**العالي والبحث العلمي**

**القسم: تقنيات الأشعة**

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| **اسم المادة** | **باللغة العربية** | **علم وظائف الاعضاء** | **السنة الدراسية الاولى** | **عدد الساعات الاسبوعية** |
| **باللغة الانكليزية** | **Physiology** | **نظري** | **عملي** | **المجموع** | **عددالوحدات** |
| **لغة تدريس المادة** | **الانكليزية** | **2** | **2** | **4** | **6** |

**اهداف المادة :التعرف على وظائف أعضاء الجسم المختلفة**

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| **Theoretical syllabus** |
| **Details**  | **week** |
| **Introduction to physiology,cells,cell components and functions** | **1** |
| **Blood ,serum,plasma,plasma proteins function** | **2** |
| **Platelets, Erythrocytes , erythropoietin function and importance** | **3** |
| **Blood clotting, mechanism of bleed closing** | **4** |
| **Physiology of circulatory system, Heart anatomy , heart as a pump** | **5** |
| **Heart sounds and Cardiac output** | **6** |
| **Blood pressure** | **7** |
| **Digestive system** | **8** |
| **Salivary glands & its function** | **9** |
| **Liver& its function** | **10** |
| **Physiology of nervous system** | **11** |
| **Sensory system** | **12** |
| **Motor system** | **13** |
| **Anatomic of nervous system** | **14** |
| **Endocrine control mechanism,pituitary gland** | **15** |
| **First exam** | **16** |
| **Adrenal gland, endocrine pancreas** | **17** |
| **Function of respiratory system**  | **18** |
| **Lung volume, exchange & transport of gases in the body** | **19** |
| **Physiology of renal system** | **20** |
| **Kidney structure & function** | **21** |
| **Role of kidney in regulation blood pressure** | **22** |
| **Second examination**  | **23** |
| **Urine formation** | **24** |
| **Female reproductive system** | **25** |
| **Male reproductive system** | **26** |
| **Physiology of pregnancy** | **27** |
| **[fetal development** | **28** |
| **Parturition, lactation** | **29** |
| **Regulation of body temperature** | **30** |

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| **physiology practical syllabus** |
| **Details** | **week** |
| **Microscope parts & uses** | **1** |
| **Finger puncture –blood smear** | **2** |
| **Staining of blood film** | **3** |
| **Differential count of white blood cell(WBC)** | **4** |
| **Sahli method for hemoglobin estimation** | **5** |
| **Packed cell volume (PCV )** | **6** |
| **Scientific film about blood & circulating system** | **7** |
| **Blood grouping & Rh factor** | **8** |
| **Bleeding & clotting time** | **9** |
| **Red blood cell count** | **10** |
| **White blood cell count** | **11** |
| **Scientific film about bleeding & transfusion** | **12** |
| **Revision** | **13** |
| **Mid-year practical examination** | **14** |
| **Erythrocyte sedimentation rate ( ESR )** | **15** |
| **Clinical examination of the patient** | **16** |
| **Pulse & tracing of the pulse** | **17** |
| **Thermometer & its uses** | **18** |
| **Arterial blood pressure estimation** | **19** |
| **Heart sounds** | **20** |
| **Electrocardiogram (ECG)** | **21** |
| **Revision** | **22** |
| **Pulmonary volume estimation** | **23** |
| **Artificial respiration** | **24** |
| **General urine examination (GUE)** | **25** |
| **Experiments on movement coordination** | **26** |
| **Film about muscles & joints** | **27& 28** |
| **Taste sensation examination** | **29** |
| **Final examination** | **30** |