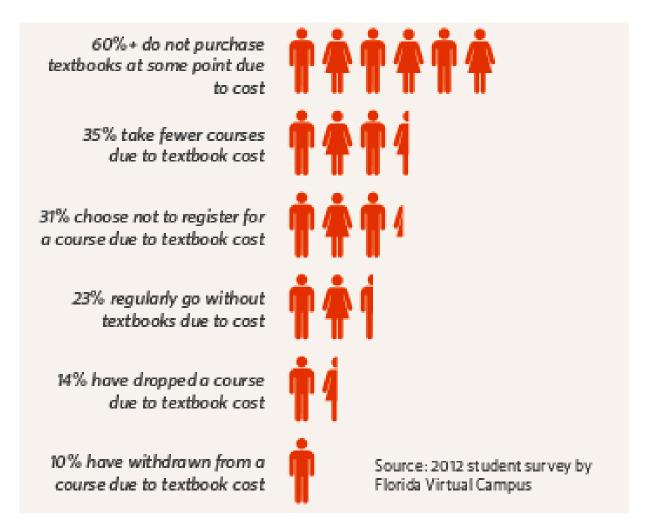
**Department of Integrative Biology & OSU Extended Campus** 

# HUMAN A&P: COLLABORATIVE OER ADOPTION





### The Cost of Textbooks

\$278

Retail price of publisher-based A&P textbook with supplementary online materials

\$185

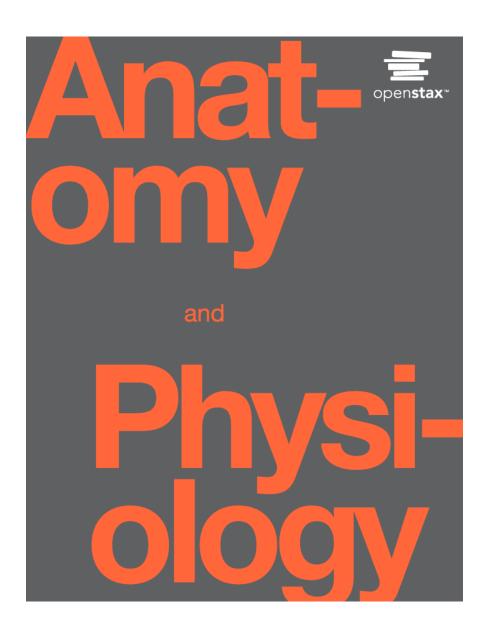
Negotiated price of same publisher-based A&P textbook for large enrollment OSU course

\$1,551

Estimated annual cost of books and supplies for OSU students<sup>1</sup>

\$100,000

Estimated annual expense to OSU BI23X that will be saved by transitioning to OER texbook



OREGON STATE UNIVERSITY 3















Skeletal

Tendons.

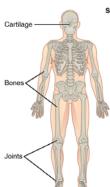
Pituitary

Thyroid

gland

#### Integumentary System

- Encloses internal
- body structures Site of many sensory receptors



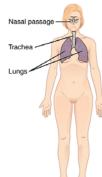
#### Skeletal System

- Supports the body
   Enables movement (with muscular system)
  - Lymph

Lymphatic vessels

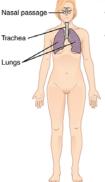
### Lymphatic System

- · Returns fluid to
- Defends against pathogens



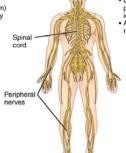
### Respiratory System

- Removes carbon dioxide from the
- body
   Delivers oxygen to blood



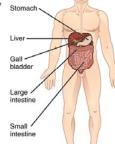
### Muscular System

- · Enables movement
- (with skeletal system) Helps maintain body temperature



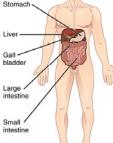
#### Nervous System

- · Detects and processes sensory information
- Activates bodily responses

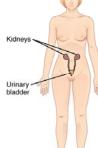


#### Digestive System

- Processes food for

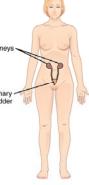


- use by the body
  Removes wastes from undigested



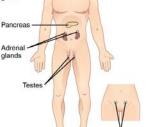
#### **Urinary System**

- · Controls water balance in the body
- Removes wastes from blood and excretes them



