

DEPARTMENT OF SCIENCE

COURSE OUTLINE – Fall 2015

NS 1500 - Anatomy and Physiology

INSTRUCTOR: Dr. Sean Irwin, Ph.D. **PHONE:** 539-2860 (W); 567-2226 (H)

OFFICE: J 221 **E-MAIL:** sirwin@gprc.ab.ca

OFFICE HOURS: Tues. and Thurs. 1 - 2:20 am

Fri. 8:30 – 9:50 am

DELIVERY MODE(S): Lectures – A2: Mon. and Wed. 8: 30 – 11:20, B 201

B2: Tues. and Thurs. Fri. 10 – 12:50, B 201

PREREQUISITE(S)/COREQUISITE: Biology 30 and Chemistry 30 or equivalents.

REQUIRED TEXT/RESOURCE MATERIALS:

Saladin, K.S. (2015), <u>Anatomy and Physiology: The Unity of Form and Function, 7th ed.</u>, (or 6th ed. 2012) WCB / McGraw-Hill, Boston MA, ISBN 978-0-07-340371-7

CALENDAR DESCRIPTION:

NS1500 6 (6-0-0) UT Pending 90 Hours 15 Weeks

Introduction to the structure of the human body and an introduction to human physiology. Notes: Available only to Nursing students.

LEARNING OUTCOMES: Upon successful completion of this course a student will have a working knowledge of the structure and function of the human body.

COURSE OBJECTIVES:

- 1. To gain further understanding of the structure and function of the human body.
- 2. To develop critical thinking skills with respect to the anatomy and physiology of the human body.
- 3. Integrate clinical situations with the underlying physiological principles and concepts.
- 4. Demonstrate critical thinking skills in relation to the study of physiology.
- 5. To gain an understanding of anatomy and physiology that will facilitate future work in the medical field.

COURSE SCHEDULE/TENTATIVE TIMELINE:

Week	Topic	Chapter
1	Introduction to anatomy; The Chemistry of Life	2
	- Orientation to Human Anatomy	Atlas A
	Introduction to physiology; Homeostasis and Feedback mechanisms	
	- Enzymes and Metabolism	1
2	Anatomy of the Cell and Histology	3 and 5
	Membrane Transport and Cellular respiration	4 and 26
	Cellular Function – Protein Synthesis and DNA Replication	
3	The Integumentary System	6
	Bone Tissue	
		7
4	Exam I – 20%	Weeks 1 -3
	The Axial and Appendicular Skeletal Systems	8
	Selected Joints	9
	The Muscular System	10
5	Muscle Tissue	11

6	The Spinal Cord and Spinal Nerves	13
	Nervous Tissue	12
7	- Somatic Reflexes	Weeks 4 -6
/	Exam II - 25%	weeks 4 -6
	The Brain and Cranial Nerves	14
	- CNS Function and Processing	15
	The Autonomic Nervous System	
8	Sense Organs	16
	The Endocrine System	17
	The Circulatory System: Blood	18
9	The Lymphatic and Immune System	21
10	Exam III – 25%	Weeks 7 – 9
	The Circulatory System: The Heart	19
	The Circulatory System: Blood Vessels	20
11	The Respiratory System	22
	The Urinary System	23
12	The Digestive System	25
	The Female Reproductive System	
		27
13	The Male Reproductive System	27
	The Female Reproductive System	28
14	Human Development	29
	Final Exam (Scheduled by the Registrar's Office) - 30%	Weeks 10 - 14

EVALUATIONS:

Exam I 20% - In order to defer an exam due to Exam II 25% illness you will require a medical

Exam III 25% note.

Final Exam 30%

Total 100%

GRADING CRITERIA:

GRANDE PRAIRIE REGIONAL COLLEGE							
GRADING CONVERSION CHART							
Alpha Grade	4-point	Percentage	Designation				
Aiplia Grade	Equivalent	Guidelines					
\mathbf{A}^{+}	4.0	90 – 100	EXCELLENT				
Α	4.0	85 – 89					
A ⁻	3.7	80 – 84	FIRST CLASS STANDING				
B⁺	3.3	77 – 79					
В	3.0	73 – 76	GOOD				
B ⁻	2.7	70 – 72					
C ⁺	2.3	67 – 69					
С	2.0	63 – 66	SATISFACTORY				
C_	1.7	60 – 62					
D ⁺	1.3	55 – 59	MINIMAL PASS				
D	1.0	50 – 54					
F	0.0	0 – 49	FAIL				
WF	0.0	0	FAIL, withdrawal after the deadline				

STUDENT RESPONSIBILITIES:

Refer to the College Policy on Student Rights and Responsibilities at www.gprc.ab.ca/d/STUDENTRIGHTSRESPONSIBILITIES

STATEMENT ON PLAGIARISM AND CHEATING:

Refer to the College Student Misconduct: Academic and Non-Academic Policy at www.gprc.ab.ca/d/STUDENTMISCONDUCT

**Note: all Academic and Administrative policies are available at www.gprc.ab.ca/about/administration/policies/

UNIVERSITY TRANSFER (If applicable):

** Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability.

Please refer to the Alberta Transfer guide for current transfer agreements: www.transferalberta.ca