composition and function a1, a2, b1, c2, d1, d2 By the cell al, a2, b1, c2, d1, d2 The cell composition and function a1, a2, b1, c2, d1, d2 Comparison between Prokaryote and Eukaryote cells Types of living tissues Types of cells Types of cells a1, a2, b1, c2, d1, d2 a1, a2, b1, c2, d1, d2 Composition and function Desin probability Description kind of p origin Observation sample of origin origin properties Data the kingdom distributions, kingdom properties Identify kingdom continuous kingdom. Protozoa Platyhelminthes Nematheliminthes Arthropoda Chordata Replication of Eukaryote cells Reduction division and Gametogenesis Types of living tissues 1 2 Stem of cells a1, a2, b1, c2, d1, d2 cell properties 1 2						
Prokaryote a1, a2, b1, c2, d1, d2 Bescription kind of porigin Observation sample of origin Observation sample of origin properties a1, a2, b1, c2, d1, d2 Desin probability Description kind of porigin Observation sample of origin Observation sample of origin properties Bata the kingdom distributions. kingdom properties Identify kingdom continuous kingdom. Protozoa Platyhelminthes Nematheliminthes Arthropoda Chordata Comparison between Prokaryote and Eukaryote cells Mitosis Al, a2, b1, c2, d1, d2 Replication of Eukaryote cells Reduction division and Gametogenesis Types of living tissues a1, a2, b1, c2, d1, d2 Stem of cells a1, a2, b1, c2, d1, d2 Cell cell properties 1 2				The cells structure		
Prokaryote a1, a2, b1, c2, d1, d2 Besin probability Description kind of porigin Observation sample of origin Observation sample of origin properties Data the kingdom distributions. kingdom properties Identify kingdom continuous kingdom. Protozoa Platyhelminthes Arthropoda Chordata Comparison between Prokaryote and Eukaryote cells Mitosis Types of living tissues a1, a2, b1, c2, d1, d2 Stem of cells Desin probability Description kind of porigin Observation sample of origin origin properties Data the kingdom distributions. kingdom properties I 2 Replication of Eukaryote cells Replication of Eukaryote cells Reduction division and Gametogenesis 1 2 Stem of cells a1, a2, b1, c2, d1, d2 Cell cell properties 1 2	2	The cell		composition and	1	2
Prokaryote a1, a2, b1, c2, d1, d2 Bescription kind of porigin Observation sample of origin Observation sample of origin properties a1, a2, b1, c2, d1, d2 Data the kingdom distributions. kingdom properties Identify kingdom continuous kingdom. Protozoa Phylum Comparison between Prokaryote and Eukaryote cells Mitosis A1, a2, b1, c2, d1, d2 Replication of Eukaryote cells Reduction division and Gametogenesis Types of living tissues a1, a2, b1, c2, d1, d2 Stem of cells A1, a2, b1, c2, d1, d2 Stem of cells A1, a2, b1, c2, d1, d2 Cell cell properties 1 2				function		
Prokaryote a1, a2, b1, c2, d1, d2 Bescription kind of porigin Observation sample of origin Observation sample of origin properties a1, a2, b1, c2, d1, d2 Data the kingdom distributions. kingdom properties Identify kingdom continuous kingdom. Protozoa Phylum Comparison between Prokaryote and Eukaryote cells Mitosis A1, a2, b1, c2, d1, d2 Replication of Eukaryote cells Reduction division and Gametogenesis Types of living tissues a1, a2, b1, c2, d1, d2 Stem of cells A1, a2, b1, c2, d1, d2 Stem of cells A1, a2, b1, c2, d1, d2 Cell cell properties 1 2				Desin probability		
