

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.

Human Physiology Teaching Kit



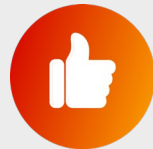
**Step-by-step
instructions**



**57 labs
And 100+
exercises**



**Adaptable to
any lab
manual**



**Quick
setup**

iWorx Human Physiology Kits Include:

- TR Control Module with Wireless ROAM (ECG, EMG) Amplifier, Built-in Pre-calibrated Sensors
- LabScribe™ Software
- Spirometer Flow Head
- Heart Sounds Sensor
- Pulse, SPO2 and Temperature Sensor
- Non-Invasive Blood Pressure Sensor
- Grip Force Sensor
- Event Marker
- Muscle Twitch Sensor
- Courseware

Animal/Human Physiology Kits Add the Following:

- Force Transducer
- Nerve Bath Chamber
- Dissolved Oxygen Sensor

Human Physiology Measurements:

- ECG/EMG
- Blood Pressure
- Spirometry
- Reflexes and more!

Animal Physiology Measurements:

- Muscle Contraction
- Frog ECG
- Action Potentials
- Mechano-reflexes and more!

iWorx courseware includes over 80 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 simply 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
- EMG Activity in Antagonistic Muscles
- EMG and Arm Wrestling
- Oculomotor Muscle Activity
- Response, Work, Summation and Tetanus in Human Muscles
- 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