



DEPARTMENT OF SCIENCE

COURSE OUTLINE – Fall 2017

NS1500 - Anatomy and Physiology – 6(6-0-0) 90 Hours 15 Weeks

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. 11:30 – 1 pm

CALENDAR DESCRIPTION:

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

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

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

REQUIRED TEXT/RESOURCE MATERIALS:

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

DELIVERY MODE(S): Lectures – A2: Mon. and Wed. 8: 30 – 11:20, J229

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.

TRANSFERABILITY:

A list of institutions to which this course transfers (For example: UA, UC, UL, AU, GMU, CU, CUC, KUC. Please note that this is a sample and it must be replaced by your specific course transfer)

***Warning:** Although we strive to make the transferability information in this document up-to-date and accurate, **the student has the final responsibility for ensuring the transferability of this course to Alberta Colleges and Universities.** Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at Alberta Transfer Guide main page <http://www.transferalberta.ca> or, if you do not want to navigate through few links, at <http://alis.alberta.ca/ps/tsp/ta/tbi/onlineSearch.html?SearchMode=S&step=2>

**** 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**

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	<u>30%</u>	
Total	100%	

GRADING CRITERIA:

Please note that most universities will not accept your course for transfer credit **IF** your grade is **less than C-**.

Alpha Grade	4-point Equivalent	Percentage Guidelines	Alpha Grade	4-point Equivalent	Percentage Guidelines
A+	4.0	90-100	C+	2.3	67-69
A	4.0	85-89	C	2.0	63-66
A-	3.7	80-84	C-	1.7	60-62
B+	3.3	77-79	D+	1.3	55-59
B	3.0	73-76	D	1.0	50-54
B-	2.7	70-72	F	0.0	00-49

COURSE SCHEDULE/TENTATIVE TIMELINE:

Week	Topic	Chapter	
1	Introduction to anatomy; The Chemistry of Life - Orientation to Human Anatomy Introduction to physiology; Homeostasis and Feedback mechanisms - Enzymes and Metabolism	2 Atlas A 1	
2	Anatomy of the Cell and Histology Membrane Transport and Cellular respiration Cellular Function – Protein Synthesis and DNA Replication	3 and 5 4 and 26	
3	The Integumentary System Bone Tissue	6 7	
4	Exam I (20%) - Sept. 20 – A2; Sept. 21 – B2 The Axial and Appendicular Skeletal Systems Selected Joints	Weeks 1 -3 8 9	
5	The Muscular System Muscle Tissue	10 11	

6	The Spinal Cord and Spinal Nerves	13	
	Nervous Tissue - Somatic Reflexes	12	
7	Exam II (25%) – Oct. 11 – A2; Oct. 12 – B2	Weeks 4 -6	
	The Brain and Cranial Nerves	14	
	- CNS Function and Processing The Autonomic Nervous System	15	
8	Sense Organs	16	
	The Endocrine System	17	
9	The Circulatory System: Blood The Lymphatic and Immune System	18 21	
10	Exam III – 25% - Nov. 8 – B2; Nov. 9 – A2	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 The Female Reproductive System	25 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	

STUDENT RESPONSIBILITIES:

The College Policy on Students Rights and Responsibilities can be found at

<https://www.gprc.ab.ca/about/administration/policies/>

STATEMENT ON PLAGIARISM AND CHEATING:

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the College Calendar at <http://www.gprc.ab.ca/programs/calendar/> or the College Policy on Student Misconduct: Plagiarism and Cheating at <https://www.gprc.ab.ca/about/administration/policies>

**Note: all Academic and Administrative policies are available on the same page.