

TEMPLATE FOR COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	College of Engineering / Al Ayen Iraq University
2. University Department/Centre	Department of Biomedical Engineering
3. Course title/code	Anatomy of Upper and Lower Limbs / MDER223
4. Modes of Attendance offered	Direct attendance only
5. Semester/Year	First Semester / Second Year
6. Number of hours tuition (total)	4 hours / 3 units / total 60 hours
7. Date of production/revision of this specification	September 18, 2024
8. Aims of the Course	
This course provides the student with basic knowledge of human anatomy at the microscopic examination level and the gross examination level of human body structures and organs and their functions.	
It focuses on normal non-pathological structures and organs as well as related diseases.	
This course also provides basic biological knowledge specific to human systems for bioengineering applications.	

9• Learning Outcomes, Teaching, Learning and Assessment Methods

A- Cognitive Objectives

- A1- Understanding the human body anatomically and its related parts.
- A2- Understanding the analysis of normal and abnormal body movements.
- A3- Distinguishing between normal and abnormal positions and sizes of various body parts and organs.
- A4- Recognizing the shapes, parts, and anatomical details of each part or organ in the body.
- A5- Identifying the locations of various parts and organs and the ability to describe them.
- A6- Understanding the normal function of each organ in the body.

B - Skills Objectives Specific to the Course

- B1 - Ability to handle the human body in its normal or abnormal states.
- B2 - Ability to analyze the correct and incorrect anatomical positions of the human body.
- B3 - Ability to understand data in finding solutions to damaged anatomical conditions.
- B4- Ability to understand the basics of solving functional disorders of body organs.

Teaching and Learning Methods

Direct instruction, discussions, cooperative learning

Assessment Methods

- 1- Monthly exams
- 2- Participation and discussion during the lecture
- 3- Assignments
- 4- Final exams

C- Affective and Value Objectives

- C1- Completing homework assignments
- C2- Trying to understand the logical structure of anatomy.
- C3- Students striving to understand the principles of body anatomy.
- C4- Actively participating in discussions during the anatomy lecture.

Teaching and Learning Methods

Lectures

Reading textbooks, resources, and visiting some websites (self-learning).

Class discussions

Assessment Methods

Oral tests

Written tests

Written tests include: - Objective tests, Essay tests include: Short answer tests, Open-ended answer tests

D - General and Transferable Qualifying Skills (Other employability and personal development skills)

- D1- Working efficiently within a team.
- D2- Organizing thoughts
- D3- Effectively solving problems
- D4- Ability to handle pressure and work with high quality

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit/Topic Name	Teaching Method	Assessment Method
1	4	Students should have an introduction to anatomy, terms of description, movement, and know the basic anatomical structures	Introduction to anatomy, terms of description & movement Basic anatomical structures	Lecture	Daily assignment
2	4	Study the imaging anatomy and sectional anatomy	Imaging anatomy, sectional anatomy Osteology of shoulder region, joints of shoulder girdle	Lecture	Daily exam
3	4	Study the osteology of shoulder region, muscles and joints of shoulder girdle, axilla & brachial plexus	Scapular & shoulder muscles, axilla & brachial plexus	Lecture with in-class discussion	In-class discussion
4	4	Study the arm (bones & muscles), elbow joint, cubital fossa	Arm & elbow joint	Lecture	Daily exam
5	4	Study the forearm region (bones, muscles and joints)	The Cubital fossa & forearm	Lecture	In-class discussion
6	4	Study the skeleton & structures of the hand	Wrist & hand	Lecture with in-class discussion	In-class discussion
7	2	An examination of the first six lectures	Mid-Term Theoretical Exam	Monthly exam	Monthly exam
8	4	Study the gluteal region, its skeleton and muscles	The gluteal region	Lecture with in-class discussion	Daily exam
9	4	Study the hip joint & the thigh (bone & muscles)	The hip joint & osteology of femur, the thigh	Lecture	In-class participation
10	4	Study the knee joint & popliteal fossa, the leg & its compartments, venous system of lower limb	Knee joint & popliteal fossa, the leg & its compartments, venous system of lower limb	Lecture	In-class discussion

11	4	Study the ankle joint & arches of the foot, the foot & nerve injuries of lower limb	Ankle joint & arches of the foot, the foot, nerve injuries of lower limb	Lecture with in-class discussion	Daily exam
12	2	An examination of 7-11 lectures	Mid-Term Theoretical Exam	Monthly exam	Monthly exam
13	4	Seminars about different diseases related to the topics covered in this course	Seminars	Presentations	Presentations
14	1	Final practical exam	Final practical exam	Final practical exam	Final practical exam
15	Preparation for the final exam				

11. Infrastructure

Required textbooks	Seeley R. R.; Stephens T. D. & Tate P. (1998) Anatomy & Physiology, fourth edition. Moore K. L. & Dalley A. f. (1999). Clinically Oriented Anatomy, fourth edition.
Main References (Sources)	Tortora G. J. Principles of Human Anatomy, tenth edition; 2005.
Recommended Books and References (Scientific Journals, Reports,....)	ell R. S. (1976). An Atlas of Normal Radiographic Anatomy, first edition.3
Electronic References, Websites,.....	https://www.kenhub.com/

12. The development of the curriculum plan

Enhancing student capabilities by giving them some lesson titles related to the curriculum and having them research, investigate, and write reports on this topic. After discussion and correction by the course instructor, these reports are included in the prescribed curriculum and considered part of it, and are included in the exam.