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**Department of Physical Eduction**

**College of Education**

**Salahaddin University – Shaqlawa**

**Subject: Introduction to Human Anatomy**

**Course Book Year 1, Second Semester**

**Lecturer's name: Dr. Ali Astokorki**

**Academic Year: *2020/2021***

**Course Book**

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| **1. Course name** | **Introduction to Human Anatomy** | |
| **2. Lecturer in charge** | **Dr. Ali Astokorki** | |
| **3. Department/ College** | **Physical Eduction** | |
| **4. Contact** | **e-mail: aliastokorki@gmail.com**  [**07518079081**](Tel:07518079081)  **07504570709** | |
| **5. Time (in hours) per week** | **Theory: 2 hrs.** | |
| **6. Office hours** | **12:30 – 14:30 Saturday** | |
| **7. Course code** |  | |
| **8. Teacher's academic**  **profile** | **Address:** 58 D  Zanko  Erbil  Iraq  PhD Ali Astokorki  School of Sport & Exercise Sciences, University of Kent  Chatham  Kent  ME4 4AG  Email: aliastokorki@gmail.com  Mob: 009647504570709  009647518079081  **Teaching/Administration Experience**  **2014-2016 Graduate Teaching Assistant – University of Kent, UK**  - Teaching the module of Introduction to Professional Skills  The module aims to provide students with a basic knowledge of professional skills, including employability skills, and research methods. This includes an introduction to academic writing style, referencing, plagiarism, quantitative research, qualitative research, history of science, critical thinking, and statistics.  - Teaching laboratories for Applied Sport and Exercise Physiology  - Supporting staff on several sessions on laboratory techniques in exercise physiology and leading a session on laboratory techniques to measure pain threshold and tolerance  - Supervision of data collection for BSc and MSc dissertation students  - School visit lead  - Leading school group visits to the department and introducing/supervising laboratory practicals  - Group lead for under 16 visits  2010-2012 Assistant Lecturer – Salahaddin University, Iraqi Kurdistan  - Teaching the module of Exercise Physiology  - The model aims to provide student with a basic knowledge of exercise and physiology, including anatomy, sport medicine, exercise science, and training.  - Teaching laboratories for Applied Sport and Exercise Physiology  - Supporting staff on several sessions on laboratory techniques in exercise physiology and leading a session on laboratory techniques to measure VO2max test, blood lactate analysis.  - Supervising Research Projects  This included an introduction to academic writing style, referencing, plagiarism, quantitative research, qualitative research, critical thinking, and statistics.  - School visit lead  **2009 Assistant Lecturer – University of Dohuk, Iraqi Kurdistan**  - Teaching the module of Fundamental Basketball Skills  The model aims to provide students with a basic knowledge of Basketball Skills, including dribbling, shooting, passing, defencing, jumping while taking shots, and running (transitions between offense and defence).  - The management of sport and physical activity  This module aims to manage the team of different sports and physical activities (e.g, basketball, handball, volleyball, football, etc).  **Education**  2013-Present: PhD ‘The effect of exercise-induced pain on endurance performance, and strategies to mitigate its impact’  University of Kent, UK, School of Sport and Exercise Sciences  Supervisor: Dr. Lex Mauger  2012- 2013 Language Qualification  2013 KITE Kent International Test of English = 6.5  2012 IELTS International English Language Test System = 5.5  **2007-2009 MSc ‘The effect of aerobic training on anaerobic capacity and physiological demands for basketball players’**  Salahaddin University, Iraqi Kurdistan, Physical Education, Exercise Physiology Modules taken included: Research project (thesis), sport medicine, methods of teaching, scientific research, motor learning, scouting, weight lifting, exercise science, scientific research, administration & organisation in PE, philosophy & history, computer, biomechanics, exercise physiology, statistics, sport psychology, tests & measurements and English language.  **2002-2006 BSc ‘Immune system alteration in response to different athletes in variety of games’**  Salahaddin University, Iraqi Kurdistan, Physical Education, Exercise Physiology  Modules taken included: Research project sport psychology, education, administration & organisation, society, racket games, application, statistics, fencing, sport medicine, methods of teaching, scientific research, motor learning, scouting, weight lifting, physiology, test & measurement, principle of PE training, biomechanics, volleyball, handball, gymnastic, boxing, wrestling, philosophy, anatomy, fitness of body, track & field game, soccer, swimming, basketball, Kurdish language, English language, computer.  **Research**  My principal research interests are in the role of exercise-induced pain as a cause of fatigue and how this may affect decisions to change work-rate during exercise performance. My PhD is focusing on the effect of exercise-induced pain on endurance performance, and strategies to mitigate its impact. This has involved the use of a variety of equipment, and consequently I am proficient in the use of; Vectra Genisys multi-waveform stimulator (Chattanooga Group, Hixon, TN, USA) for physiotherapies, high performance treadmills, cycle ergometers (Lode, Corival, Monark and Velotron), electromyography (EMG), online gas analysis systems (Cortex) and blood lactate/glucose analyses. I am also proficient with various IT packages, including Microsoft Office and SPSS. I have regularly presented my research at the School research seminar series.  **Publications**  - Astokorki, A.H.Y., Mauger A.R. (2016). Tolerance of exercise‐induced pain at a fixed rating of perceived exertion predicts time trial cycling performance. Scandinavian journal of medicine & science in sports, In Press, doi: 10.1111/sms.12659.  - Astokorki, A.H.Y., Mauger A.R. (2017). Transcutaneous electrical nerve stimulation reduces exercise-induced perceived muscle pain and improves endurance exercise performance. European Journal of Applied Physiology. doi: 10.1007/s00421-016-3532-6  - علي حسين يوسف، تأثير تناول الحامض الدهني اوميگا-٣ على البروتينات الدهنية لدى عدائي ٨٠٠ م، جامعة دهوك، ٢٠١٠.  - علي حسين يوسف وديار مغديد وبژار جوكل، تأثير تناول الحامض الدهني اوميگا-٣ على سكر الكلوكوز ومعدل ضربا القلب لدى عدائي ٨٠٠ م، جامعة صلاح الدين، ٢٠١٠.  **Manuscripts Under Review**  - Astokorki, A.H.Y., Mauger A.R. (2016). Task deception using a Mirror Box can influence the time-to-exhaustion of an isometric voluntary contraction.  - Astokorki, A.H.Y., Mauger A.R. (2016). The effect of compassional hyperalgesia on exercise-induced pain during endurance cycling performance. Manuscripts in preparation.  **Abstracts and Conferences**  Astokorki, A.H.Y., Mauger A.R. (2015). An investigation into the analgesic effects of transcutaneous electrical nerve stimulation and interferential current on exercise-induced pain and performance. Endurance Research Conference, Kent 2015  Astokorki, A.H.Y., Mauger A.R. (2016). The effect of compassional hyperalgesia on exercise-induced pain during endurance cycling performance. European College of Sports Science Conference, Vienna, Austria.  Astokorki, A.H.Y., Mauger A.R. (2017). ‎Transcutaneous electrical nerve stimulation inhibits central pain transmission and limits the development of peripheral muscle pain during cycling time trial performance. The British Association of Sport and Exercise Sciences Student Conference, Plymouth, UK.  **Work Experience**  2014-16 Graduate Teaching Assistant – University of Kent  2015-2016 Coach 1st team Medway Basketball (University of Kent & Greenwich)  - Developed game plans and adjusted them according to various game situations.  - Built strong rapport with athletes and assistants before, during and after coaching seasons.  - Taught a range of sport-specific skills in a clear, safe manner.  - Acted as a positive role model for team participants and in the community.  - Recruited student-athletes of the highest calibre to elevate team performance.  - Maintained thorough knowledge of all rules, game procedures, coaching techniques and current trends in Basketball.  - Developed guidelines for injury prevention.  - Demonstrated a high level of respect for opponents, officials and facilities.  - Worked closely with the athletics director in scheduling interscholastic contests.  - Drilled student-athletes in run, jump, turn, and switching man-to-man defences.  - Accepted coaching, constructive criticism and recognition with humility and composure.  - Exhibited sound judgment while executing coaching responsibilities and functions.  - Supervised practices and contests, prioritising safety at all times.  - Worked with basketball coaching staff regarding game scouting reports and game strategies for opponents.  - Maintained high academic standards for all student athletes and enforced academic discipline.  **OTHER INTERESTS**  - Coach 1st team Medway Basketball (University of Kent & Greenwich)  - Official England Basketball referee (Level 3)  - I am a keen sportsman and very into health and fitness as well as physiotherapy. I played basketball (1st Team Medway Basketball for two years and play a number of other sports recreationally.  - I love to travel and take the opportunity to visit as many countries and cultures as possible. I can speak Arabic and English to advantage level.  - I am a keen amateur cook.  Biomechanical and kinesiology of movement for PT: kinematics, kinetics, muscle force, osteokinematics, arthrokinematics, gait, path-mechanics  This course providing the vital approach and understanding of movement for physiotherapy as a science and technique. This includes an introduction and definition to biomechanical and mechanics of movement for physiotherapy. Also, this course contains kinematics, kinetics, muscle force; work, energy and power. Osteokinematics concerns with the description of bone movement when a bone swings through a range of motion around the axis in a joint, such as with flexion, extension. Arthrokinematics refers to the movement of joint surfaces, and gait. The laboratory generally delivers students parallels and supports lecture concepts throughout the use of models, assessment tools and demonstrations. Lectures meet one time and two time weekly. Students also attend three hours laboratories per week.  After successfully competing this model, students should be able to: -  - Understanding the scope and practise of movement science  - Accept the vital of an ethical approach to movement science  - Recognise the application of mechanical principles to human movement and anatomical structures.  - Identify quantification of motion without consideration of the forces involved  - Calculate velocity from time and displacement  - Distinguish work, energy and power of muscular  - Appreciate the vital of development concepts as providing foundation of the understanding of the complexity of human movement  - Use appropriate terminology to describe aspects of movement science | |
| **9. Keywords** | Anatomical posture /Anatomical movement / Anatomical plane/skeleton/joints/muscle/cell. | |
| **10. Course overview:**  The approved and provided course book for the undergraduate students of 1st graders at Physical Educationis as follow; Human Anatomy textbook; Interbit Singh…… it’s a very reliable book and important to physical fitness. Lecture presentation begins an introduction of anatomical terminology and learns gross anatomy of the following systems: skeletal, muscular, joints and overview of cellular processes and tissue classification. The practical subject reinforces lecture concepts through the use of skeletal models and demonstration. lectures apply one time with two hours weekly. | | |
| **11. Course objective:**  A sound knowledge of the gross anatomy of the human body with regarding each organ or structure of the human body  A sound knowledge about the skeletal system that he/she is going to be able to put it to practice as a physical education student.  How to cooperate with one another to get to the bottom of any problem or getting over any obstacle as they study in small groups  Learn how to respect the clients from the very beginning during learning the human body. | | |
| **12. Student's obligation;**  Its mandatory for all students in order to pass the educational year with success to attend all the theoretical sessions throughout the year to aid in their learning process of human anatomy in the proper manner, there participation in the study groups and seminar presentations not to mention answering questions and quizzes activities are all counts for extra credits. | | |
| **13. Forms of teaching**  We are currently trying to intervene the latest methods and apparatus to attract students attention to the subject like projecting power point presentations using data, plastic replicas, modules and samples of human body, text books (Human Anatomy with colour Atlas, Inderbir Singh), Cunningham’s manual for dissection volume 2 & 5 and hand-outs regarding each topic not to mention conventional teaching methods like making diagrams using white board…assuring students participation at theory sessions**.** | | |
| **14. Assessment scheme**  **Breakdown of overall assessment and examination**  As I mentioned before I always try to expand the students horizon by asking them questions that make them critically think and provide me with answers based on what they really think of the matters and not based only on fact memorization anatomy, pop quizzes every now and then, multiple sorts of lab activities like reports, mini researches and presentations at the last 15 minutes of the theoretical sessions to assure participation of all the students.  Class attendance is mandatory for all except for sick and emergency leaves  The end of the year for theoretical evaluations of the students and grades are distributed as follow;  Percentage/point allocation per activity: Assignment or exam.  Daily activity………………….2%  Quizzes (weekly exams)……… 3%  Mid‐Course exam.  Theoretical examination ……. 35%  Final‐Course exams.  Final Theory exam ……….…… 60%  Total 100/100 for the entire educational year  ‌ | | |
| **15. Student learning outcome:**  **Expected out comes of learning ;**  **By the end of the educational year the students will be able to learn the followings from the provided course of general human anatomy;**   * Have a basic understanding of human anatomy in relation to different levels of organization (e.g., cells, tissues, organs, etc.). * The correct identification of anatomical term, anatomical plane anatomical positions, anatomical movement, and direction. * A sound knowledge of the general anatomy of the human body linked to various systems regarding each organ or structure of the human body * How to cooperate with one another to get to the bottom of any problem or getting over any obstacle as they study in small groups * Learn how to take responsibilities for their actions and how to critically think or compose solutions by thinking on their own and to respect what and how others think as there could be two right answers or even more for the same question | | |
| **16. Course Reading List and References‌:**  ▪ Key references: Text book of anatomy with colour atlas.  ▪ Useful references: Cunningham’s manual for dissection volumes 2, 3 and 5, Grant’s atlas of dissection  ▪ Magazines and review (internet): [www.Instantanatomy.com](http://www.Instantanatomy.com)  [www.slideshare.net](http://www.slideshare.net), [www.thehumanbody.com](http://www.thehumanbody.com) | | |
| **17. The Topics:** | | **Lecturer's name** |
| Topic for the first semester  Introduction to human anatomy, anatomical terminology, anatomical section, anatomical plane and position, anatomical movement, anatomical directions, anatomical levels (chemical level, cellular level, tissue level, organ level, system level, organism), cell structure classification, tissue classification, blood structure classification.  Gross anatomy of organ systems of the body, Cardiovascular and Circulatory system, Respiratory system, Digestive system .osteology of the head, the skull, hyoid bone, cervical vertebrae, skeleton of the upper limb and lower limb . | | Lecturer's name  Dr. Ali Astokorki  Theory 2hours per week |
| **19. Examinations:**  ***1. Compositional:*** In this type of exam the questions usually starts with Explain how, What are the reasons for…? Why…? How….?  With their typical answers  Examples  **Explain? (6 marks- 2marks each)**  Why most of fracture of humerus bone as long bone of upper limb occurs in surgical neck?  Answer is: the anatomical neck of humerus is smooth and above the greater and lesser tubercle but the surgical neck is below the greater and lesser tubercules of humerus and is very narrow at this point so most of fracture occurs in surgical neck.  ***2.******True or false type of exams:***  In this type of exam a short sentence about a specific subject will be provided, and then students will comment on the trueness or falseness of this particular sentence.  Examples; Label the followings with either true or false;  Movement of any part of the body away from the midline is called abduction.  Answer is: true  The sagittal plane divides the body to anterior and posterior parts  Answer is: false  ***3. Multiple choices:***  In this type of exam there will be a number of phrases next or below a statement, students will match the correct phrase.  Examples; the type of joint that characterised by having a joint cavity and presence of a lubricating fluid in its cavity are named………..  Fibrous  Cartilaginous  Sutural  synovial  Answer is: synovial | | |
| **20. Extra notes:**  None! | | |
| **21. Peer review**  *I have reviewed this course book fully and I have approved it as the head of the department of* physical education | | |