PHYSICAL EDUCATION, ATHLETICS & KINESIOLOGY
Grande Prairie Regional College

PE1030: Integrative Human Physiology [3(3-0-1)] 60 Hrs. UT Pending

Winter 2005

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Pre-Requisite: PE1015 (Essentials of Human Physiology)

Course Description:
This course is an introduction to **Integrative Human Physiology**. The main focus of the course is on 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:
Silverthorn DU (2001) Human Physiology: An Integrated Approach, 2nd Edition, Prentice-Hall Inc.

Silverthorn Physiology Website: www.prenhall.com/silverthorn
Students can explore a wealth of dynamic resources that expand the text into a truly interactive learning tool. This site includes quiz material, reviews, answers to the end-of-chapter questions (EOC) and links to other relevant sites.

Course Layout:
The textbook selected for this course is thorough and will be a strong resource for PEDS200 (Exercise Physiology). 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:

Mid-term Exam #1	Date to be determined	25%
Mid-term Exam #2	Date to be determined	25%
Final Exam	Scheduled during Exam Week	50%

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.

Chapter	Topic	Lectures
4	Cellular Metabolism	2
5	Membrane Dynamics	1
6	Communications & Homeostasis	1
7	Endocrine System	1
8 & 11	Nervous System, Autonomic and Somatic Nervous Systems	1
10	Sensory Physiology	2
13	Control of Body Movement	2
12	Muscles (focus on skeletal muscle)	2
14 & 15	Cardiovascular Physiology, Blood Flow and Blood Pressure	2
17	Respiratory Physiology	2
18 & 19	Kidneys and Fluid and Electrolyte Balance	2
20	Digestion	1
21	Energy balance, metabolism and growth	2
22	Immune System	2
24	Reproduction and Development	2