#### **Endocrine System**

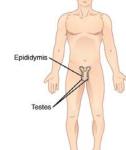
- Secretes hormones
   Regulates bodily processes





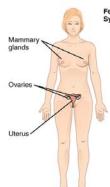
#### Cardiovascular System

- Delivers oxygen and nutrients to tissues
- Equalizes temperature in the body



#### Male Reproductive System

- Produces sex hormones and gametes
- Delivers gametes



#### Female Reproductive System

- Produces sex hormones
- and gametes
   Supports embryo/
- fetus until birth Produces milk for infant



Integumentary system Protects underlying

- tissues · Provides skin
- sensation Helps regulate body
- temperature
   Synthesizes vitamin D



Skeletal system · Attachment for

Produces blood

cells

- Moves body and maintains posture muscles Protects organs
   Stores calcium and • Internal transport
- phosphorus
  - of fluids Generation of heat

Muscular system



Nervous system Regulates and integrates body functions via neurons



**Endocrine system**  Regulates and integrates body functions via hormones



Cardiovascular system

- Transports nutrients, respiratory gases, wastes, and heat
- Transports immune cells and antibodies
- Transports hormones
- Regulates pH



Lymphatic system • Returns tissue fluids

to bloodstream · Protects against infection and disease



Respiratory system

 Exchanges respiratory gases with the environment



Physical and

chemical breakdown of food

· Absorbs, processes, stores food



Urinary system

 Maintains constant internal environment through the excretion of nitrogenous waste

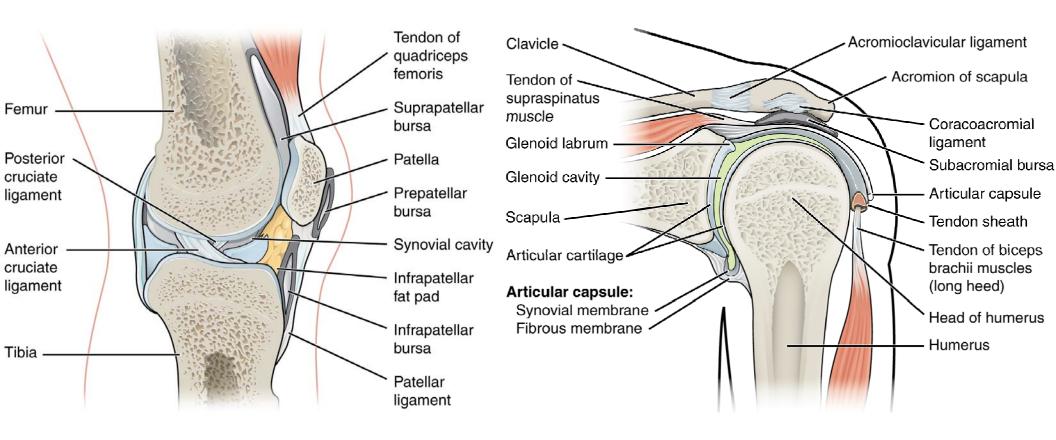


Reproductive system

- Produces and secretes hormones
- Produces and releases egg and sperm cells
- Houses embryo/fetus
- (females only)

   Produces milk to nourish offspring (females only)

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## **Chapter Framing**

- Ch. 27 The Reproductive System
  - 27.1 A&P of the Male Reproductive System
  - 27.2 A&P of the Female Reproductive System
  - 27.3 Development of the Male and Female Reproductive Systems

- Ch. 27 The Sexual Systems
- 27.1 Development of the Female and Male Sexual Systems
  - 27.2 A&P of the Female Sexual System
  - 27.3 A&P of the Male Sexual System
  - 27.4 Physiology of the Sexual Act

# Special thanks: **Book Sprint Team**

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