







Yarmouk University

Faculty of Physical Education and Sport Sciences

## **Exercise Physiology Lab**

The person in charge: Dr. Ramzi A. Al-Hourani

## **Laboratory Overview:**

Focuses on research related to physical exertion and athletic performance from a physiological perspective, examining its impact and the relationship between them (how physical exertion and sports activity affect physiological functions).

## **Devices:**

- 1. Resistance training devices for major muscle groups, capable of measuring maximum muscle strength, muscular endurance, muscle fatigue, and microscopic damage.
- 2. Treadmills with multiple uses depending on the type of test, such as incremental testing or maximum effort testing.
- 3. Ergometer device, a stationary bike used to measure power output.
- 4. Centrifuge for separating blood components.
- 5. pH meter for measuring acidity of fluids and solutions.
- 6. Handheld meter for measuring lactate and glucose levels in blood.
- 7. Electrophoresis system for protein separation in tissue samples.
- 8. Polar belt watch for measuring heart rate.
- 9. Skin calipersdevices for Anthropometric measurement.
- 10. Quo-lab device for measuring of HbA1C.
- 11. Homogenizer for tissue grinding.
- 12. Orbital Rocker for sample homogenization.
- 13. High precision balance







Ergometer



Homogenizer



Polar belt watch





A handheld meter for measuring lactate and glucose in the blood.



Skin caliper



A1c- Quo-lab



Ph meter



High precision balance



Optical rocker



Shaker



Blood pressure meter



Electrophoresis system











Resistance training devices