2023
TP-153

Course Specification

(Bachelor)

Course Title:	Biology for Health Specialties
Course Code:	105Bio-4
Program:	All Health Programs at Jazan University
Department:	Biology
College:	Science
Institution:	Jazan University
Version:	First Version
Last Revision Date:	

Contents

A. General information about the course: 3

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods 4

C. Course Content 5

D. Students Assessment Activities 6

E. Learning Resources and Facilities 6

F. Assessment of Course Quality 7

G. Specification Approval 7

H. Attachments 8

1- Blueprint 8

A. General information about the course:

1. Course Identification

1. Credit hours:					
(4 hrs.)					
2. Course type					
A.	☐ University	☒ College	☐Department	☐Track	☐Others
B.	☒ Required		☐Elective		
3. Level/year at which this course is offered: (Level 3 / 1st year)					
4. Course General Description:					
This course includes basic knowledge of biological organizations, biological molecules, cell biology, body tissues, and organ systems of the human body. In addition, it contains offers information on molecular biology and basic genetics.					
5. Pre-requirements for this course (if any)**:**					
English (Engl-181)					
6. Co-requisites for this course (if any)**:**					
None					
7. Course Main Objective(s):					
A. By the end of this course, the student will have a good understanding of the basic concepts of human biology, which will help them understand concepts in medical health sciences. B. The course is designed so that students can explain basic information in biological organizations, cell biology, body tissues, structure and functions of human body systems, molecular biology, and basic genetics.					

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	**55**	**100%**
2	E-learning	-	-
3	Hybrid • Traditional classroom • E-learning	-	-
4	Distance learning	-	-

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	33
2.	**Laboratory/Studio**	22
3.	**Field**	-
4.	**Tutorial**	-
5.	**Others (specify)**	-
Total		**55**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with the program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding** (Upon completion of the course, the student will be able to)			
1.1	**Define** structures, features, processes, mechanisms, modes of action, and theories of all topics related to the Principles of Biology.		Lectures, Group discussions, Lab work.	**Direct** (formative and summative): In-class interactive questioning, quizzes, written exams **Indirect:** student survey
1.2	**Recall** all processes, mechanisms, modes of actions, and theories of all topics relevant to the Principles of Biology.		Lectures, Group discussions, Lab work.	**Direct** (formative and summative): In-class interactive questioning, quizzes, written exams **Indirect:** student survey
1.3	**Identify** different structures, functions, and mechanisms related to principles of biology.		Lectures, Group discussions, Lab work.	**Direct** (formative and summative): In-class interactive questioning, quizzes, written exams **Indirect:** student survey
2.0	**Skills** (Upon completion of the course, student will be able to)			
2.1	**Examine** theoretically or practically the slides, photos, diagrams, or statements related to principles of biology.		Lectures, Group discussions, Lab work.	**Direct** (formative and summative): In-class interactive questioning, quizzes, written exams **Indirect:** student survey

C. Course Content

I. Theoretical Part

No	List of Topics (Theoretical)	Contact Hours
1.	**Introduction to Biology:** Characters of living organisms, Biological Organization, Principles of Biology, Scientific investigation, biological diversity. **Biological Molecules:** Carbohydrates, Lipids, Proteins, Nucleic Acids	3
2.	**Organization of the human body:** The Cell: Cell size, Prokaryotic / Eukaryotic Cell, Plant / Animal Cell, Cell shape. Cell constituents: Nucleus, Ribosomes, Endomembranous System.	3
3.	Mitochondria, Cytoskeleton, Centrosomes, Motile Cilia, Flagella, and Cell Junctions.	3
4.	**Cellular Reproduction and Genetics:** (Cell cycle and DNA replication).	3
5.	**Cell division**: Mitosis, cell cycle control & Meiosis.	3
6.	Heredity: Mendel's principles	1.5
7.	The flow of Genetic Material from DNA to RNA to Protein	3
8.	Genetic Mutations	1.5
9.	Digestion and Digestive System	1.5
10.	Gas Exchange and Respiratory System	1.5
11.	Circulatory & Lymphatic Systems	1.5
12.	Immune System	1.5
13.	Hormones and the Endocrine System	3
14.	Urinary System	1.5
15.	Nervous System	1.5
16.	Tissues of the Human Body: Epithelial and Connective Tissues, Bones, Cartilage, Muscular and Nervous Tissues	3
18.	Reproductive System (Female)	1.5
19.	Reproductive (Male)	1.5
	Total	**39**