Prokaryote a1, a2, b1, c2, d1, d2 a1, a2, b1, c2, d1, d2 Types of living tissues a1, a2, b1, c2, d1, d2 Belication of Eukaryote cells a1, a2, b1, c2, d1, d2 Belication of Eukaryote cells a1, a2, b1, c2, d1, d2 Belication of Eukaryote cells a1, a2, b1, c2, d1, d2 Belication of Eukaryote cells a1, a2, b1, c2, d1, d2 Belication of Eukaryote cells a1, a2, b1, c2, d1, d2 Belication of Eukaryote cells a1, a2, b1, c2, d1, d2 Belication of Eukaryote cells a1, a2, b1, c2, d1, d2 Belication of Eukaryote cells a1, a2, b1, c2, d1, d2 Belication of Eukaryote cells a1, a2, b1, c2, d1, d2 Belication of Eukaryote cells a1, a2, b1, c2, d1, d2 Belication of Eukaryote cells a1, a2, b1, c2, d1, d2 Belication of Eukaryote cells a1, a2, b1, c2, d1, d2 Belication of Eukaryote cells a1, a2, b1, c2, d1, d2 Belication of Eukaryote cells a1, a2, b1, c2, d1, d2 Belication of Eukaryote cells a1, a2, b1, c2, d1, d2 Belication of Eukaryote cells a1, a2, b1, c2, d1, d2 Belication of Eukaryote cells a1, a2, b1, c2, d1, d2 Belication of Eukaryote cells a1, a2, b1, c2, d1, d2 Belication of Eukaryote cells a2, a2, b1, c2, d1, d2 Belication of Eukaryote cells a2, a2, b1, c2, d1, d2 Belication of Eukaryote cells a2, a2, b1, c2, d1, d2 Belication of Eukaryote cells a3 de Arthropoda Chordata						
A Kingdom A Kingdom A Kingdom A Laz, b1, c2, d1, d2 A Laz, b1, c2, d2, d2 A Laz, b1, c2, d2		Prokaryote		_		
distributions. kingdom distributions. kingdom properties A Kingdom a1, a2, b1, c2, d1, d2 Phylum a1, a2, b1, c2, d1, d2 Protozoa Platyhelminthes Nematheliminthes Arthropoda Chordata Comparison between Prokaryote and Eukaryote cells Al, a2, b1, c2, d1, d2 Replication of a1, a2, b1, c2, d1, d2 Replication of a1, a2, b1, c2, d1, d2 Reduction division and Gametogenesis Types of living tissues a1, a2, b1, c2, d1, d2 Stem of cells a1, a2, b1, c2, d1, d2 Cell cell properties 1 2	3		d1, d2	<u> </u>	1	2
A Kingdom A A A C C A A C C A A				*		
4 Kingdom a1, a2, b1, c2, d1, d2 Phylum a1, a2, b1, c2, d1, d2 Protozoa Platyhelminthes Nematheliminthes Nematheliminthes Arthropoda Chordata 7 Mitosis a1, a2, b1, c2, d1, d2 Begin a1, a2, b1, c2, d1, d2 Types of living tissues a1, a2, b1, c2, d1, d2 a1, a2, b1, c2, d1, d2 Comparison between Prokaryote and Eukaryote cells a1, a2, b1, c2, d1, d2 Begin a1, a2, b1, c2, d1, d2 Cell cell properties 1 2 2 2 2 3 3 6 A 2 5 A 3 6 A 3 6 A 3 6 A 3 6 A 4 6 A 5 A 7 A 6 A 7 A 6 A 7 A 7 A 8 A 8 A 8 A 8 A 8 A 9 A 9 A 9				<u> </u>		
4 Kingdom a1, a2, b1, c2, d1, d2 Phylum a1, a2, b1, c2, d1, d2 Protozoa Platyhelminthes Nematheliminthes Arthropoda Chordata Comparison between Prokaryote and Eukaryote cells Mitosis Types of living tissues Types of cells a1, a2, b1, c2, d1, d2 Stem of cells a1, a2, b1, c2, d1, d2 Cell cell properties 1 2 distributions. kingdom properties Identify kingdom continuous kingdom. Protozoa Platyhelminthes Nematheliminthes Nematheliminthes Replication of Eukaryote cells Reduction division and Gametogenesis 1 2 2 2 4 2 5 2 6 3 6 4 7 2 8 2 2 8 3 6 Replication of Comparison between Arthropoda Chordata 1 2 Comparison between Arthropoda Chordata 1 2 Comparison between Arthropoda Chordata 1 2 Cell cell properties 1 2				· · ·		
4 Kingdom d1, d2 properties Identify kingdom continuous kingdom. Phylum a1, a2, b1, c2, d1, d2 Phylum Comparison between Prokaryote and Eukaryote cells Mitosis Types of living tissues Types of cells At A 2, b1, c2, d1, d2 Stem of cells At A 2, b1, c2, d1, d2 Protozoa Platyhelminthes Nematheliminthes			o1 o2 b1 o2	_		
Phylum a1, a2, b1, c2, d1, d2 Phylum a1, a2, b1, c2, d1, d2 Phylum Comparison between Prokaryote and Eukaryote cells Mitosis Types of living tissues Types of cells a1, a2, b1, c2, d1, d2 Stem of cells A1, a2, b1, c2, d1, d2 Stem of cells A1, a2, b1, c2, d1, d2 Cell cell properties Types of cells A1, a2, b1, c2, d1, d2 Cell cell properties Types of cells A1, a2, b1, c2, d1, d2 Cell cell properties Types of cells	4	Kingdom			1	2
continuous kingdom. Protozoa Platyhelminthes Nematheliminthes Nematheliminthes Arthropoda Chordata Comparison between Prokaryote and Eukaryote cells Al, a2, b1, c2, d1, d2 Replication of Eukaryote cells Reduction division and Gametogenesis Types of living tissues a1, a2, b1, c2, d1, d2 Stem of cells a1, a2, b1, c2, d1, d2 Cell cell properties 1 2	4	840	a1, a2		1	2
Phylum a1, a2, b1, c2, d1, d2 Protozoa Platyhelminthes Nematheliminthes						
