

DEPARTMENT OF SCIENCE

COURSE OUTLINE – Fall 2022

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

Northwestern Polytechnic acknowledges that our campuses are located on Treaty 8 territory, the ancestral and present-day home to many diverse First Nations, Metis, and Inuit people. We are grateful to work, live and learn on the traditional territory of Duncan's First Nation, Horse Lake First Nation and Sturgeon Lake Cree Nation, who are the original caretakers of this land.

We acknowledge the history of this land and we are thankful for the opportunity to walk together in friendship, where we will encourage and promote positive change for present and future generations.

INSTRUCTORS:	Dr. Sean Irwin Ph.D. (Section A2)	Dr. Beatrice Amar Ph.D. (Section B2)	Miss Nicoletta Harabor M.Sc. (Section C2)
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OFFICE:	J224	J208	J222
OFFICE HOURS:	T/R 11:30 – 12:20	M/W 13:30 – 14:20	T/R 13:30 – 14:20
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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 or equivalent.

REQUIRED TEXT/RESOURCE MATERIALS:

Saladin, K.S. (2020), *Anatomy and Physiology : The Unity of Form and Function*, 9th ed., (or 8th ed. 2018) WCB / McGraw-Hill, Boston MA, ISBN 9781260571295

NS1500 Study Aid – Available at the bookstore.

DELIVERY MODE(S): Lectures – A2: Tues. and Thurs. 8:30 – 11:20 am, HEC201
B2: Mon. and Wed. 14:30 – 17:20 pm, HEC201
C2: Tues. and Thurs. 14:30 – 17:20 pm, HEC206

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.

LEARNING OUTCOMES:

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

TRANSFERABILITY:

Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at the Alberta Transfer Guide main page <http://www.transferalberta.ca>.

Please note that a grade less than C+ is not accepted for transfer to the U of A for NURS 106 (previously NURS 140 and 150). A minimum grade of C+ is required to receive credit in NS1500.

**** 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 illness
Exam II	22.5%	you will require a medical note.
Exam III	22.5%	
Final Exam	25%	
Completed Study Aid	5%	
Online Quizzes	<u>5%</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 Cellular Function – Protein Synthesis and DNA Replication	3 and 5 3 and 4
3	The Integumentary System Bone Tissue	6 7
4	Exam I – B2 - Sept. 28; A2/C2 Sept. 29 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 Nervous Tissue - Somatic Reflexes	13 12
7	Exam II – B2 - Oct. 26; A2/C2 Oct. 27 The Brain and Cranial Nerves	Weeks 4 -6 14

	- CNS Function and Processing The Autonomic Nervous System	15
8	Sense Organs The Endocrine System	16 17
9	The Circulatory System: Blood The Lymphatic and Immune System	18 21
10	Exam III – B2 - Nov. 16; A2/C2 - Nov. 17 The Circulatory System: The Heart The Circulatory System: Blood Vessels	Weeks 7 – 9 19 20
11	The Respiratory System The Urinary System	22 23
12	The Digestive System The Female Reproductive System	25 27
13	The Male Reproductive System Human Development	28 29
	Final Exam (Scheduled by the Registrar’s Office)	Weeks 10 - 13

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 Northwestern Polytechnic Calendar at <https://www.nwpolytech.ca/programs/calendar/> or the Student Rights and Responsibilities policy which can be found at <https://www.nwpolytech.ca/about/administration/policies/index.html>.

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