

Revision, Section)

D, F, M, N, P, Q

Revised:

Date of Previous Revision:

September 2004

Date of Current Revision:

March 2006

C: Biology

Human Anatomy and Physiology II

E: 3

Subject & Cour

M: Course Objectives / Learning Outcomes

Upon completion of Biology 1203, the student will be able to:

1. Describe the basic requirements of human nutrition and describe the roles of various nutrients in the body.
2. Describe the absorption, transport, storage and metabolic importance of carbohydrates, lipids and proteins.
3. Describe the gross anatomy of the digestive system and describe the digestion of carbohydrates, lipids, and proteins.
4. Describe energy metabolism, including the processes of glycolysis, Krebs Cycle and the electron transport chain.
5. Describe the importance of oxygen in respiration and compare aerobic and anaerobic respiration.
6. Describe the fluid and electrolyte composition of the body and explain how fluid and electrolyte balance is maintained.
7. Describe the components of the urinary system and explain the process by which the kidney manufactures urine.
8. Describe the considerations included in a typical urinalysis.
9. Describe the components of the nervous system and identify the roles of the major components of the nervous system and associated sensory organs.
10. Describe the glands of the endocrine system and name and specify the function of all major hormones.
11. Describe the structure and functioning of the male and female reproductive systems.
12. Describe embryonic and fetal development and the changes which take place in the mother during fetal development and lactation.
13. Describe the principles of genetics as they apply to humans and describe the mode of inheritance, and methods of in utero detection of common genetic abnormalities.
14. Describe the structure and functioning of the major mammalian body systems using a dissected fetal pig as a model.

Core Competencies (General Academic Expectations of Students)

Students successfully participating in this course will be expected, in addition to specific course objectives, to demonstrate competency in the following:

1. Oral, Written and Interpersonal Communications.
In-classroom assignments, weekly written tests, mid-term and final examinations in this course will include writing. Students will work in groups on in-classroom assignments.
2. Independent Learning and Information Literacy.
Students will use computer technology to access study guide materials provided by the textbook producer and will also utilize computer technology for self assessment.
3. Critical and Creative Thinking.
This is a science based course which will require a critical analysis of data and conclusions derived from observations and experiments. Students will be required to think critically as they apply theory learned in the course to everyday situations and problems.

R: Prior Learning Assessment and Recognition: specify whether course is open for PLAR

There is no provision of PLAR, other than that normally done by examining transcripts and comparing course outlines of human biology courses taken within the last five years elsewhere to the Douglas College Biology 1203 course content.

Course Designer(s)

Education Council / Curriculum Committee Representative

Dean / Director

Registrar