PHYSICAL EDUCATION, ATHLETICS & KINESIOLOGY
Grande Prairie Regional College

PE1030: Integrative Human Physiology [3(3-1)] 60 Hrs. UT

Winter 2009

Instructor: Ray Kardas Office No.: C418
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Pre-Requisite: PE1015 (Essentials of Human Physiology)
Class Times: M/W 8:30 – 10:00, D308; Lab 1: T 12:00 – 12:50; Lab 2: F 9:00 – 9:50, J130 (if necessary)

Course Description:
The focus of this introductory physiology course is cellular functions in the human body with special emphasis on control and integration of these functions. Whenever possible, the responses and adaptations to exercise will be used as a foundation upon which the concepts of control and integration will be discussed. Some topics from PE1015 (Essentials of Human Physiology) will be revisited to discuss control and integration of cellular and systemic function.

Course Objectives:
- Acquire **knowledge** about the basic **structure-function relationships** that exist within the human body and the **regulation** of these physiological processes.
- To provide content and a rich environment in which to **understand the principles** and mechanisms of human physiology.
- To **establish a foundation** from which the responses to acute and chronic exercise stresses can be studied.

Required Text:
Germann, William J., and Stanfield, Cindy L. (2005). Principles of Human Physiology, 2nd Ed. San Francisco: Pearson

Course Layout:
It is the student's responsibility to read and understand the required areas of the text. The objective of the lectures is to highlight the major concepts of each topic area and provide examples to facilitate comprehension.

Course Evaluation:

Test #1	February 11	25%
Test #2	March 11	25%
Test #3	April 13	25%
Paper on Reproductive Physiology	Due last class	10%
LAB Exam	April 8	15%

Grading System:

Letter Grade	Grade Point Value	Percentage Range
A+	4.0	94 – 100
A	4.0	89 – 93
A-	3.7	85 – 88
B+	3.3	81 – 84
B	3.0	77 – 80
B-	2.7	72 – 76
C+	2.3	69 – 71
C	2.0	64 – 68
C-	1.7	60 – 63
D+	1.3	55 – 59
D	1.0	50 – 54
F	0.0	Below 50

Student Responsibilities:
Reading the upcoming topic in the textbook BEFORE each lecture will help students understand and keep pace with the flow of lectures.

Questions always arise and it is important for the student to act on them. Ask your questions during class or bring them up at the end of class or send your question(s) via e-mail.

"Study-buddy" or study groups are highly recommended. Having someone to discuss the lecture with or review course material has been very helpful to many students.

Attendance will not be monitored during the lectures. Students are responsible for all material assigned or presented.

Lecture Schedule:
For the most part, we will follow the content, topic areas and sequence as outlined in your text. Not all chapters will be covered or completed with the same depth and the sequencing may be changed. Any changes to this schedule are to reflect the needs of the students.

Chapter	Topic	Lecture Dates	No. of Lectures
16	The Cardiovascular System: Blood	Jan. 7, 12	2
14	The Cardiovascular System: Cardiac Function	12, 14, 19	3
15	The Cardiovascular System: Blood Vessels, Blood Flow, and Blood Pressure	21, 26, 28	3
11	The Nervous System: Sensory Systems	Feb. 2, 4, 9	3
	Test #1	**Feb. 11**	
	Winter Break	Feb. 16-20	
17	The Respiratory Systems: Pulmonary Ventilation	Feb. 23, 25	2
18	The Respiratory Systems: Gas Exchanges and Regulation of Breathing	Mar. 2, 4, 9	3
	Test #2	**Mar. 11**	
19	The Urinary System: Renal Function	16, 18	2
20	The Urinary System: Fluid & Electrolyte Balance	23, 25	2
21	The Gastrointestinal System	30	1
24	The Whole Body: Integrated Physiological Responses to Exercise	April 1, 6	2
	Test #3	**April 13**	