

Making Physiology Happen

iWorx offers complete solutions for the teaching of human/animal physiology as well as advanced, high performance systems for research. The numerous “hands-on” experiments provide student involvement that enhances the overall learning experience.

Ultimate Animal and Human Teaching Kit



Step-by-step instructions



91 labs and 250+ exercises



Adaptable to any lab manual



Quick setup

Ultimate Animal and Human Physiology Kits Include:

- TR Control Module with Wireless ROAM (ECG, EMG) Amplifier, Built-in Pre-calibrated Sensors
- LabScribe™ Software and courseware
- Spirometer Flow Head, Heart Sounds Sensor
- Pulse, SPO2 and Temperature Sensor
- Non-Invasive Blood Pressure Sensor
- Grip Force Sensor, Muscle Twitch Sensor
- Single-axis Goniometer, Patellar Reflex Hammer
- Respiration Monitor
- Event Marker, Force Transducer
- Dissolved Oxygen Sensor
- Nerve Bath Chamber, Needle Electrodes
- Bipolar Stimulating Electrode
- Headphones

Human Physiology Measurements:

- ECG, EMG, GSR
- Hemispheric EEG
- Blood Pressure, Heart Sounds
- Spirometry
- Reflex Testing, Reaction Times, Polygraph
- Facial EMG, Skin Temperature
- Stroop Test, Eriksen Flanker Test

Animal Physiology Measurements:

- Muscle Contraction
- Frog ECG
- Action Potentials
- Cellular Metabolism
- Mechano-reflexes and more...

iWorx ultimate courseware includes over 90 experiments and 250 exercises in cardiovascular, neuromuscular and spirometric physiology, as well as all of the components and professionally developed courseware you need to conduct the labs. Use pre-configured teaching kits or iWorx unique LabsByDesign approach to choose only the equipment you need for the labs you want to teach.

Human Circulation:

- Blood Pressure, Peripheral Circulation, and Body Position
- Blood Pressure, Peripheral Circulation, and Imposed conditions
- Pulse Wave Velocity

Human Heart:

- The Electrocardiogram (ECG) and the Pulse
- Heart Sounds and the Electrocardiogram (ECG)
- The Effects of Exercise on the Electrocardiogram (ECG) and the Pulse
- The Six-Lead Electrocardiogram
- The Diving Reflex
- Heart Rate Variability (HRV)

Human Muscle:

- Grip Strength and Electromyogram (EMG) Activity
- Electromyogram Activity in Antagonistic Muscles
- EMG and Arm Wrestling
- Oculomotor Muscle Activity
- Response, Work, Summation and Tetanus in Human Muscle
- Kinesiology Targeted Muscles
- Human Muscle Twitch

Human Spirometry:

- Breathing Parameters at Rest and after Exercise
- Breathing and Gravity
- Factors that Affect Breathing Patterns
- Lung Volumes and Heart Rate

Human Nerve:

- Auditory and Visual Reflexes
- Stretch Receptors and Reflexes with Reflex Hammer
- Stretch Receptors and Reflexes with Plethysmograph
- Human to Human Interface

Animal:

- Skeletal Muscle - Work, Summation and Tetanus
- Smooth Muscle Contraction
- Byssal Retractor Muscle
- Frog Electrocardiogram
- Crayfish Heart
- Membrane Potentials
- Compound Action Potentials
- Cockroach Leg Mechanoreceptors
- Cockroach Cercal Sense Organs