

PRACTICAL SESSIONS FOR SEMESTER 2, 2017/2018
(Cardiovascular, Respiratory and Urinary Systems)
Physiology, 2nd Year, English Module

Semester 2 practical laboratories' schedule

Seria 1 (M1) – Thursdays from 8:00 to 11:00

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

Seria 3 (M3) – Fridays from 8:00 to 11:00 (for groups 17, 18, 19, 20) and from 11:00 to 14:00 (for groups 21, 22, 23 and 24).

Practical laboratories:

1. **Practical 1** (March 1-2): Properties of the myocardium: excitability, automatism and rhythmicity, conductibility. The automatism of the heart - Stannius ligatures on the frog heart. Action potential and the law of periodic inexcitability of the heart. The influence of ions and mediators on heart activity. Effect of vagal stimulation on heart activity and vagal escape.
2. **Practical 2** (March 8-9): Cardiac cycle. Peripheral manifestations of cardiac activity: Heart sounds. The phonocardiogram recording and analysis.
3. **Practical 3** (March 15-16): ECG 1 – basic concepts in electrocardiography
4. **Practical 4** (March 22-23): ECG 2 – ECG recording and interpretation of normal ECG
5. **Practical 5** (March 29-30): Carotidogram recording and analysis. Jugulogram. Apexocardiogram. Polygram. The heart as a pump – BIOPAC recordings.
6. **Practical 6** (April 5-6): Practical laboratories recovery
7. **Practical 7** (April 19-20): Blood pressure. Arterial and venous circulation. Capillary, venous and lymphatic circulations.
8. **Practical 8** (April 26-27): Pulmonary volumes and pulmonary capacities (spirometry). Ventilatory flows, flow-volume loop
9. **Practical 9** (May 3-4): Respiratory gases analysis in blood and expiratory air. Pulsoximetry. Clinical illustrations.
10. **Practical 10** (May 10-11): Test from Cardiovascular Physiology

11. **Practical 11** (May 17-18): Urinalysis test - physical and chemical properties of the urine, microscopic examination. Dilution-concentration test.
12. **Practical 12** (May 24-25): Renal clearance for urea, creatinine, cystatin C, inulin, para-aminohippurate (PAH).
13. **Practical 13** (May 31, June 1): Practical laboratories recovery and review.
14. **Practical exam** (June 7-8)