Douglas College

EFFECTIVE: SEPTEMBER 2004
CURRICULUM GUIDELINES

A. Division: **Science and Technology**

Effective Date: **September 2004**

B. Department / Program Area: **Biology**

Revision [X] New Course [ ]

If Revision, Section(s) Revised: **C, H, M, P, R**

Date of Previous Revision: **May 2002**

Date of Current Revision: **September 2004**

C: **Biology 1203** **D**: **Human Biology II** **E:** **3**

Subject & Course No.	Descriptive Title	Semester Credits

F: Calendar Description:

Human Biology II is a continuation of the study of the anatomy and physiology of humans. The anatomy and physiology of the nervous, excretory, endocrine and reproductive systems are studied. Enrolment is usually limited to students in Health Sciences programs.

G: Allocation of Contact Hours to Type of Instruction / Learning Settings

Primary Methods of Instructional Delivery and/or Learning Settings:

Lecture/Tutorial/Lab

Number of Contact Hours: (per week / semester for each descriptor)

5 hours/week
(2 hours lecture/1 hour tutorial/2 hours lab)

Number of Weeks per Semester: **15 weeks**

H: Course Prerequisites:

Biology 1103

I: Course Corequisites:

None

J: Course for which this Course is a Prerequisite

None

K: Maximum Class Size:

Lecture = 42
Tutorial = 21

L: PLEASE INDICATE:

[ ] Non-Credit

[ ] College Credit Non-Transfer

[X] College Credit Transfer:

SEE BC TRANSFER GUIDE FOR TRANSFER DETAILS (www.bccat.bc.ca)

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 fluid and electrolyte composition of the body and explain how fluid and electrolyte balance is maintained.
3. Describe the components of the excretory system and explain the process by which the kidney manufactures urine.
4. Describe the considerations included in a typical urinalysis.
5. Describe the components of the nervous system and identify the roles of the major components of the nervous system and associated sensory organs.
6. Describe the glands of the endocrine system and name and specify the function of all major hormones.
7. Describe the structure and functioning of the male and female reproductive systems.
8. Describe embryonic and fetal development and the changes which take place in the mother during fetal development and lactation.
9. 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.
10. Describe the structure and functioning of the major mammalian body systems using a dissected fetal pig as a model.

N: Course Content:

1. The major electrolytes of the body will be described. The regulation of the electrolyte composition and the regulation of fluid balance will be discussed.
2. The components of the excretory system will be examined. The functioning of the nephron in the manufacture of urine will be discussed.
3. The organization of the nervous system will be described. The structure and function of the parts of the brain, the spinal cord, the major nerves, and the reflex arc will be discussed. The structure and functioning of the sense organs will be described.
4. The hormones of the endocrine glands will be identified, and the effects of each hormone will be studied.
5. The male and female reproductive structures will be identified and the functioning of the reproductive system will be described.
6. Human embryonic development will be studied. Fetal development, labor and lactation will be studied.
7. The principles of genetics, as they apply to humans, will be examined. Modes of inheritance, common genetic disorders, and amniocentesis will be discussed.
8. Fetal pig dissections will be studied, with particular reference to the respiratory, digestive, cardiovascular, excretory, and reproductive systems.

O: Methods of Instruction

This course involves three hours per week of classroom instruction and two hours per week of laboratory activity. Classroom work will consist of two hours of lecture per week and one hour of group work (with instructor assistance) per week.

P: Textbooks and Materials to be Purchased by Students

1. Tortora, G.J., and S.R. Grabowski. Principles of Anatomy and Physiology. New York: John Wiley and Sons Inc.

2. Douglas College produced manual: Biology 1203: Human Biology II.

Q: Means of Assessment

TYPE OF EVALUATION		POINTS
Class Tests and Assignments		20
Laboratory Reviews (see note 1 below)		*(up to -22)*
Laboratory Examination		15
Comprehensive Examinations	- midterm	30
	- final	35
	TOTAL	100

GRADES: **A+ 95-100** **A 90-94** **A- 85-89** **B+ 80-84** **B 75-79**
B- 70-74 **C+ 65-69** **C 60-64** **C- 55-59** **P 50-54** **F 0-49**

Note:

1. **Laboratory Reviews:**
   Required laboratory reviews will be assigned in most weeks, and these reviews must be completed in the laboratory in the week that they are assigned. The laboratory reviews are intended to provide an opportunity to review particular material with each student. Completion of the review will result in a grade of P (Pass), or R(Review Recommended) being marked on the laboratory card. If **more than one review** is not completed satisfactorily, (P or R), **two marks will be deducted from the course total for each lab review in excess of one that is not completed.** A student **must complete 50% of the reviews to pass the course**.

2. **Comprehensive Examinations:**
   There will be one midterm in week 7. The final examination will cover the entire course. If the student achieves a higher mark on the final than on the midterm, the midterm grade will be raised to equal that achieved on the final examination.

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