Phylum a1, a2, b1, c2, d1, d2 Platyhelminthes Nematheliminthes Nematheliminthes Arthropoda Chordata Comparison between Prokaryote and Eukaryote cells Replication of Eukaryote cells Reduction division and Gametogenesis Types of living tissues a1, a2, b1, c2, d1, d2 Stem of cells a1, a2, b1, c2, d1, d2 Cell cell properties 1 2						
5 Phylum d1, d2 Nematheliminthes Arthropoda Chordata 3 6 Comparison between Prokaryote and Eukaryote cells 7 Mitosis a1, a2, b1, c2, d1, d2 Reduction division and Gametogenesis 1 2 Types of living tissues a1, a2, b1, c2, d1, d2 Cell cell properties 1 2						
Comparison between Prokaryote and Eukaryote cells Mitosis Types of living tissues Types of cells Arthropoda Chordata Replication of Eukaryote cells Reduction division and Gametogenesis 1 2 Stem of cells Arthropoda Chordata 1 2 Replication of Eukaryote cells Reduction division and Gametogenesis 1 2 Stem of cells 1 2		Dhylyn				
Chordata Comparison between Prokaryote and Eukaryote cells Replication of Eukaryote cells Ali, a2, b1, c2, d1, d2 Eukaryote cells Reduction division and Gametogenesis Types of living tissues a1, a2, b1, c2, d1, d2 Stem of cells a1, a2, b1, c2, d1, d2 Chordata 1 2 Replication of Eukaryote cells Reduction division and Gametogenesis 1 2 Stem of cells 1 2	5	Phylum	d1, d2		3	6
Comparison between Prokaryote and Eukaryote cells Replication of Eukaryote cells Mitosis Types of living tissues 1 2 Stem of cells Al, a2, b1, c2, d1, d2 Stem of cells Al, a2, b1, c2, d1, d2 Cell cell properties 1 2 Replication of Eukaryote cells Reduction division and Gametogenesis 1 2 Cell cell properties 1 2						
Prokaryote and Eukaryote cells Mitosis Application of Eukaryote cells Replication of Eukaryote cells Reduction division and Gametogenesis Types of living tissues Application of Eukaryote cells Reduction division and Gametogenesis 1 2 2 2 4 3 2 4 5 3 4 5 4 5 5 6 5 6 6 6 6 6 6 6 6 6 6 6 6 6				Chordata		
Eukaryote cells Replication of a1, a2, b1, c2, d1, d2 Eukaryote cells Reduction division and Gametogenesis Types of living tissues a1, a2, b1, c2, d1, d2 a1, a2, b1, c2, d1, d2 Stem of cells a1, a2, b1, c2, d1, d2 Cell cell properties 1 2		Comparison between				
Mitosis Al, a2, b1, c2, d1, d2 Replication of Eukaryote cells Reduction division and Gametogenesis Types of living tissues Al, a2, b1, c2, d1, d2 Stem of cells Al, a2, b1, c2, d1, d2 Cell cell properties 1 2	6	Prokaryote and			1	2
Mitosis a1, a2, b1, c2, d1, d2 Reduction division and Gametogenesis Types of living tissues a1, a2, b1, c2, d1, d2 a1, a2, b1, c2, d1, d2 Stem of cells a1, a2, b1, c2, d1, d2 cell properties 1 2		Eukaryote cells				
Mitosis d1, d2 Reduction division and Gametogenesis Types of living tissues a1, a2, b1, c2, d1, d2 Stem of cells a1, a2, b1, c2, d1, d2 Cell cell properties 1 2				Replication of		
Mitosis d1, d2 Reduction division and Gametogenesis Types of living tissues a1, a2, b1, c2, d1, d2 Stem of cells a1, a2, b1, c2, d1, d2 Cell cell properties 1 2			a1 a2 b1 c2	Fukarvote cells		
Reduction division and Gametogenesis Types of living tissues a1, a2, b1, c2, d1, d2 a1, a2, b1, c2, Cell cell properties 1 2	7	Mitosis		•	1	2
Types of living a1, a2, b1, c2, d1, d2 1 2 Stem of cells a1, a2, b1, c2, Cell cell properties 1 2	,		u1, u2	Reduction division and	1	2
Types of living a1, a2, b1, c2, d1, d2 1 2 Stem of cells a1, a2, b1, c2, Cell cell properties 1 2				Gametogenesis		
8 tissues d1, d2 1 2 9 Stem of cells a1, a2, b1, c2, d1, d2 Cell cell properties 1 2				Gametogenesis		
9 Stem of cells a1, a2, b1, c2, Cell cell properties 1 2		Types of living				
9 Stem of cells a1, a2, b1, c2, Cell cell properties 1 2	8	tissues	d1, d2		1	2
9 Stem of cells d1, d2 cell properties 1 2		ussues				
di, dz cen properties		G	a1, a2, b1, c2,			
drawing cell	9	Stem of cells	d1, d2	cell properties	1	2
urawing con				drawing cell		

