

Your Instructors for BIO360

Dr. Ty C.M. Hoffman

LSC414

TR 0900-1000

bio360@cox.net

Dr. Gro Amdam

ISTB-1 rm 314

Office Hours TBA

Gro.Amdam@asu.edu

Lecture T.A.

Erik Handberg

ehandber@gmail.com

my.asu.edu

Table 1-2

TABLE 1-2

Key Concepts (Themes) in Physiology

1. Homeostasis and control systems
2. Biological energy use
3. Structure/function relationships
 - Compartmentation
 - Mechanical properties of cells, tissues, and organs
 - Molecular interactions
4. Communication
 - Information flow
 - Mass flow

Figure 1-1

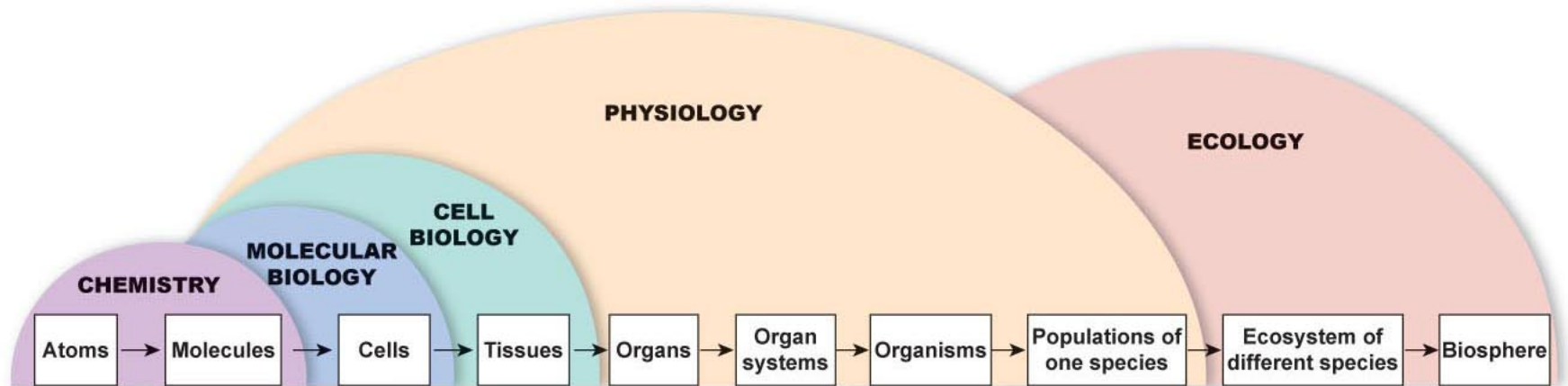


Table 1-1

TABLE 1-1 Organ Systems of the Human Body		
SYSTEM NAME	ORGANS OR TISSUES	REPRESENTATIVE FUNCTIONS
Circulatory	Heart, blood vessels, blood	Transport of materials between all cells of the body
Digestive	Stomach, intestines, liver, pancreas	Conversion of food into particles that can be transported into the body; elimination of some wastes
Endocrine	Thyroid gland, adrenal gland	Coordination of body function through synthesis and release of regulatory molecules
Immune	Thymus, spleen, lymph nodes	Defense against foreign invaders
Integumentary	Skin	Protection from external environment
Musculoskeletal	Skeletal muscles, bones	Support and movement
Nervous	Brain, spinal cord	Coordination of body function through electrical signals and release of regulatory molecules
Reproductive	Ovaries and uterus, testes	Perpetuation of the species
Respiratory	Lungs, airways	Exchange of oxygen and carbon dioxide between the internal and external environments
Urinary	Kidneys, bladder	Maintenance of water and solutes in the internal environment; waste removal

