

<b>Course Name</b>	Basic Science 1					
<b>Course Information</b>	<b>Course Code</b>	<b>Course No.</b>	<b>Course Level</b>	<b>Credit Hours</b>	<b>Weekly contact hours</b>	<b>Prerequisite(s)</b>
	2417-304	304	Preparatory Year	2	4	-
<b>Course Track</b>	<input type="checkbox"/> University Requirement <input checked="" type="checkbox"/> College Requirement <input type="checkbox"/> Specialized Core <input type="checkbox"/> Electives					

#### Course Description:

The main purpose of this course is to provide help to the medical students in the preparatory year to understand the basic concepts of the subjects of cytology, anatomy, physiology, immunology, biochemistry and genetics. The course presents foundations of these subjects and describes them in simple details and language to make them understandable to students. This course will focus on naming and describing the structure and function of cells. Build a good foundation in anatomy, physiology and immunology. Describe the circulatory, respiratory system, urinary system and body defenses. This course will also focus on biological macromolecules (proteins, carbohydrates, lipids, and nucleic acids), their structure and function. Recognize the fundamental concepts of cellular reproduction. Introduce students to the core concepts of what genes are and how they work, enabling students to appreciate the transfer of genetic information in living cells, describe the basic aspects of the flow of genetic information from DNA to proteins. Recognize how the hereditary information in DNA controls what an organism looks like and how it works and recognize how to identify and classify mutations in DNA. Understanding the principal concepts and terminology of these subjects will help the students to understand these and other medical subjects when delivered in more details in the advanced classes in their designated colleges.

#### Course Outcomes:

- Explain the concepts of organic compounds.
- Provide an overview of cytology, and cellular metabolism.
- Recognize the fundamental concepts of genetics, and cellular reproduction.
- Recognize the fundamental concept of DNA structure and function.
- Recognize the basic concepts of animal structure and function.
- Recognize the fundamental concept of circulation and respiration.
- Explain the basic concepts of defense system.

<b>Assessment Policy</b>	<b>Assignment</b>	10%	<b>Quiz</b>	15%	<b>Lab (Virtual lab)</b>		<b>Project</b>	5%
	<b>Midterm</b>	30%	<b>Final</b>	40%	<b>Others</b>	--%		
<b>Textbook</b>	Campbell Essential Biology with Physiology, A custom edition for: Basic Sciences Department, Preparatory Year Deanship, King Faisal University ( Custom edition + Access code) ISBN: 9781839613739							
<b>References</b>	Simon. Reece. Dickey, "Campbell Essential Biology with Physiology", Pearson, 2019-sixth edition							

