



Grande Prairie Regional College

Department of Physical Education, Athletics & Kinesiology

COURSE OUTLINE – WINTER 2010

PE 1030 Integrative Human Physiology

(3-3-1) UT [60 hours]

Instructor:	Jody Virr	Phone:	780-539-2893
Office:	K217	E-mail:	jvirr@gprc.ab.ca
Hours:	Drop in or by Appointment	Class Times:	Mondays & Wednesday 8:30 a.m. – 9:50 a.m., D308
		Lab Times:	L1 - Tuesday 12:00-12:50p.m. L2 – Friday 9:00-9:50a.m.

Pre-Requisite: PE1015 Essentials of Human Physiology

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:

At the conclusion of the course the student will be able to:

1. Understand the basic structure-function relationships that exist within the human body and the regulation of these physiological processes.
2. Describe the basic principles and mechanisms of human physiology.
3. Explain the control and integration of cellular and systemic function in responses to acute and chronic exercise stress.

Required Text:

Germann, William J., and Stanfield, Cindy L. (2005). Principles of Human Physiology, 2nd Edition. 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. Class notes will be posted on Moodle prior to lecture date.

Course Evaluation:

Test #1	Feb. 8	20%
Test #2	Mar. 22	20%
LAB Exam	L1 - April 6 L2 - April 9	10%
LAB Attendance		5%
Reproductive Physiology Assignment	Due Apr. 14	10%
Final Exam	TBA	35%

Delivery Mode:

Lecture & Lab

Transferability:

U of A, AU*, CUC, AUC, U of L, CU, KUC

*See GPRC Calendar/Transfer Guide

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 but will be monitored for the lab portion of the course. Students are responsible for all material assigned or presented.

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Grading Conversion Chart

Alpha Grade	4-point Equivalent	Designation
A+	4.0	EXCELLENT
A	4.0	
A-	3.7	FIRST CLASS STANDING
B+	3.3	
B	3.0	GOOD
B-	2.7	
C+	2.3	SATISFACTORY
C	2.0	
C-	1.7	
D+	1.3	MINIMAL PASS
D	1.0	
F	0.0	FAIL
WF	0.0	FAIL, withdrawal after the deadline

Evaluation will be completed and expressed in raw marks (%) throughout the course. Grades (using the letter grading system) will be assigned only to the final distribution of mark totals for the course. Such assignment will be based on a combination of absolute achievement and relative performance in the class.

Statement on Plagiarism and Cheating:

Please refer to pages 49-50 of the College calendar regarding plagiarism, cheating and the resultant penalties. These are serious issues and will be dealt with severely.

Lecture Schedule PE 1030:

Date	Schedule	Readings
Jan. 6	Cardiovascular System Review	
Jan. 11, 13	Blood Vessels, Blood Flow & Blood Pressure	Ch. 14
Jan. 18, 20	Nervous System : CNS & Neural Integration	Ch. 8/9
Jan. 25, 27, Feb. 1	Nervous System: Sensory Systems	Ch. 10
Feb. 3	Respiratory System: Pulmonary Ventilation	Ch. 16
Feb. 8	Test #1	
Feb. 10	Respiratory System: Pulmonary Ventilation	
Feb. 15	Family Day	
Feb. 17, 22	Respiratory System: Gas Exchanges & Regulation of Breathing	Ch. 17
Feb. 24, Mar. 1	Urinary System: Renal Function	Ch. 18
Mar. 3	Urinary System: Fluid & Electrolyte Balance	Ch. 19
March 5-12	Winter Break	
Mar. 15	Urinary System: Fluid & Electrolyte Balance	
Mar. 17	Gastrointestinal System	Ch. 20
Mar. 22	Test #2	
Mar. 24, 29	Gastrointestinal System	
Mar. 31, Apr. 5	Immune System	Ch. 23
April 2	Good Friday	
Apr. 7, 12	Whole Body: Integrated Physiological Responses to Exercise	Ch. 24
Apr. 14	Review Class Reproductive assignment Due	
TBA	Final Exam	

Date	Schedule	
Jan. 12	Cardiovascular System Blood Typing	J130
Jan. 19	Cardiovascular System Blood Pressure	J227
Jan. 26	Cardiovascular System Blood Pressure	J227
Feb. 2	Nervous System: Sensory Systems	J130
Feb. 9	Nervous System: Sensory Systems	J130
Feb. 16	Respiratory System: Pulmonary Ventilation	J130
Feb. 23	Respiratory System: Pulmonary Ventilation	J130
March 2	No Lab	
March 9	No Classes – Winter Break	
Mar. 16	Gastrointestinal System: Digestive enzymes	J130
Mar. 23	Review	J130
March 30	No Lab	
Apr. 6	Lab Exam	J130

Lab 1 (Tuesday) Schedule PE 1030:

Date	Schedule	Location
Jan. 15	Cardiovascular System Blood Typing	J130
Jan. 22	Cardiovascular System Blood Pressure	J227
Jan. 29	Cardiovascular System Blood Pressure	J227
Feb. 5	Nervous System: Sensory Systems	J130
Feb. 12	Nervous System: Sensory Systems	J130
Feb. 19	Respiratory System: Pulmonary Ventilation	J130
Feb. 26	Respiratory System: Pulmonary Ventilation	J130
March 5	No Classes - Winter Break	
Mar. 19	Gastrointestinal System: Digestive enzymes	J130
Mar. 26	Review	J130
April 2	No Classes – Good Friday	
Apr. 9	Lab Exam	J130

Lab 2 (Friday) Schedule PE 1030:

