



Integrated Human Biology Module – Year-2 Semester-2

Topics / Concept	Objectives	Time	T/L – activity	Dept.	comments
2011-2/SBM-10/1 Clinical anatomy	<p>Students should be able to</p> <p>discuss the anatomical/developmental/ genetic basis of common clinical conditions/examination techniques/diagnostic, management, rehabilitation procedures</p> <p>List the key points List the problems list the Learning issues in the case that is explained by the knowledge of anatomy/embryology/genetics/neuroanatomy</p> <ul style="list-style-type: none"> • injury /abnormality • signs and symptoms • clinical examination • procedure <p>Describe/ the normal</p> <ul style="list-style-type: none"> • anatomy relevant to the case (system/region/structure) • development relevant to the case • genetic mechanisms involved • neuroanatomy involved <p>Discuss how the abnormality/injury is altering the normal anatomy/development/genetic mechanisms/neuroanatomical process Discuss the anatomical basis of signs and symptoms, examination techniques used, diagnostic techniques used or procedures performed in order to manage the problem/s</p>	6 hrs	Project based learning (14groups)	Anatomy	<p>All academic staff of anatomy will supervise the projects</p> <p>student seminar/demonstration (15 min seminar/demonstration in the lab) using Window dissections, prosections , bones, volunteer human beings, cross sections, imaging techniques/diagnostic procedures: endoscopic anatomy / videos, illustrations relevant to the case</p> <p>Students may request to visit a clinic/laboratory/ward/ ETU to observe clinical presentations/ learn/observe clinical examinations/observe diagnostic procedures or procedures performed in order to manage/rehabilitate the condition.</p>
	1hr	Lecture	Anatomy		
2011-2/SBM-10/2 Cross sectional Anatomy	<ol style="list-style-type: none"> 1. understand the importance of learning cross-sectional anatomy. 2. Study the different imaging modalities available for cross-sectional imaging. 3. Learn to draw the cross sections of the body at standard levels. 4. Describe the location of abnormal foci presented on a cross section. 	5hrs	Lecture – 1hrs Presentation- 2x2 hrs	Anatomy	(Lecture 1hr, MM presentation 4hrs) Dr. Bhadra Hewawitharane, Dr. Deepthi Nanayakkara Dr. Shanthini Rosairo
			 <hr style="width: 100px; margin: 0 auto;"/>		
			<p>Chairperson Curriculum Coordinating Committee Faculty of Medicine University of Peradeniya</p>		

2011-2/SBM-10/3 Sports Medicine Workshop	Common sports injuries Diagnosis, first aid and basic management concepts	1hr 2hrs	lecturer Practical demonstration	Anatomy	Dr Suraweera Staff from orthopedics Head/Anatomy to arrange
	Physiological basis of fitness testing			Physiology	Head /physiology to arrange
	Exercise prescription for cardiopulmonary fitness	1hr	Clinical lecture demonstration	Anatomy	Lecturer from orthopedics Head /Anatomy to arrange
	Sports Nutrition	1hr	Lecture	Anatomy	
2011-2/SBM-10/4 Alcoholism	1. Alcohol metabolism and effects of long-term alcohol consumption	8hrs	4hrs– Lecture 4hrs – Student Seminar	Biochemistry	Lectures followed by a 4 hour seminar on Alcoholism
2011-2/SBM-10/5 Metabolic derangements	Diabetes Mellitus	8hrs	Student seminars	Biochemistry	
2011-2/SBM-10/6 Alcoholism	Alcohol metabolism	2hrs	Lectures	Biochemistry	
	Alcoholism – Sociological aspects	1hr	Lecture	Sociology	
	1) Be able to describe safe levels of alcohol use Be able to describe what is meant by the following terms * Social drinking * Harmful use of alcohol (or alcohol misuse) * Alcohol dependency * Binge drinking * Acute alcohol withdrawal * Delirium tremens 2) Describe the commonly used types of alcohol, and common patterns of alcohol use, in Sri Lanka. 3) Discuss different factors that contribute to alcohol misuse and dependency. 4) Briefly discuss different strategies which have been shown to be effective in reducing alcohol misuse and dependency (at a national or international level)	1hr	Lecture	Psychiatry  Chairperson Curriculum Coordinating Committee Faculty of Medicine University of Peradeniya	
2011-2/SBM-10/7 Problem Based Learning 1) Cardiac failure / Copulmonale	1. to discuss mechanisms by which breathing is controlled and the determinants of alveolar ventilation. 2. to relate the anatomy of the mouth, palate and pharynx to their function in breathing 3. to discuss the causes and mechanisms underlying chronic airflow obstruction and its complications 4. to discuss issues related to smoking , and chronic lung diseases associated with smoking 5. to discuss why the upper airway becomes vulnerable to	27hrs	Lectures	Physiology	Head/Physiology to coordinate with lecturers from the Departments of Anesthesiology & Medicine and arrange resource lectures

