

ACADEMIC YEAR 2018/2019 - SEMESTER 2

Physiology, 2nd Year, English Module

Practical Sessions for Physiology of the Cardiovascular, Respiratory and Urinary Systems

Semester 2 practical laboratories' schedule

Seria 3 (M3) – Thursdays from 8:00 to 11:00

Seria 2 (M2) – Thursdays from 11:00 to 14:00

Seria 3 (M1) – Fridays from 8:00 to 11:00 (for gr. 7 and 8) and from 11:00 to 14:00 (for gr. 1, 2 3, 4, 5 and 6).

Practical laboratories:

1. **Practical 1** (February 28 - March 1): Properties of the myocardium: excitability, automatism and rhythmicity, conductivity. The automatism of the heart - Stannius ligatures. Action potential and the law of periodic inexcitability of the heart.
2. **Practical 2** (March 7-8): The influence of ions and mediators on heart activity. Effect of vagal stimulation on heart activity and vagal escape. Cardiac cycle. Peripheral manifestations of cardiac activity: Heart sounds. The phonocardiogram recording and analysis.
3. **Practical 3** (March 14-15): Carotidogram recording and analysis. Jugulogram. Apexocardiogram. Polygram. The heart as a pump – BIOPAC recordings.
4. **Practical 4** (March 21-22): ECG 1 – basic concepts in electrocardiography
5. **Practical 5** (March 28-29): ECG 2 – ECG recording and interpretation of normal ECG
6. **Practical 6** (April 4-5): ECG3 – ECG overview, pathological aspects
7. **Practical 7** (April 11-12): Measurement of blood pressure and its physiological changes. Sphygmogram. Capillary and venous circulation assessment.
8. **Practical 8** (April 18-19): Pulmonary volumes and pulmonary capacities (spirometry). Ventilatory flows, flow-volume loop
9. **Practical 9** (April 25-26): Respiratory gases analysis in blood and expiratory air. Pulsoximetry. Clinical illustrations.
10. **Practical 10** (May 9-10): Test from Cardiovascular Physiology (lectures). Practical laboratories recovery
11. **Practical 11** (May 16-17): Urinalysis test - physical and chemical properties of the urine, microscopic examination. Dilution-concentration test.
12. **Practical 12** (May 23-24): Renal clearance for urea, creatinine, cystatin C, inulin, para-amino-hippurate (PAH).
13. **Practical 13** (May 31, June 1): Practical laboratories recovery and review.
14. **Practical exam** (June 6-7).