

Course Syllabi

Course Title and Code	BHS 111 – Human Biology
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➤ **Course Identification and General Information:**

Department	Biology Department	Course Level	Level 2
Contact Hours	2 theory classes per week of 75 minutes each 1 practical lab per week of 100 minutes	Credit Hours	4(3+1)
Web Address	http://www.des.qu.edu.sa		

➤ **Course Instructor/Coordinator's Name:** Dr. Farmanour Rahman Khan

➤ **Textbook Title, Author, and Year:**

- Sylvia Mader, Michael Windelspecht, 2013. Human Biology. 13th edition, McGraw-Hill Higher Education. ISBN-13: 9780073525488

➤ **Other Supplemental Materials:**

- Campbell Biology (Concepts and Connections), 7/E edition, Reece et al, 2012.
- Biology, Johnson G. B. Raven P.H., Mason K.A., Losos J.B., Singer S.S. 2011
- Concepts of Biology, Mader S.S., 2011.

➤ **Specific Course Information:**

- **Catalog Description:** Structure of the human systems (digestive, respiratory, nervous, excretory,.....etc)
- **Pre-requisites:** None
- **Co-Requisites:** None.
- **Required, Elective, or Selected Elective:** Required.

➤ **Specific Goals for the Course:** Summary of the main learning outcomes for enrolled students.

- By the end of this program students will be able to:
- demonstrate basic knowledge and understanding of the central facts and concepts of Human Biology
- Demonstrate and understanding of the relevance of Human Biology knowledge to problems in area such as human health and disease.
- Demonstrate basic knowledge and understanding of the main investigative methods used in human biology in the laboratory

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➤ **Program Outcomes Addressed by the Course:**

This course provides the following outcomes with the following relationship:

PYP Program Outcome	Relationship to Course
The course contributes to the development of student skills in English writing, reading and conversation	High
The course contributes to the development of student skills in computer and its application in learning process	Not Related
The course helps to develop the skill of the students in the learning process.	High
The course helps to develop the skill of students in compliance and accounting.	Medium
The course helps to develop the skill of students in interaction with the University environment and for undergraduate study.	High
The course helps to develop the skill of students in interaction with the environment and the needs and attitudes of the community and science.	High
The course helps to develop the skill of students on effective interaction on student activities.	High
The course helps to develop student skills in the effective interaction in volunteer work.	High
The course helps to develop student skills in effective leadership.	Medium
The course helps to develop student skills in linking information to realistic applications.	High
The course helps to develop student skills in estimating functional responsibility toward national growth.	Medium
The course helps to develop student skills in linking information to realistic applications.	High
The course helps to develop the skill of students on work ethic.	Not Related
The course helps to develop student skills in assessing the scientific career path chosen	High
The course strengthens ties education collaborative learning (peer-to-peer and other appropriate sources).	Medium
The course fosters the development of student skills in creative thinking, innovative and positive.	High
The course instills the principles and positive communication within groups (enjoy the team spirit).	Not Related

The course contributes to the development of student skills in methods of constructive dialogue.	Not Related
The course fosters the development of student skills in making decisions.	Not Related
The course helps to develop the skill of the students in problem solving.	High
The course helps to develop the skill of students on constructive criticism.	Not Related

➤ **Brief List of Topics to be Covered:**

- Cell structure and function
- Human body systems (Integumentary, skeletal & muscular system, digestive, immunity, nervous.... etc)

➤ **Outcome Assessment:**

- 1. Direct Assessment**
- Midterm Written Exam I
 - Midterm Written Exam II
 - Final Written Exam
 - Quizzes
 - Homework
 - Integrative Projects
 - Students' Portfolios
 - Case Study
 - Oral Exams
 - Written Reports
 - Participation in Lecture
 - Illustrative Presentations
 - Use of Computer Facilities by Students
 - Reading of References Related to Course Topics
 - Team Work
 - Practice in the Lab
- 2. Indirect Assessment**
- Pre-Course Questionnaire
 - Post-Course Questionnaire
 - Group Discussions
 - Students' Interviews

