douglas college **Course Information**

A: Division: ACADEMIC

DATE: August, 1991

B: Department: SCIENCE & MATHEMATICS

New Course: _____

Revision of Course Information form: X

DATED: March, 1985

C: BIOLOGY 203 (Subject & Course No.) D: HUMAN BIOLOGY II (Descriptive Title) E: 3 (Semester Credit)

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, digestive, excretory, endocrine, and reproductive systems are studied. Enrolment is usually limited to students in the Nursing or Psychiatric Nursing Programs. An evening section may be offered for students nor currently in the Nursing or Psychiatric Nursing Programs.

Summary of Revisions:
(Enter date & section)
Ex: Section C,E,F, &R

F,G,L,M,O,P,R

G: Type of Instruction:

	Hours Per Week/ Per Semester	
Lecture		Hrs.
Laboratory (Audio-Tutorial)	3	Hrs.
Seminar (Tutorial)	2	Hrs.
Clinical Experience		Hrs.
Field Experience		Hrs.
Practicum		Hrs.
Shop		Hrs.
Studio		Hrs.
Student Directed Learning		Hrs.
Other		Hrs.

TOTAL 5 HOURS

H: Course Prerequisites:
BIOLOGY 103

I: Course Corequisites:

J: Course for which this course is a pre-requisite

K: Maximum Class Size:
25

L: College Credit Transfer X

College Credit Non-Transfer _____

M: Transfer Credit:
Requested ___
Granted X
Specify Course Equivalents or Unassigned Credit as Appropriate

U.B.C. BIOL 153 (3) (With Douglas BIO 103)
S.F.U. GE BISC (1.5)
U. Vic.
OTHER:

COURSE DESIGNER(S)

DIVISIONAL DEAN

DIRECTOR/CHAIRPERSON

REGISTRAR

N: TEXTBOOKS AND MATERIALS TO BE PURCHASED BY STUDENTS

Tortora, G.J. and Anagnostakos, N.P. 1990. Principles of Anatomy and Physiology (6th Edition). New york: Harper and Row Publishers Inc.

Biology 203 Study Guide. Douglas College

O. COURSE OBJECTIVES

Upon completion of Biology 203, 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.

P. COURSE CONTENT

1. Nutrition will be considered with particular reference to the roles of carbohydrates, lipids, proteins, vitamins and minerals in human nutrition.

2. The major electrolytes of the body will be described. The regulation of the electrolyte composition and the regulation of fluid balance will be discussed.

3. The components of the excretory system will be examined. The functioning of the nephron in the manufacture of urine will be described.

4. 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.

5. The hormones of the endocrine glands will be identified, and the effects of each hormone will be studied.

6. The male and female reproductive structures will be identified and the functioning of the reproductive system will be described.

7. Human embryonic development will be studied. Fetal development, labor and lactation will be studied.

8. The principles of genetics, as they apply to humans, will be examined. Modes of inheritance, common genetic disorders, and amniocentesis will be discussed.

9. Fetal pig dissections will be studied, with particular reference to the respiratory, digestive, cardiovascular, excretory, and reproductive systems.

R. COURSE EVALUATION

TYPE OF EVALUATION		POINTS
Weekly Class Evaluations		30
Laboratory Evaluations		
Laboratory Examination		10
Comprehensive Examinations	- midterm	30
	- final	30
	TOTAL	100

GRADES:											
	A+	92-100	A	87-91	A-	82-86	B+	77-81	B	72-76	B- 67-71
	C+	62-66	C	57-61	C-	53-56	P	50-52	F	0-49	

Notes:

1. Weekly Class Evaluations:

   Each week, there will be written evaluations in class based on the course objectives and other material covered in the previous week. The best 9 out of 10 evaluations will be averaged to determine this portion of the grade.

2. Laboratory Evaluations:

   Approximately eight laboratory evaluations will be assigned during the semester. The evaluations must be completed in the laboratory in the week that they are assigned. The laboratory assignments are "mastery based" and each will be assigned a grade of P(Pass), or R(review recommended), or UN(Unprepared). 1 mark will be deducted from the Weekly Evaluations for each evaluation not completed (with a P or R grade). Students are encouraged to be re-evaluated to improve a UN or R grade. Re-evaluations must be completed in the week they are assigned.

3. Laboratory Examination: There will be one final laboratory examination at the end of the term.

4. Comprehensive Examinations:

   A mid-term and a final examination will be worth 30 marks each. The mid-term examination will cover all material covered prior to the examination. The final examination will cover the entire course. If the student achieves a better grade on the final exam than on the mid-term examination, the mid-term grade will be raised to equal that achieved on the final examination.