نائب العميد لشئون الجودة عميد الكلية عميد مركز التطوير وضمان الجودة رئيس الجامعة د. عبدالرقيب الشامي أ.د. القاسم د. عبدالرؤف الشوكاني أ.د. هدى العماد محمد عباس









الجمهورية اليمنية والبحث المنية ونعاء وزارة التعليم العالي والبحث المجمعة صنعاء والبحث كلية الطب البيطري

10	Blood composition and function	a1, a2, b1, c2, d1, d2		1	2
11	General characteristic of Bacteria			1	2
12	General characteristic of virus	a1, a2, b1, c2, d1, d2		1	2
	Number of Weeks /and Units Per Semester				

	b- Training Aspect:						
Order	Training Tasks	CILOs (symbols)	Number of weeks	Contact hours			
1	The microscope and The cell	c1, c2, d1, d ⁷	1	2			
2	Prokaryote and Eukaryote cells	c1, c2, d1, d ⁷	1	2			
3	Mitosis	c1, c2, d1, d ⁷	1	2			
4	Types of tissues	c1, c2, d1, d ⁷	1	2			
5	Protozoa: Mastigophora, Sarcodena, Ciliphora, Sporozoa	c1, c2, d1, d ⁷	2	4			
6	Nematoda: Ascaris, Ancylostoma	c1, c2, d1, d ⁷	1	2			
7	Trematoda: Fasciola, Schistosoma	c1, c2, d1, d ⁷	2	2			
8	Cestoda: Taenia	c1, c2, d1, d ⁷	1	2			
9	Mosquitoes	c1, c2, d1, d ⁷	1	2			
10	Organismal	c1, c2, d1, d ⁷	1	2			
11	Draw and design	c1, c2, d1, d ⁷	2	4			
	Number of Weeks /and Units Per Semester						

نائب العميد لشئون الجودة عميد الكلية عميد مركز التطوير وضمان الجودة رئيس الجامعة د. عبدالرقيب الشامي أ.د. القاسم د. عبدالرؤف الشوكاني أ.د. هدى العماد محمد عباس









V. Teaching strategies of the course:

- Brainstorming
- Teacher explanation
- Directed reading
- Silent Reading
- Self-learning
- Problem solving
- Cooperative learning
- Group work
- Pair work
- Listening to short dialogues

3-Assessment Methods:

Home Active

Home Work

Class Work

Research Papers

Watch Video

Note sample

Abstract

V	VI. Schedule of Assessment Tasks for Students During the Semester:						
No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes (CILOs symbols)		
1	Participation, quizzes and assignments	2-14	10	10%	a1, a2, b1, b2, c1, c2,d1		
2	Mid-Term Exam	8	10	10%	a1, a2, b1, b2, c1, c2		
3	Mid-Term Practical Exam	8	10	10%	a1, a2, b1, b2, c1, c2		