➤ **Course Outline:**

Weeks	Date	Contact Hours	Chapter	Topics
1		-	Orientation	Exploring life and science
2	12-16/11	5	Chapter 3 Cell structure and function	What is a cell? Page: 45 How cells are organized Page: 48 The plasma membrane and how substance cross it Page: 50 Nucleus and endomembrane system Page: 54 The cytoskeleton, cell movement, and cell junctions Page: 56 Mitochondria and cellular metabolism Page: 58
3	19-23/11	5	Chapter 4 Organization and Regulation of Body Systems	Types of tissues Page: 68 Connective Tissue connects and support Page: 68 Muscular tissue moves the body Page: 71 Nervous Tissue communicates Page: 73 Epithelial tissue protects Page: 75 Integumentary system Page: 77 Organ systems, Body cavities and Body membranes Page: 82 Homeostasis Page 84
4	26/11-1/12	5	Chapter 5 Cardiovascular System: Heart and Blood Vessels	Overview of the Cardiovascular System Page: 92 The types of blood vessels Page: 93 The heart is a double pump Page: 94 Features of the cardiovascular system Page: 99 Two cardiovascular pathways

				<p>Page: 102 Exchange at the capillaries</p> <p>Blood: An Overview Page: 114 Red blood cells and transport of oxygen Page: 116 White blood cells and defence against disease Page: 119 Platelets and blood clotting Page: 121 Blood typing and transfusions Page: 124</p>
5	4-8/12	Eid Adha	إجازة عيد الأضحى	
6	11-15/12	Eid Adha	إجازة عيد الأضحى	
6	18-22/12	5	<p>Chapter 7 The Lymphatic and Immune Systems</p>	<p>Microbes, Pathogens, and You Page: 132 The lymphatic system Page: 135 Innate Immune defences Page: 137 Adaptive immune defences Page: 140 Acquired immunity Page: 145</p>
7	25-29/12	5	<p>Chapter 8 Digestive System and Nutrition</p>	<p>Overview of digestion Page: 169 The mouth, pharynx, and esophagus Page: 171 The stomach and small intestine Page: 173 The accessory organs and regulation of secretions Page: 178 The large intestine and defecation Page: 180</p>
8	2-6/1/1436	5	<p>Chapter 9 Respiratory System</p>	<p>The Respiratory System Page: 197 The upper respiratory tract Page: 198</p>

				<p>The lower respiratory tract Page: 200</p> <p>Mechanism of breathing Page: 203</p> <p>Control of ventilation Page: 206</p> <p>Gas exchanges in the body Page: 207</p> <p>The Urinary System Page: 218</p> <p>Kidney structure Page: 222</p> <p>Urine formation Page: 225</p> <p>Kidneys and Homeostasis Page: 228</p>
9	9-13/1		Midterm Exam	
10	16-20/1	5	Chapter 11 Skeletal System	<p>Overview of skeletal system Page: 239</p> <p>Bones of the axial skeleton Page: 241</p> <p>Bones of the appendicular skeleton Page: 245</p> <p>Articulations Page: 249</p>
11	23-27/1	5	Chapter 12 Muscular System	<p>Overview of the muscular system Page: 261</p> <p>Skeletal muscle Fiber contraction Page: 265</p>
12	1-5/2	5	Chapter 13 Nervous System	<p>Overview of the nervous system Page: 284</p> <p>The central nervous system Page: 291</p> <p>The limbic system and higher mental functions Page: 297</p> <p>The peripheral nervous system Page: 299</p>
13	8-12/2	5	Chapter 14 Senses	<p>Overview of sensory receptors and sensations Page: 312</p> <p>Somatic senses</p>

				<p>Page: 314 Senses of taste and smell Page: 316 Sense of vision Page: 318 Sense of hearing Page: 324</p>
14	15-19/2	5	<p>Chapter 15 Endocrine System</p>	<p>Endocrine glands Page: 334 Hypothalamus and Pituitary gland Page: 339 Thyroid and Parathyroid glands Page: 343 Adrenal glands Page: 345 Pancreas Page: 349 Other endocrine glands Page: 352 Hormone and Homeostasis Page: 354</p>
15	22-26/2	5	<p>Chapter 16 Reproductive System</p>	<p>Human life cycle Page: 361 Male reproductive system Page: 363 Female reproductive system Page: 366 The ovarian cycle Page: 369</p>
17	29/2-3/3	Revision	Revision	
18	6-10/3	Final Exam	Final Exam	
		60	Total Contact Hours	

Marks Distribution:

Quiz: 10 Marks

Mid Term Exam: 30 Marks

Final Exams: 60 Marks

Total: 100 Marks