Figure 1-2

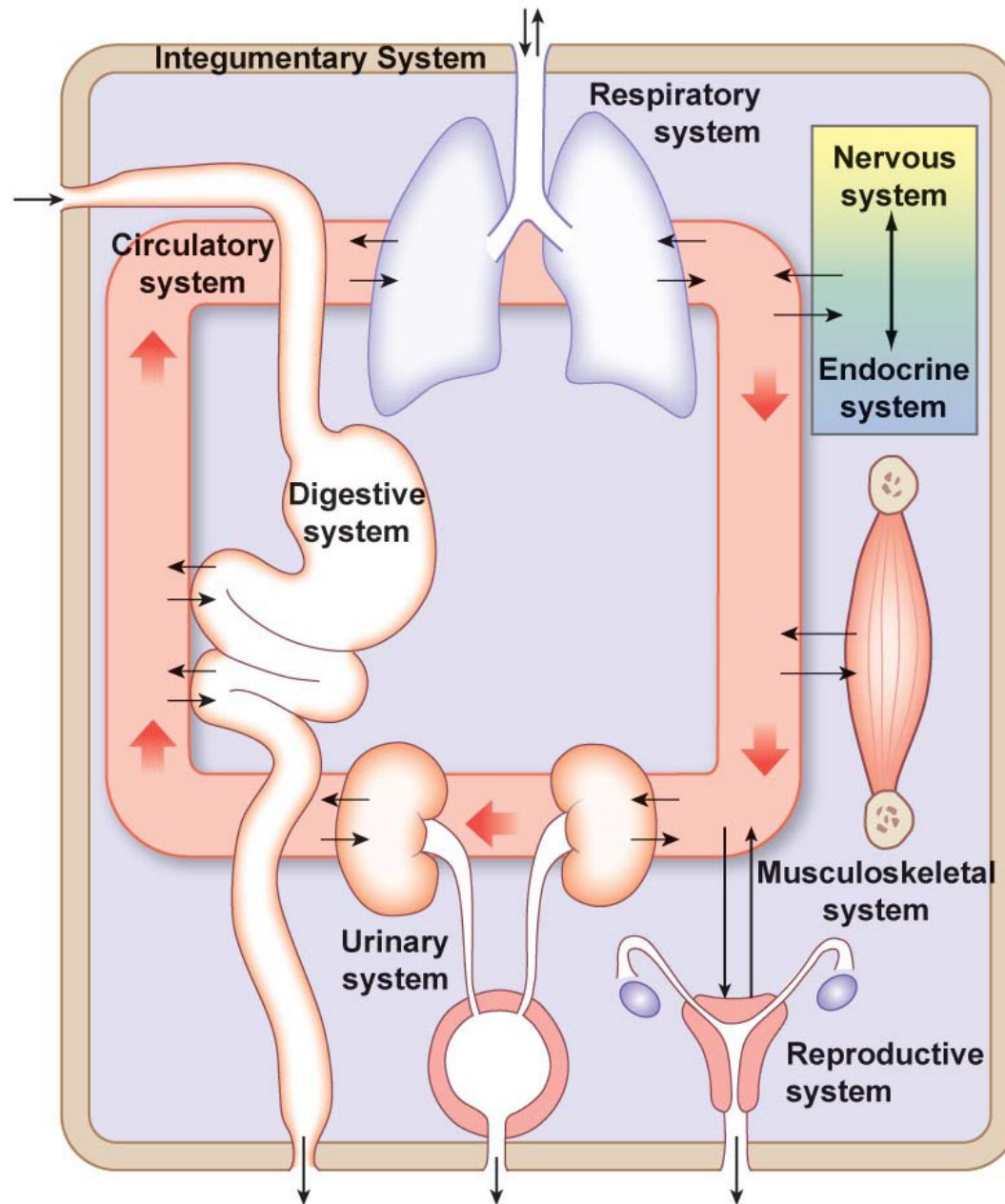


Figure 1-3

