

BI 121 Introduction to Human Physiology, V. Pat Lombardi

This is an introductory lecture and laboratory course examining human body function primarily at the body organ and systems levels. It is designed for non-science majors with a limited background in science and math and satisfies the University Science Area of Inquiry (formerly Science Group) requirement. Topic coverage includes basic cell physiology and genetics, and physiology of the gut, heart, vessels, blood, glands, lungs, brain, nerves, and muscles. Nutrition and exercise physiology are also discussed with goals of making the material more applicable to daily activities and to promote optimal choices to enhance body awareness and health for a lifetime.

Learning outcomes: By the end of the course, students should be able to:

- describe the concept of homeostasis.
- apply a simplified homeostatic model to the regulation of unique body organs and systems.
- explain the basic structure and function of cells and cell organelles.
- summarize the basic structure and function of the gut, heart, vessels, blood, glands, lungs, brain, nerves and muscles.
- contrast a personal diet with US guidelines and make recommendations for improvement
- articulate and debunk common myths about nutrition and exercise.
- paraphrase guidelines established by the American Heart Association, American College of Sports Medicine, Centers for Disease Control, and American Dietetic Association.