نائب العميد لشئون الجودة عميد الكلية عميد مركز التطوير وضمان الجودة رئيس الجامعة د. عبدالرقب الشامي د. عبدالرقف الشوكاني أ.د. هدى العماد أ.د. القاسم محمد عباس









4	Final Practical Exam	15	10	10%	a1, a2, b1, b2, c1, c2
5	Oral Exam	16	5	5%	a1, a2, b1, b2, c1, c2,d1
6	Final Exam	16	55	55%	a1, a2, b1, b2, c1, c2
	Total		100	100%	

VII. Students' Support:	
Office Hours/week	Other Procedures (if any)
Every sun day	Non

VIII. Learning Resource (MLA style or APA style)S:

- 1- Required Textbook(s) (maximum two)
- Morris Mano, "Biology 3", by Prentice Hall 2011 ISBN. 1995
 - 2- Recommended Readings and Reference Materials
 - R. A. Serway and J. S. Faughn, General Biology, 2006, Holt, USA.
 - John F.Warrly, "General Biology", Pearson Education, Russia
 - **3-** Essential References

Richards, Jack C., Hull, Jonathan and Proctor, Susan. (2008). Biology-o. Third edit

Cambridge U

http://www.ph.utexas.edu/~ General Biology /resources/resources.html

- 4- Electronic Materials and Web Sites etc.
- http://mastersinesl.com/2012/40-best-sites-for-esl-study-materials-textbooks-and-software/
- http://learnenglishteens.britishcouncil.org/skills/listening-skills-practice http://www.everythingesl.net/inservices/elementary_sites_ells_71638.php
- http://www.everythingesl.net/inservices/elementary_sites_ells_71638.php
- http://www.5minuteenglish.com/the-fun-of-learning-english.htm

http://www.funbrain.com/cgi-bin/gg.cgi?A1=m&A2=0&A3=0&AFUNCT=1&ALEVEL=0

نائب العميد لشئون الجودة عميد الكلية عميد مركز التطوير وضمان الجودة رئيس الجامعة د. عبدالرقيب الشامي د. عبدالرقف الشوكاني أ.د. هدى العماد أ.د. القاسم محمد عباس









http://classroom.jc-schools.net/basic/la-grammar.html

http://classroom-aid.com/2012/08/28/25-online-games-for-english-language-learners/

https://www.vocabulary.co.il/

http://www.talkenglish.com/listening/listenintermediate.aspxhttps://learnenglish.britishcouncil.grammar/clause-phrase-and-

- sentence/sentence-structure
- http://classroom.jc-schools.net/basic/la-grammar.html
- http://www.factmonster.com/homework/writingskills1.html
 - 5- Other Learning Material:

I. Course Policies: (including plagiarism, academic honesty, attendance etc)

Class Attendance:

- Attendance in all lectures and practical classes are required, except in very emergency circumstances, such as serious illness or death in the family with providing an acceptable documentation approved by the university and forwarded by the chairman of the department. Otherwise the absence shall be considered unexcused.
- In accordance with the university rules, if the percentage of student's absence exceeds 25 % of the total lectures or practical classes, the student involved shall be disqualified in the final written and practical examination of the course and shall be deemed to have failed in the course.

Tardy:

١

٣

Roll will be called in the very beginning of each lecture and practical class. Retardation for more than three weeks without a reasonable cause, the student involved shall not be allowed to attend the class any longer and consequently shall be considered to be absent.

Exam Attendance/Punctuality:

- It is incumbent on student to report at the examination hall for checking in and rolls calling at least 15 minutes before the commencement of examination.
- A student is not allowed to submit answer booklet and leave the examination hall only on or after the passage of the half examination duration.
- A student who comes late shall not be admitted to the examination hall, only within the first 30 minutes of the examination. After this time, the student will be considered to be missed in the examination and shall be deemed to have failed in the course.

نائب العميد لشئون الجودة عميد الكلية عميد مركز التطوير وضمان الجودة رئيس الجامعة د. عبدالرقيب الشامي د. ع









When a student misses the final examination due to a legitimate medical problems or death in the family, an acceptable documentation approved by the university medical unit for the excused absence must be provided no later than three weeks and consequently the student shall be disqualified in the examination but with the excused absence.