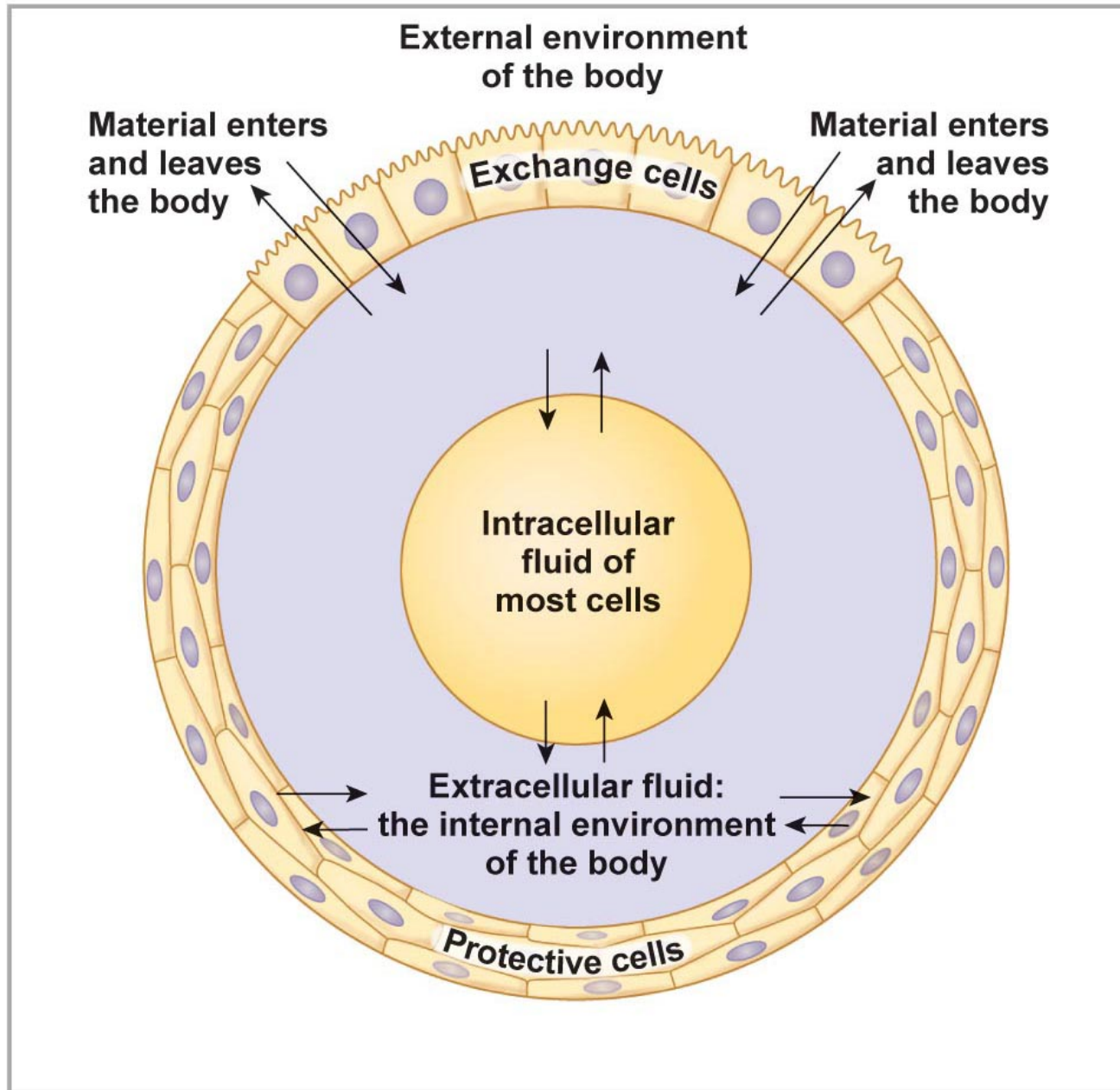


Figure 1-4

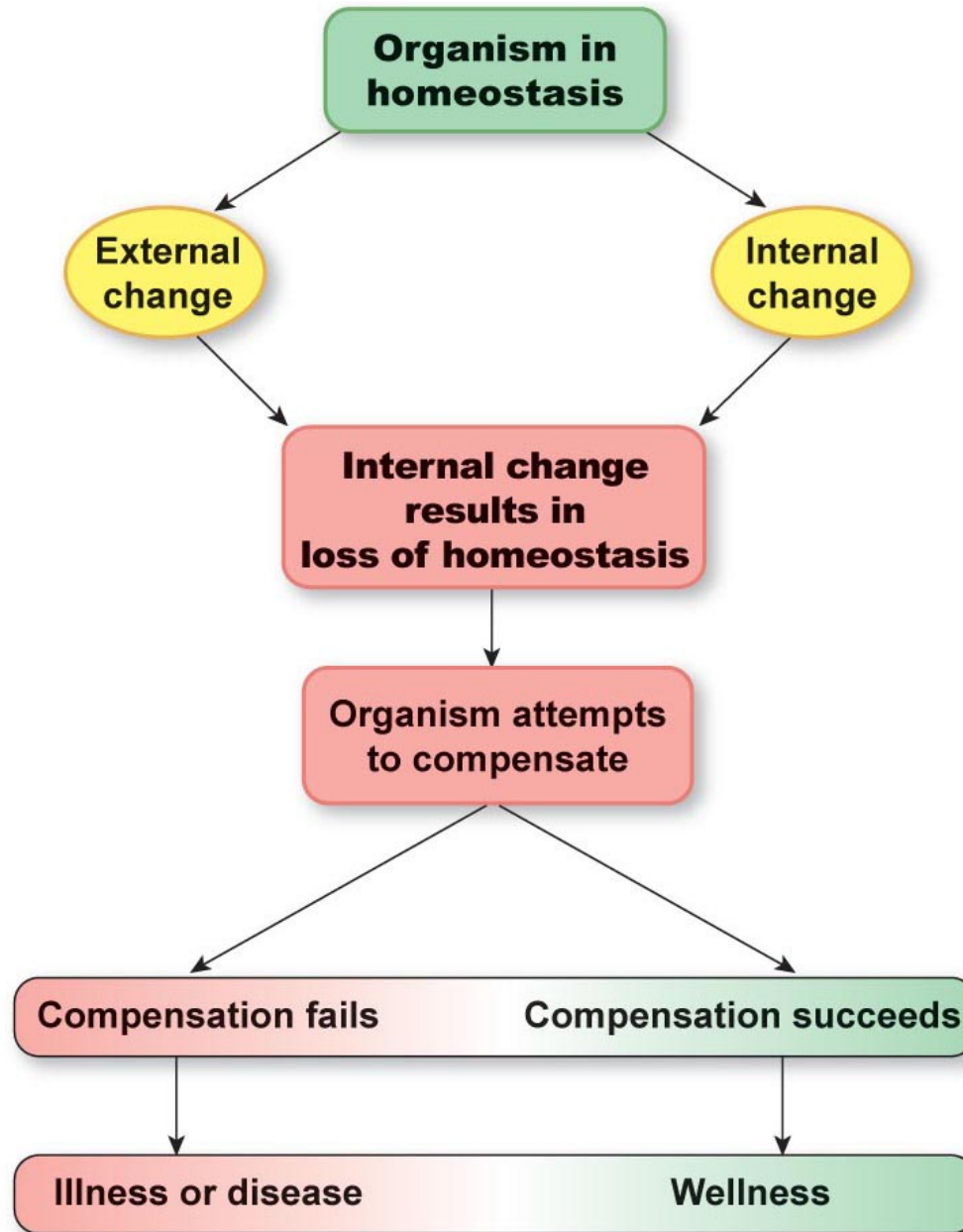


