

**Science Department**  
Grande Prairie Regional College

**PZ1510 A2/C2 Elementary Physiology II (2<sup>nd</sup> yr Nursing CBL)**  
**2008 -- 2009**

**General Information:**

Instructor:	Ray Kardas	Office:	C418
Phone:	539-2990	E-Mail:	rkardas@gprc.ab.ca
Class Time:	Tuesdays/Thursdays from 8:30 – 9:50 in J202		
Office Time:	TBA		

**Course Description:**

This is an introductory course in physiology for the health sciences. It is available only to students in the Nursing program.

The content of this course follows the topics outlined in the scenarios presented in the second year of the CBL Nursing program. Some of the topics covered will require extra reading / study by the students.

**Prerequisite:** PZ1500

**Transferability:** UA, UC, AU, AF, Other

**Textbook:**

Stanfield, C.L. and Germann, W.J. (2009). Principles of Human Physiology, 3<sup>rd</sup> ed. San Francisco: Pearson.

**Evaluation:**

Quiz I	10%
Project I	15%
Fall Final Exam	25%
Quiz II	10%
Project II	15%
Winter Final Exam	<u>25%</u>
Total	100%

**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

**Course Schedule (A2) – Fall 2008:**

Learning Package 2.1.1 – Mrs. Read (1week)

Physiology of Osseous Tissue: Chapter 21, pgs. 606 – 629

- Mineral deposition and resorption
- Vitamin D and other hormones
- Bone disorders and fractures
- Clinical View – osteoporosis

Learning Package 2.1.2 – Bryon, Beck Part A & B: We're Expecting (2 weeks)

Pregnancy and Childbirth: Chapter 22, pgs. 630 – 664

- Hormones of pregnancy
- Adjustments to pregnancy
- Childbirth

Embryonic and Fetal Development

- Fetal development

The Neonate

- The transitional period
- Adaptations
- Premature Infants

Lactation

Chromosomes and Heredity

Congenital Anomalies

Learning Package 2.1.3 – George (2 weeks)

The Urinary System: Chapters 18 & 19, pgs. 536 – 602

- Glomerular filtrations
- Tubular resorption and secretion
- Concentration of urine
- Urine storage and elimination

Quiz I – Thurs., Sept. 30 – 8:30 am

Learning Package 2.1.4 – Denny and Cokum (2 weeks)

The Endocrine System: Chapters 5 & 6, pgs. 125 – 164

- Endocrine Glands
- Hormone classification
- Hormone action
- Hormone receptors
- Hormone interactions
- Endocrine disorders
- Clinical View -- IDDM

Fall Final Exam – Tues., Oct. 21

**Course Schedule (C2) – Winter 2009:**

Learning Package 2.2.1 – Adam Enman (1 week)

The Central Nervous System: Chapter 9, pgs. 215 – 250

- Processing
- Neural integration

Learning Package 2.2.2 – Mr. Tran (2 weeks)

The Digestive System: Chapter 20, pgs. 569 – 602

- Mouth and esophagus
- Stomach
- Liver, gallbladder, and pancreas
- Small intestine
- Large intestine
- Digestion and absorption
- Clinical View – diarrhea

Quiz II – Wed., Feb. 3 – 8:30

Learning Package 2.2.3 – Norman Tourmay (1 week)

The Cardiovascular System: Chapters 13 & 14, pgs. 360 – 434

- Heart
- Cardiac muscle
- Electrical and contractile activity
- Clinical View – stroke

Learning Package 2.2.4 – Janet (1 week)

The Cardiovascular System: Chapters 13 & 14, pgs. 360 – 434

- Blood flow and cardiac cycle
- Cardiac output
- Clinical View – atherosclerosis / myocardial infarction

Learning Package 2.2.5 – Kathy and Chrissy (1 week)

Human Development

- Aging

Winter Final Exam – Wed., Feb. 26