Assignments & Projects:

- Assignments and practical reports must be submitted for assessment on or before the due date.
 - The submission date extension will not be granted only by the consent of the faculty member concerned.
 - In the case of late submission, the student must provide a reasonable explanation to the faculty member. Otherwise, 1% of the obtained marks will be subtracted for each late day, including weekends and holidays.

Cheating:

٥

- If a student is found cheating in examination (midterm or final or quizzes) (copying from unauthorized materials and another students' work or allowing other students to copy from his/her own work), the student involved shall be disqualified in the examination and shall be deemed to have failed in the course and also suspended from examinations of two more courses.
 - If a student is found engaging in any unauthorized communications (oral, sign, call, etc.), while the examination is in progress or in possessing of any authorized materials or electronic devices before the distribution of examination papers , the student involved shall be disqualified in the examination and shall be deemed to have failed the course.

Plagiarism:

- Plagiarism is the presentation of any material (text, data or figures) from any other source in preparation of assignments or practical reports without clear and adequate acknowledgement of the source.
 - Plagiarism is also the use or copy of other students' work (with, or without payment) to prepare all or part of undertaken assignments or practical reports of work submitted for assessment.
 - All types of plagiarism are unacceptable and are considered dishonest practices. If a student is found plagiarism, the student involved shall be subjected to the same penalties as in the case of cheating as already mentioned in the sub-section (5) of the course policies.

Other policies:

7

Students must switch off their mobile phones, laptops, electronic devices etc.
 before entering lecture room or lab. If a student is found using these devices

نائب العميد لشئون الجودة عميد الكلية عميد مركز التطوير وضمان الجودة رئيس الجامعة د. عبدالرقب الشامي د. عبدالرقب الشوكاني أ.د. هدى العماد أ.د. القاسم محمد عباس









while the lecture or practical work is in progress, the student involved shall be expelled out of the class and shall be considered to be absent.

نائب العميد لشئون الجودة عميد الكلية عميد مركز التطوير وضمان الجودة رئيس الجامعة د. عبدالرقيب الشامي د. عبدالرقف الشوكاني أ.د. هدى العماد أ.د. القاسم حمد عباس









Course Plan of Biology

(Information about Faculty Member Responsible for the Course:							
Name of Faculty Member		Office Hours					
Location & Telephone No.		SAT	SUN	MON	TUE	WED	THU
E-mail							

Ι	IX. Course Identification and General Information:					
1	Course Title:	Biology				
2	Course Number & Code:	FR114				
		C.H Tota			Tota	
3	Credit hours:	Theoret ical	Practical	Training	Semin ar	l
		2	-	1	-	3
4	Study level/ semester at which this course is offered:	First Year - First Semester				
5	Pre –requisite (if any):	None				
6	Co –requisite (if any):			None		
7	Program (s) in which the course is offered:	Bachelor of Veterinary Medicine				
8	Language of teaching the course:	English language				
9	Location of teaching the course:	Regular/ Semester				
1	Mode of delivery:		Lecture	s and Pract	ical	

نانب العميد لشئون الجودة عميد الكلية عميد مركز التطوير وضمان الجودة رئيس الجامعة د. عبدالرقيب الشامي د. عبدالرقف الشوكاني أ.د. هدى العماد أ.د. القاسم محمد عباس









الجمهورية اليمنية وزارة التعليم العالي وزارة التعليم العالي والبحث الحجامعة صنعاء كلية الطب البيطري

Location of teaching the course:

Faculty of Veterinary Medicine Building

X. Course description:

Biology is a Facility required course, This course provides a student by basic and advanced skills for understand Biology at studying environment, and at home. It presents the knowledge of basic Biology concepts. The course provides the knowledge needed to operate and utilize the operating system and office software package, and to use the. Biology and further develops students' communication skills in design, describe, Draw and using a moderately advanced materials. It also provides the students with a wide range of basic concept and develops their use Experience of medical Biology, and processes to investigate the effect of varying resistance on the Science of Biology in the environment, solve simple problems on the cost of using Science of Biology appliances, using machines and Networks.

I. Intended learning outcomes (ILOs) of the course:

After completing this course, students will be able to:

- a1- Describe how arrangement of the components of an e Biology system affects the outputs of the system.
- a2- Distinguish what is meant by Biology , relate it to an output of an Biology system
- b1- Analyze Science of Biology system.
- b2- Explain the design of biological Organization
- c1- Use the microscope in diagnose the bacteria and parasites.
- c2- Perform calculations on Biology.
- d1- Calcute the value of pressure in Biology.
- d2 Draw Type of living tissues.