II. Practical Part

No	List of Topics (Practical)	Contact Hours
1.	Laboratory Safety Measures and Microscopy	2
2.	Cell Organelles and Inclusions	2
3.	Mitosis and Meiosis	2
4.	Epithelial Tissue & Nervous Tissue	2
5.	Connective Tissue, Bone, Cartilage, Muscular Tissue	2
6.	Human Skeletal System	2

7.	Sense Organs	2
8.	Human Brain	2
9.	Human Blood (Composition and Grouping)	2
10.	Dissection Techniques and Anatomy of Relevant Mammalian Experimental Animals.	2
11.	Revision	2
	Total	**22**
Total		**61**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (In week No)	Percentage of Total Assessment Score
1.	Quiz	5th week	5%
2.	Midterm Practical Exam and Activities	6th week	10%
3.	Midterm Theory Exam	7th week	20%
4.	Final Practical Exam	11th week	15%
5.	Final theory Exam	12th week	50%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	**Biology (concepts and connections),** 9th Edition by Neil A. Campbell, Jane B. Reece, Martha R. Taylor, Eric J. Simon, and Jean L. Dickey. Pearson Benjamin Cummings, San Francisco, CA 94111, 2011.
Supportive References	**Biology,** 6th edition by Eldra P. Solomon, Lina R. Berg, and Diana W. Martin. Publisher: Brooks/Cole, Thomson Learning, 2002, ISBN: 0-03-033503-5. **Basic Genetics: Textbook & activities;** 2nd Edition by A. Abouelmagd & H. M. Ageely. Publisher: Universal Publishers: Boca Raton, Florida, USA, 2009.
Electronic Materials	https://www.ck12.org/book/CK-12-Biology/
Other Learning Materials	

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	- Lecture halls with an adequate number of seats and audio-visual facilities - Small group classes - Laboratory labs for biology provided with microscopes, computers
Technology equipment (Projector, smart board, software)	- Audio-visual facilities in lecture halls and laboratory lab of Medical Biology - Smart board for all classes and labs. - Student library
Other equipment (Depending on the nature of the specialty)	- Student compound microscopes - Stereomicroscopes - Dissecting tools - Glassware for sample maintenance - Balances - Human tissue sections - Human skeleton

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students, Faculty	Direct assessment of CLOs, Indirect surveys.
Effectiveness of Students' assessment	Students, Faculty	Direct / Indirect
Quality of learning resources	Students, Faculty	Indirect
The extent to which CLOs have been achieved	Instructor	Direct / Indirect
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewers, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	
REFERENCE NO.	
DATE	

H. Attachments

1- Blueprint

College Of Science **Course Name:** Biology for Health Specialties **Course Code:** 105Bio-4
Biology Department **Coordinator of the course:** Dr. Yahya Hasan Mahmoud Ali
Biology Program Quality and Accreditation Committee **Semester:**20242

CLOs	Course Learning Outcomes	Weight Percentage (%) of Learning Domains of the Course	Mark's Distribution of Learning Domains of the Course	Course Assessment Tools				
				Theory Quiz (5) Marks	Practical Midterm (10) Marks	Theory Midterm (20) Marks	Practical Final (15) Marks	Theory Final (50) Marks
Knowledge		76%	76					
1.1	Define structures, features, processes, mechanisms, modes of action, and theories of all topics related to principles of biology.	18%	18	1	-	4	3	10
1.2	Recall all processes, mechanisms, modes of action, and theories of all topics relevant to principles of biology.	38%	38	3	4	8	5	18
1.3	Identify different structures, functions, and mechanisms related to principles of biology.	20%	20	-	3	4	3	10
Skill		24%	24					
2.1	Examine theoretically or practically the slides, photos, diagrams, or statements related to principles of biology.	24%	24	1	3	4	4	12
Values								
V1	-	-	-	-	-	-	-	-
	Total	100%	100 Marks	5 Marks	10 Marks	20 Marks	15 Marks	50 Marks

Learning Domains	نسبة مجالات التعلم في المقرر	نسبة مجالات التعلم في الاختبار النهائي	الدرجات في الاختبار النهائي
Knowledge & Understanding	76%	76%	38
Skills	24%	24%	12
Values	--		
Total	100%	100%	50 Marks