Figure 1-5

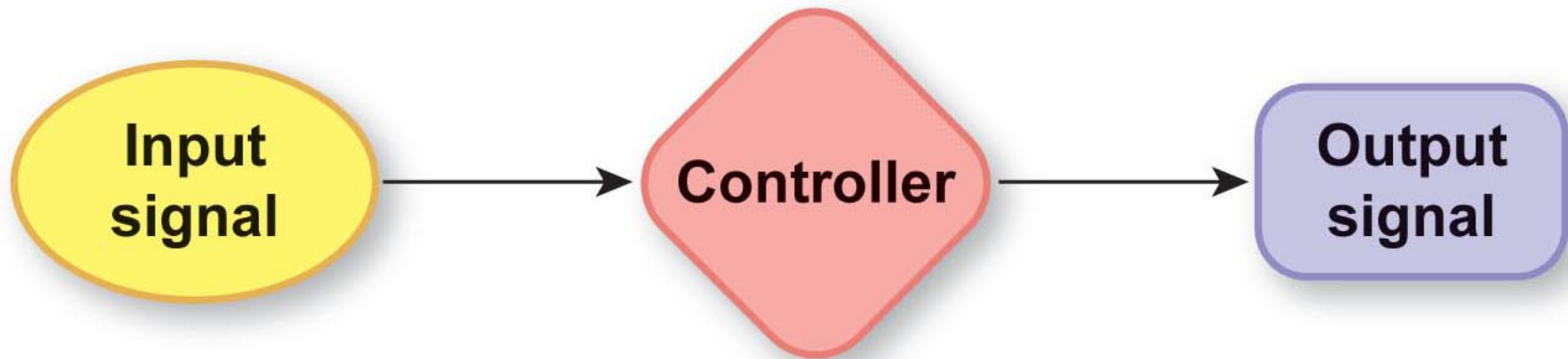