I. Course Content:

نائب العميد لشئون الجودة عميد الكلية عميد مركز التطوير وضمان الجودة رئيس لجامعة د. عبدالرقب الشامي د. عبدالروف الشوكاني أ.د. هدى العماد أ.د. القاسم حمد عباس









A – Theoretical Aspect:				
Order	Topics List	Week Due	Contact Hours	
1	Introduction of Biology	1	2	
2	The cell	2	2	
3	Prokaryote	3	2	
4	Kingdom	4	2	
5	Phylum	5,6,7	6	
6	Mid-Term Exam	8	2	
7	Comparison between Prokaryote and Eukaryote cells	9	2	
8	Mitosis	10	2	
9	Types of living tissues	11	2	
10	Stem of cells	12	2	
11	Blood composition and function	13	2	
12	General characteristic of Bacteria	14	2	
13	General characteristic of virus	15	2	
14	Final Exam	16	2	
Number of Weeks /and Units Per Semester 16 32				

	b- Training Aspect:				
Order	Training Tasks	Week Due	Contact hours		
1	The microscope and The cell	1	2		
2	Prokaryote and Eukaryote cells	2	2		

نانب العميد لشئون الجودة عميد الكلية عميد مركز التطوير وضمان الجودة رئيس الجامعة د. عبدالرقيب الشامي د. عبدالرقف الشوكاني أ.د. هدى العماد أ.د. القاسم محمد عباس









3	Mitosis	3	2	
4	Types of tissues	4	2	
5	Protozoa: Mastigophora, Sarcodena, Ciliphora, Sporozoa	5,6	4	
6	Nematoda: Ascaris, Ancylostoma	7	2	
7	Mid-Term Exam	8	2	
8	Trematoda: Fasciola, Schistosoma	9,10	4	
9	Cestoda: Taenia	11	2	
10	Mosquitoes	12	2	
11	Organismal	13	2	
12	Draw and design	14,15	4	
13	Final Exam	16	2	
	Number of Weeks /and Units Per Semester 16 32			

I. Teaching strategies of the course:

- Brainstorming
- Teacher explanation
- Directed reading
- Silent Reading
- Self-learning
- Problem solving
- Cooperative learning
- Group work
- Pair work
- Listening to short dialogues

3-Assessment Methods:

Home Active

Home Work

نانب العميد لشئون الجودة عميد الكلية عميد مركز التطوير وضمان الجودة رئيس الجامعة د. عبدالرقيب الشامي د. ع









Class Work

Research Papers

Group Projects

Watch Video

Note sample

Abstract

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment
1	Participation, quizzes and assignments	2-14	10	10%
2	Mid-Term Exam	8	10	10%
3	Mid-Term Practical Exam	8	10	10%
4	Final Practical Exam	15	10	10%
5	Oral Exam	16	5	5%
6	Final Exam	16	55	55%
	Total	_	100	100%

II. Students' Support:	
Office Hours/week	Other Procedures (if any)
Every sun day	Non

III. Learning Resource (MLA style or APA style)S:

- 1- Required Textbook(s) (maximum two)
- Morris Mano, "Biology 3", by Prentice Hall 2011 ISBN. 1995
 - 2- Recommended Readings and Reference Materials
 - R. A. Serway and J. S. Faughn, General Biology, 2006, Holt, USA.
 - John F.Warrly, "General Biology", Pearson Education, Russia

نائب العميد لشئون الجودة عميد الكلية عميد مركز التطوير وضمان الجودة رئيس الجامعة د. عبدالرقيب الشامي د. عبدالرقف الشوكاني أ.د. هدى العماد أ.د. القاسم









3- Essential References

Richards, Jack C., Hull, Jonathan and Proctor, Susan. (2008).Biology-o. Third edit
Cambridge U

http://www.ph.utexas.edu/~ General Biology /resources/resources.html

- 4- Electronic Materials and Web Sites etc.
- http://mastersinesl.com/2012/40-best-sites-for-esl-study-materials-textbooks-and-software/
- http://learnenglishteens.britishcouncil.org/skills/listening-skills-practice http://www.everythingesl.net/inservices/elementary_sites_ells_71638.php
- http://www.everythingesl.net/inservices/elementary_sites_ells_71638.php
- http://www.5minuteenglish.com/the-fun-of-learning-english.htm

http://www.funbrain.com/cgi-bin/gg.cgi?A1=m&A2=0&A3=0&AFUNCT=1&ALEVEL=0

- http://classroom.jc-schools.net/basic/la-grammar.html
- http://classroom-aid.com/2012/08/28/25-online-games-for-english-language-learners/
- https://www.vocabulary.co.il/

http://www.talkenglish.com/listening/listenintermediate.aspxhttps://learnenglish.britishcouncil.grammar/clause-phrase-and-

