

Bangor University MBBS Year 1: Specification - S1A/Main Examination

| Bangor University (A100) North Wales Medical School Curriculum Specification | Case-Based Learning (CBL) | Topics | Learning Objectives (LO's) |
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| <p style="text-align: center;">Year 1 BMBS Medicine</p> <p>Cardiff MBBCh and Bangor BMBS Medicine programmes share an identical curriculum specification, lecture content, and programme structure.</p> <p>Contact Hamza Bhatti at hmb25kfb@bangor.ac.uk if you have any questions about these LO's.</p> | CASE 1 | 1.1 Healthy Skin | 1.1 Relate the anatomical structure of the limbs to their function in health and in injury |
| | | 1.2 Wound Healing | 1.2 Outline the physiology of bone health |
| | | 1.3 Inflammation | 1.3 Relate the motor and sensory innervation of the lower limb to clinical deficits |
| | | 1.4 Physiology of Pain 1 | 1.4 Identify the different tissues present in the limbs at a macroscopic and microscopic level |
| | | 1.5 Physiology of Pain 2 | 1.5 Outline the physiology of pain mechanisms |
| | | 1.6 NSAIDs and Analgesics | 1.6 Outline the molecular and cellular basis of inflammation and wound healing |
| | | 1.7 Ageing and Bones | 1.7 Describe skin structure and function with reference to inflammation and wound healing |
| | CASE 2 | 2.1 Social Aspects of CHD | 2.1 Relate the main structures of the thorax to their surface anatomy and radiological images |
| | | 2.2 Endothelial Function | 2.2 Describe the arterial supply of the heart |
| | | 2.3 Ischaemic Heart Disease | 2.3 Explain the physiology of cardiovascular function including cardiac muscle, the cardiac cycle and cardiac output |
| | | 2.4 Angina Treatment | 2.4 Describe endothelial cell function and the cellular changes associated with normal and accelerated cardiovascular ageing |
| | | 2.5 Cardiac Markers | 2.5 Apply the principles of cardiovascular physiology to the regulation of blood pressure |
| | CASE 3 | 3.1 Respiratory System | 3.1 Interpret the physiology of the breathing cycle |
| | | 3.2 Pulmonary Circulation | 3.2 Describe the microstructure of the lungs including the respiratory epithelium, its protective mechanisms and the role of surfactants |
| | | 3.3 Restrictive Lung Disease | 3.3 Explain regional differences between lung ventilation and perfusion |
| | | 3.4 Smoking, Cough and Lungs | 3.4 Explain the basic principles of acid/base metabolism in relation to lung function |
| | | 3.5 Respiratory Failure & | 3.5 Interpret arterial blood gas data |
| | | 3.6 Lung Histology | 3.6 Outline the neural and chemical control of ventilation in health and disease |
| | | 3.7 Sputum in Airways | 3.7 Describe the structural and functional changes in the respiratory system across the life course |
| | | 3.8 Inflammation and Disease | 3.8 Relate respiratory function to environmental exposures |
| CASE 4 | 4.1 Antibiotic Classes | 4.1 Relate the anatomical structure of the pelvis and genitourinary organs (biological male and female) to their function | |
| | 4.2 The Kidney | 4.2 Distinguish the different tissues present in the genitourinary organs of the biological male and female | |
| | 4.3 UTI's | 4.3 Relate the physiology of the menstrual cycle to reproduction and the reproductive hormones | |
| | 4.4 STI's | 4.4 Describe the physiology of puberty and development of sexual function | |
| | 4.5 Contraception | 4.5 List the different forms of contraception and their modes of action (both barrier and pharmacological) | |
| CASE 5 | 5.1 CNS Cells | 5.1 Describe the functional anatomy of the brain - the main regions of the brain, their blood supply and function. | |
| | 5.2 Memory and Memory Systems | 5.2 Relate the main structures of the brain to their radiological images on CT scan and MRI | |
| | 5.3 Ageing and Conditions | 5.3 Describe structure and function of the hearing apparatus | |
| | 5.4 Mental Capacity | 5.4 Identify the different cell types present in the brain and their role in injury and repair. | |
| | 5.5 Cognitive Assessment | 5.5 Describe how memories are stored in the brain and the neural networks underpinning cognitive function. | |
| | 5.6 Hearing Apparatus | 5.6 Discuss the social determinants of cognitive health over the life course. | |
| | 5.6 Hearing Apparatus | 5.7 Describe changes in brain structure and cognitive function across the life course. | |

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| | CASE 6 | 6.1 Physiology of the Upper GIT | 6.1 Explain the functional anatomy and physiology of the upper gastrointestinal tract |
| | | 6.2 Medical Virology | 6.2 Describe the physiology of digestion including the composition of secretions from the upper gastrointestinal tract (including pancreas) and the hormonal control of their release |
| | | 6.3 Bilirubin | 6.3 Describe the alimentary tract histology and cell defence mechanisms |
| | | 6.4 Liver in Disease | 6.4 Explain drug actions: therapeutics, pharmacokinetics; drug side effects and interactions in the treatment of upper gastrointestinal and liver disease |
| | | 6.5 Hepatic Drug Metabolism | 6.5 Describe the molecular mechanisms of therapeutic agents used to treat dyspepsia |
| | | 6.6 Upper GIT Therapeutics | 6.6 Identify the mechanisms by which the liver deals with toxins and drugs |
| | | 6.7 Health Behaviours | 6.7 Define the causes of jaundice |
| | | | 6.8 Outline the immunological principles involved in defence against viral infection using hepatitis as an example |
| | | | 6.9 Describe principles of travel immunisation |
| | | | 6.10 Describe the public health aspects of infection and infection control from a global perspective |
| | | | 6.11 Describe the effects of lifestyle and behaviour in relation to alcohol and/or drug use and their effects on individuals and communities. |