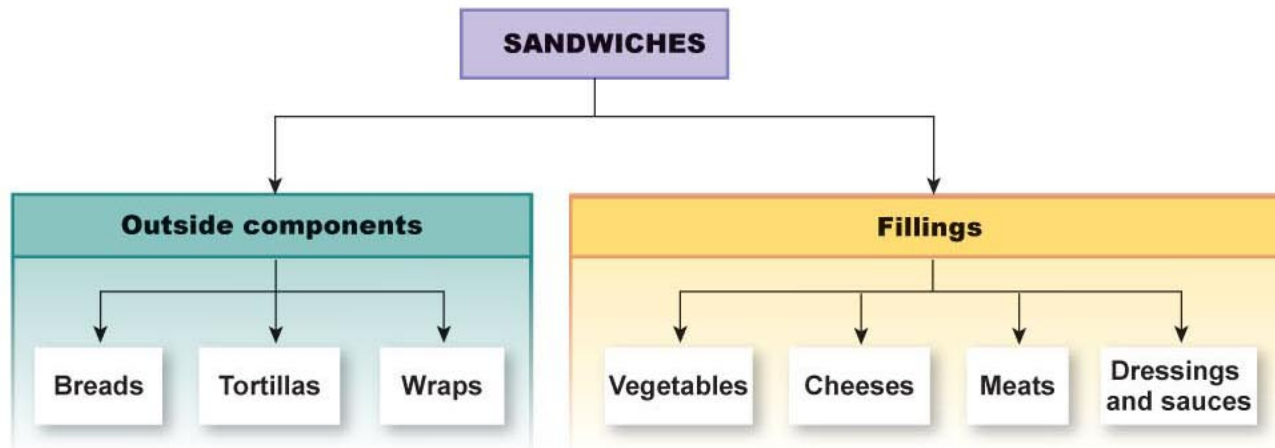
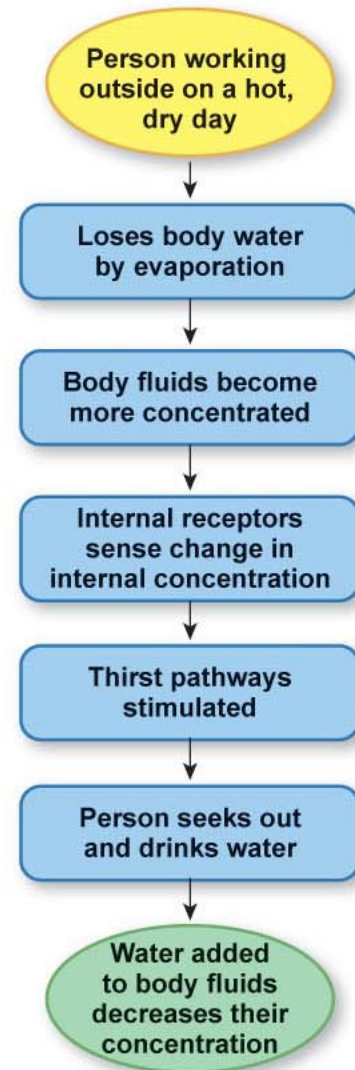