- sentence/sentence-structure
- http://classroom.jc-schools.net/basic/la-grammar.html
- http://www.factmonster.com/homework/writingskills1.html
 - 5- Other Learning Material:

II. Course Policies: (including plagiarism, academic honesty, attendance etc)

Class Attendance:

١

 Attendance in all lectures and practical classes are required, except in very emergency circumstances, such as serious illness or death in the family with providing an acceptable documentation approved by the university and forwarded by the chairman of the department. Otherwise the absence shall be considered unexcused.

نائب العميد لشئون الجودة عميد الكلية عميد مركز التطوير وضمان الجودة رئيس الجامعة د. عبدالرقب الشامي د. عبدالروف الشوكاني أ.د. هدى العماد أ.د. القاسم محمد عباس









 In accordance with the university rules, if the percentage of student's absence exceeds 25 % of the total lectures or practical classes, the student involved shall be disqualified in the final written and practical examination of the course and shall be deemed to have failed in the course.

Tardy:

۲

٣

٤

٥

Roll will be called in the very beginning of each lecture and practical class. Retardation for more than three weeks without a reasonable cause, the student involved shall not be allowed to attend the class any longer and consequently shall be considered to be absent.

Exam Attendance/Punctuality:

- It is incumbent on student to report at the examination hall for checking in and rolls calling at least 15 minutes before the commencement of examination.
- A student is not allowed to submit answer booklet and leave the examination hall only on or after the passage of the half examination duration.
- A student who comes late shall not be admitted to the examination hall, only within the first 30 minutes of the examination. After this time, the student will be considered to be missed in the examination and shall be deemed to have failed in the course.
- When a student misses the final examination due to a legitimate medical problems or death in the family, an acceptable documentation approved by the university medical unit for the excused absence must be provided no later than three weeks and consequently the student shall be disqualified in the examination but with the excused absence.

Assignments & Projects:

- Assignments and practical reports must be submitted for assessment on or before the due date.
 - The submission date extension will not be granted only by the consent of the faculty member concerned.
 - In the case of late submission, the student must provide a reasonable explanation to the faculty member. Otherwise, 1% of the obtained marks will be subtracted for each late day, including weekends and holidays.

Cheating:

 If a student is found cheating in examination (midterm or final or quizzes) (copying from unauthorized materials and another students' work or allowing other students to copy from his/her own work), the student involved shall be

نانب العميد لشئون الجودة عميد الكلية عميد مركز التطوير وضمان الجودة رئيس الجامعة د. عبدالرقيب الشامي د. ع









disqualified in the examination and shall be deemed to have failed in the course and also suspended from examinations of two more courses.

If a student is found engaging in any unauthorized communications (oral, sign, call, etc.), while the examination is in progress or in possessing of any authorized materials or electronic devices before the distribution of examination papers , the student involved shall be disqualified in the examination and shall be deemed to have failed the course.

Plagiarism:

6

7

- Plagiarism is the presentation of any material (text, data or figures) from any other source in preparation of assignments or practical reports without clear and adequate acknowledgement of the source.
 - Plagiarism is also the use or copy of other students' work (with, or without payment) to prepare all or part of undertaken assignments or practical reports of work submitted for assessment.
 - All types of plagiarism are unacceptable and are considered dishonest practices. If a student is found plagiarism, the student involved shall be subjected to the same penalties as in the case of cheating as already mentioned in the sub-section (5) of the course policies.

Other policies:

Students must switch off their mobile phones, laptops, electronic devices etc. before entering lecture room or lab. If a student is found using these devices while the lecture or practical work is in progress, the student involved shall be expelled out of the class and shall be considered to be absent.

نائب العميد لشئون الجودة عميد الكلية عميد مركز التطوير وضمان الجودة رئيس الجامعة د. عبدالرقف الشوكاني أ.د. هدى العماد أ.د. القاسم محمد عباس