UNIVERSITY COLLEGE of the FRASER VALLEY

COURSE IMPLEMENTATION DATE: September 2008
COURSE REVISED IMPLEMENTATION DATE: January 2009
COURSE TO BE REVIEWED: January 2012
(Four years after UPAC final approval date) (MONTH YEAR)

OFFICIAL COURSE OUTLINE INFORMATION

Students are advised to keep course outlines in personal files for future use.
Shaded headings are subject to change at the discretion of the department and the material will vary - see course syllabus available from instructor

FACULTY/DEPARTMENT: **Biology**

BIO 280		**3**
COURSE NAME/NUMBER	FORMER COURSE NUMBER	UCFV CREDITS

Human Physiology
COURSE DESCRIPTIVE TITLE

CALENDAR DESCRIPTION:

This course introduces students to the physiology of humans. We will be studying the endocrine, nervous, sensory, muscular, cardiovascular, respiratory, excretory, and gastrointestinal systems of humans. This course is meant as a survey of the different organ systems in humans with particular focus on physiological principles and mechanisms.

PREREQUISITES: **BIO 111 and BIO 112**
COREQUISITES:

SYNONYMOUS COURSE(S)
(a) Replaces: **n/a** *(Course #)*
(b) Cannot take: **n/a** *(Course #)* for further credit.

SERVICE COURSE TO:
(Department/Program)
(Department/Program)

TOTAL HOURS PER TERM: **39**
STRUCTURE OF HOURS:

Lectures:	**39**	Hrs
Seminar:		Hrs
Laboratory:		Hrs
Field Experience:		Hrs
Student Directed Learning:		Hrs
Other (Specify):		Hrs

TRAINING DAY-BASED INSTRUCTION
LENGTH OF COURSE:
HOURS PER DAY:

MAXIMUM ENROLLMENT: **24**
EXPECTED FREQUENCY OF COURSE OFFERINGS: **every year**

WILL TRANSFER CREDIT BE REQUESTED? (lower-level courses only)	☒ Yes	☐ No
WILL TRANSFER CREDIT BE REQUESTED? (upper-level requested by department)	☐ Yes	☒ No
TRANSFER CREDIT EXISTS IN BCCAT TRANSFER GUIDE:	☐ Yes	☒ No

AUTHORIZATION SIGNATURES:

Course Designer(s): Tony Stea
Chairperson: Barbara Moon *(Curriculum Committee)*
Department Head: Barbara Moon
Dean: Wanda Gordon
UPAC Approval in Principle Date:
UPAC Final Approval Date: May 23, 2008

LEARNING OBJECTIVES / GOALS / OUTCOMES / LEARNING OUTCOMES:

Upon successful completion of this course students should be able to:

a) describe the role of the major endocrine glands in humans.
b) explain how electrical and chemical signals are essential for nervous system signalling.
c) discuss the mechanisms of signal transduction for the five senses.
d) describe the sliding-filament model of muscle contraction
e) explain the cardiac cycle and label the anatomical features of the human heart.
f) describe the role of red blood cells in gas exchange.
g) discuss the role of the nephron in excretion.
i) identify the major organs of the gastrointestinal tract and discuss their roles.

METHODS:

This course will involve a standard lecture approach to cover basic information along with assignments and topical readings to stimulate student-based learning and discussion.

PRIOR LEARNING ASSESSMENT RECOGNITION (PLAR):

Credit can be awarded for this course through PLAR (Please check:) ☒ Yes ☐ No

METHODS OF OBTAINING PLAR:

Course examination: The student must challenge the course by writing an examination.
The student will be provided with a copy of the syllabus and information how to obtain a copy of the current textbook.
The student will also be given information about exam style and expected standards.
The student can write the examination for the course at a time convenient to both student and instructor.

TEXTBOOKS, REFERENCES, MATERIALS:

[Textbook selection varies by instructor. An example of texts for this course might be:]

Principles of Human Physiology 3rd ed. by Cindy Stanfield and William Germann

SUPPLIES / MATERIALS:

STUDENT EVALUATION:

[An example of student evaluation for this course might be:]

Quizzes and assignments	25%
Midterm	25%
Final exam	50%

COURSE CONTENT:

[Course content varies by instructor. An example of course content might be:]

Explanation of the major glands of the endocrine system with a focus on the main hormonal axes.

Overview of the nervous system and description of the physiology of electrical and chemical signalling in the nervous system.

Discussion of the transduction mechanisms of the five senses.

Explanation of the mechanisms for muscle contraction including the sliding filament model.

Overview of the anatomy and function of the heart with a focus on the cardiac cycle.

Description of the role of blood in the cardiovascular system and in particular the role of red blood cells in gas exchange.

Overview of the anatomy of the repiratory system and its role.

Overview of the anatomy of the kidney with a focus on the role of the nephron.

Description of the organs of the gastrointestinal tract with a focus on the role of each in human digestion.