Figure 1-6

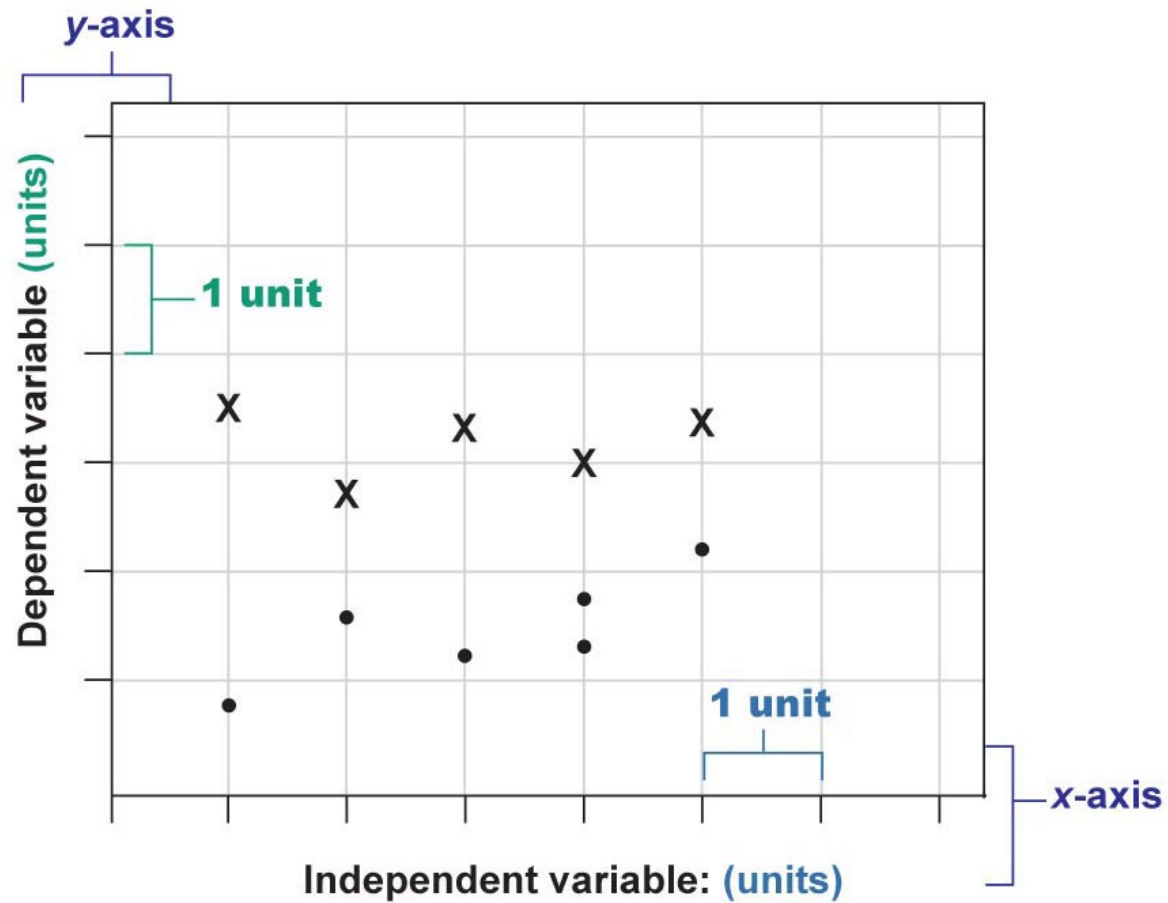


(a) A map showing structure/function relationships



(b) A process map, or flow chart

Figure 1-7a



Legend — (Describes the information represented by the graph)

(a) The standard features of a graph.

KEY • Group A X Group B

Key

Figure 1-9