	obstruction during sleep 6. to discuss the pathogenesis of respiratory failure 7. to discuss the physiological basis of the management of patients with chronic airflow obstruction				
2) Acute Renal failure	1. to describe the anatomical and physiological determinants of glomerular filtration rate and renal blood flow. 2. to describe the function of the renal tubules, i.e reabsorption, secretion and urine concentration. 3. to describe the renal actions and regulation of the rennin-angiotensin system, prostaglandins and atrial natriuretic peptide. 4. to describe the role of the kidney in acid-base and potassium balance, and the consequences of hyperkalaemia. 5. to describe the mechanisms involved in fluid and electrolyte balance, thirst and salt appetite 6. to describe the volume and composition of body fluid compartments and principles rehabilitation therapy 7. to describe the categories of renal failure (pre-renal, renal, and post-renal) and the immediate consequences of acute renal failure. 8. to describe the anatomical relationships of the prostate gland and the effect of prostatic enlargement of urinary outflow.				
Causes of ill health					
2011-2/SBM-10/08 What is ill health ; Global & local situation - Trends & dynamics	1. explain what ill health is. 2. describe the current burden of disease, disease patterns in relation to global and Sri Lankan situation	1hr	Lecture	Com.med	<i>J.A. Edman</i>
2011-2/SBM-10/9 Biopsychosocial aspects - Lifestyle, personality, environment etc.	1. explain what is meant by the term 'Biopsychosocial'. 2. list the psychological and social factors that may affect health & illness. 3. describe how the psychological and social factors can affect health & illness. 4. explain briefly what is meant by the term 'stress'. 5. describe how stress can impair homeostasis.	3hrs	Lecture	Psychiatry	Chairperson Curriculum Coordinating Committee Faculty of Medicine University of Peradeniya
b. Physical and chemical factors	1. state the main physical and chemical factors that cause ill health 2. explain briefly, how these factors lead to ill health	1hr	Lecture	Medicine	
c. Nutritional, endocrine & metabolic	1. state the interrelationship between nutrition & ill health 2. state the main endocrine and metabolic factors that cause ill health 3. explain briefly, how these factors lead to ill health	1hr	Lecture	Medicine	
d. DNA & the cancer cell	1. list the factors that could cause damage to DNA. 2. describe the repair mechanisms available for damaged DNA. 3. recall that DNA repair mechanisms lead to oncogenesis. 4. list the other factors that cause transformation of normal cells	2hrs	Lectures	Bioch	

	into cancer cells. 5. state how normal cells differ from cancer cells in energy metabolism, DNA synthesis & cell division				
2011-2/SBM-10/10					
Principles of management of illnesses	1. state the principles of management of ill-health 2. appreciate that management requires multidisciplinary and holistic approaches 3. list the different modalities of management of a patient	2hrs	Lectures	Medicine	

Lecture /activity	Time	Lecturer
Introduction to clinical anatomy	1hr (Lecture)	Dr.JD/SBA
Growth anomalies and developmental anomalies	1hr	Lecture
Discussion on preparation with supervisors	1hr	All anatomy staff
Preparation time	8hrs	All anatomy staff
Seminar and demonstration	3hr	All anatomy staff



Chairperson
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