DEREE COLLEGE SYLLABUS FOR:

BI 1017 HUMAN BIOLOGY: BODY ANATOMY AND CURRENT ISSUES **3/2/4**

UK LEVEL: 4
UK CREDITS: 20

(Updated Fall 2022)

PREREQUISITES:	None
CATALOG DESCRIPTION:	An issues-based course designed for non-science majors that takes a fresh approach to the field of biology. Emphasis is put on basic biological processes, structure and function of organs and organ systems as well as diseases and infections of the human body.
RATIONALE:	An issues based 4cr. course with labs, suitable for non-science majors, the approach of which helps students to experience the relationships between the various fields of biology, the interdisciplinary nature of today's biology, and the intimate connection between biology and social issues. The aim is to make students aware that biology is both interesting and relevant to their lives. Facts are taught in a context that emphasizes how they are produced, organized, and used to solve problems.
LEARNING OUTCOMES:	As a result of taking this course, the student should be able to: 1. Demonstrate basic knowledge of the scientific method, core biology concepts and principles. 2. Identify the hierarchical architecture of the human body from molecules, to cells, tissues, organs, organ systems, and the whole organism. 3. Develop basic knowledge of the human body anatomy in terms of structure and function of the organ systems in healthy and disease state of the body. 4. Demonstrate knowledge of various ethical issues in relation to Human Body state and function. 5. Develop the necessary analytical skills to understand the nature of scientific inquiry by practicing inquiry in the laboratory and by addressing the right questions and applying the appropriate methodology.
METHOD OF TEACHING AND LEARNING:	In congruence with the teaching and learning strategy of the college, the following tools are used: ➢ Class lectures, interactive learning (class discussions, group work) video presentations, and practical problems solved in class. ➢ Exercises and primary source documents are assigned as homework, the solutions of which are reviewed in class. ➢ Laboratory work (some laboratory reports and drawings may be required). ➢ CD-ROMS (The Dynamic Human, Explorations in Human Biology. Virtual Biology Laboratory, Explorations in Cell Biology & Genetics). ➢ http://www.aw-bc.com/humanbiology/ ➢ Office hours: students are encouraged to make full use of the office hours of their instructor, where they can ask questions, see their exam paper, and/or go over lecture/lab material. ➢ Use of a blackboard site, where instructors post lecture notes, assignment instructions, timely announcements, as well as additional resources.
ASSESSMENT:	**Summative:**

Midterm examination In-class lab midterm (1/2-hour), 10% (Microscopy slide identification, diagram labelling, organ identification, problem solving, short answers, classification of organisms, chemical reactions of processes etc.) In-class midterm examination (2-hour), 30% (Multiple choice/short answers/matching /essay questions combination/problem solving)	**40%**
Final examination In-class lab final (1/2-hour), 10%	**60%**

	(Microscopy slide identification, diagram labelling, organ identification, problem solving, short answers, classification of organisms, chemical reactions of processes etc.) In-class midterm examination (2-hour), 50% (Multiple choice/short answers/matching /essay questions combination/problem solving)	

Formative:

Multiple "on-line diagnostic" tests Multiple choice/short answers/	0
essay questions	0

The **formative MC (on-line) and written essays** aim to prepare students for the examination. Students are expected to submit feedback on their performance.
The two lab exams test the practical component of all learning outcomes of the course as stated in learning outcome 5.
The midterm examination tests Learning Outcomes 1&2.
The final examination tests all learning outcomes and it is comprehensive.

The final grade for this module will be determined by averaging all summative assessment grades, based on the predetermined weights for each assessment. If students pass the comprehensive assessment that tests all Learning Outcomes for this module and the average grade for the module is 40 or higher, students are not required to resit any failed assessments.

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INDICATIVE READING:	**REQUIRED READING:** **Textbook:** Johnson, M. D. 2016. *Human Biology: Concepts and Current Issues*. 8th edition, Pearson. **Lab Manual:** Mader, S. S. 2014. *Inquiry into Life, Lab Manual*. McGraw-Hill Higher Education. **RECOMMENDED READING:** N/A
INDICATIVE MATERIAL: *(e.g. audiovisual, digital material, etc.)*	**REQUIRED MATERIAL:** N/A **RECOMMENDED MATERIAL:** N/A
COMMUNICATION REQUIREMENTS:	N/A
SOFTWARE REQUIREMENTS:	Microsoft Word, Microsoft PowerPoint, Blackboard CMS
WWW RESOURCES:	http://www.aw-bc.com/humanbiology/ http://highered.mheducation.com/sites/0072347325/information_center_view0/index.html http://www.mhhe.com/biosci/genbio/mader http://www.mhhe.com/maderinquiry14 http://www.dnalc.org http://www.medtropolis.com/VBody.asp http://www.whitman.edu/biology/vpd/ http://www.cellsalive.com/ http://multimedia.mcb.harvard.edu/media.html http://www.mcb.harvard.edu/BioLinks.html http://www.mhhe.com/biosci/esp/2002_general/Esp/default.htm

	http://nhscience.lonestar.edu/biol/bio1int.htm http://biology.uco.edu/AnimalBiology/Tissues/Tissuhome.html http://www.sciam.com
INDICATIVE CONTENT (LEC):	1. Human Biology, Science, and Society 2. The Chemistry of Living Things 3. Structure and Function of Cells 4. From Cells to Organ Systems 5. The Digestive system and Nutrition 6. The Skeletal System and the Muscular System 7. The Circulatory System 8. The Respiratory System and the Urinary System 9. The Immune System and Mechanisms of Defence 10. The Nervous System-Integration and Control 11. The Sensory System 12. The Endocrine System 13. The Reproductive System
INDICATIVE CONTENT (LAB):	1. Laboratory Safety. The Scientific Method 2. Metric Measurement and Microscopy 3. Chemical Composition of Cells 4. Cell Structure and Function 5. Enzymes and Biological Processes 6. Animal Tissues 7. Basic Human Body Anatomy 8. The Digestive System 9. The Nervous System 10. The Senses 11. Human Diseases 12. Human Reproduction & Sexually Transmitted Diseases (STDs)