SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: Human Anatomy & Physiology

CODE NO.: BIOL2105 SEMESTER: 1,2

PROGRAM: Collaborative BScN

AUTHOR: Leslie Uhlig, Room D1201, leslie.uhlig@saultc.on.ca

DATE: Sept/02 PREVIOUS OUTLINE DATED: Sept./01

APPROVED:

DEAN DATE

TOTAL CREDITS: 6

PREREQUISITE(S):

HOURS/WEEK: 6

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(705) 759-2554, Ext. 603/689

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Tuesdays and Thursdays, 10:30 a.m. - 12:00 p.m. **Lecture Times:**

Lecture Location:

Tuesdays, 1:00 p.m. - 3:50 p.m. OR Laboratory:

Thursdays, 1:00 p.m. - 3:50 p.m.

Laboratory Location: A2050

I. **COURSE DESCRIPTION:**

This course describes human anatomy and physiology at the cellular, tissue, organ and system levels of organization. Aspects of this course will concentrate on the clinical applications of anatomy and physiology.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

- 1. Utilize the terminology related to the structure and function of the human body.
- 2. Recognize the interrelationships of cells, tissues, organs and body systems from both an anatomical and physiological perspective.
- 3. Differentiate the basic chemical concepts and principles as they are related to the anatomy and physiology of the human body.
- 4. Describe the location, structure and function of the organs of the stated major organ/body systems.
- 5. Recognize the major tissue types, their location, structure, function and roles throughout the human body's major body systems.
- 6. Analyze the interrelationships of body organ systems, homeostasis and the complementarity of structure and function.
- 7. Recognize the connections between homeostasis (and the mechanisms by which the body maintains it) and the state of health in a human body.
- 8. Understand that in order to evaluate the health status of a patient, a thorough understanding of the healthy human body (both anatomical and physiological) is required.

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III. TOPICS:

TERM 1: Sept. - Dec. 2002

<u>Date</u>	<u>Week</u>	<u>Topic</u>	Relevant Chapter in Text
Sept. 10 Sept. 12	1 1	Orientation Introduction to the Human Body	1,2
Sept. 17 Sept. 19	2 2	Cell Structure (Part 1) Cell Structure (Part 2)	3 3
Sept. 24 Sept. 26	3 3	Cell Division Histology (Part 1): Epithelial Tissues	3 4
Oct. 1 Oct. 3	4 4	Histology (Part 2): Connective Tissu Histology (Part 3): Membranes & Tis	
Oct. 8 Oct. 10	5 5	Integumentary System (Part 1): Ana Integumentary System (Part 2): Functions and Pathology	atomy 5 5
Oct. 15 Oct. 17	6 6	The Skeletal System (Part 1): Bone The Skeletal System (Part 2): Bone Physiology	as a Tissue 6 6
Oct. 22 Oct. 24	7 7	TEST 1 (Worth 10%) The Skeletal System (Part 3): The S	1-6 Skull 7
Oct. 29	8	The Skeletal System (Part 4):	7
Oct. 31	8	Vertebral Column and Thorax The Skeletal System (Part 5): The Appendicular Skeleton	7
Nov. 5 Nov. 7	9 9	Joints (articulations) Muscle Tissue (Part 1)	8 9
Nov. 12 Nov. 14	10 10	Muscle Tissue (Part 2) Muscular System (Part 1): Axial Mus	9 scles 10
Nov. 19	11	Muscular System (Part 2):	10
Nov. 21	11	Appendicular Muscles Nervous System (Part 1): Nervous	Tissues 11
Nov. 26	12	Nervous System (Part 2): The Brain	12
<i>Nov.</i> 28	12	TEST 2 (Worth 10%)	7-12
Dec. 3	13	Nervous System (Part 3):	12 & 13
Dec. 5	13	The Spinal Cord and Spinal Nerves Nervous System (Part 4): The Cranial Nerves, Autonomic N.S	13 & 14

TERM 2: Jan. – April 2003

<u>Date</u>	Week	<u>Topic</u>	Relevant Chapter in Text
Jan. 7	1	Senses (Part 1): Hearing	13
Jan. 9		Senses (Part 2): Vision	13
Jan. 14	2 2	Endocrine System (Part 1)	15
Jan. 16		Endocrine System (Part 2)	15
Jan. 21	3	Circulatory System (Part 1): Blood	16
Jan. 23	3	Circulatory System (Part 2): Heart	17
Jan. 28	4	Circulatory System (Part 3): Blood Vessels, Arteries	18
Jan. 30	4	Circulatory System (Part 4): Blood Vessels, Veins	18
Feb. 4	5	The Lymphatic System: Vessels, Or	
Feb. 6	5	The Immune System	20
Feb. 11*	6	TEST 3 (Worth 10%) Respiratory System (Part 1)	13-20
Feb. 13	6		21
rep. 13	O	Respiratory System (Fart 1)	
Feb. 18	7	Respiratory System (Part 2) Digestive System (Part 1)	21
Feb. 20	7		22
Feb. 25 Feb. 27	8 8	Digestive System (Part 2) Digestive System (Part 3): Nutrition,	Metabolism 22
March 4	9	Urinary System (Part 1)	24
March 6	9	Urinary System (Part 2)	24
March 11	10	SPRING BREAK; no classes	
March 13	10	SPRING BREAK; no classes	
March 18	11	Male Reproductive System (Part 1)	26
March 20	11	Male Reproductive System (Part 2)	26
March 25 March 27	12 12	Female Reproductive System (Part Female Reproductive System (Part	•
April 1 April 3*	13 13	Pregnancy and Human Developmer TEST 4 (Worth 10%)	nt
April 8	14	Heredity: Genetics	
April 10	14	Review for exam	

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IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Marieb, E. N. (2002). <u>Anatomy and Physiology</u>,1st edition. Benjamin Cummings, ISBN: 0-8053-6469-2

Marieb, E.N. (2002). <u>Human Anatomy and Physiology Laboratory Manual</u>. Cat Version. 7th Edition. Benjamin Cummings. ISBN: 0-8053-4985-5

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One dissecting kit (available in bookstore). Contains scalpel, fine scissors, forceps and probe).

One bound notebook of 8.5" X 11" drawing paper (also available in bookstore or other office/art supply stores such as Stones)

Drawing pencils of 3H (very hard) lead. You will need several.

A clean, white, full-length lab coat is required.

Students will be expected to purchase their own replacement scalpel blades (available in Campus Shop).

V. EVALUATION PROCESS/GRADING SYSTEM:

1. The pass mark for this course is <u>50%</u>. It is composed of lecture tests, a final lecture exam, laboratory tests, laboratory quizzes and laboratory assignments (drawings).

5%

10%

2. Evaluation Methods:

Lecture Portion:

Lab Quizzes

Lab Drawings

Term Test 1	October 23	10%
Term Test 2	November 28	10%
Term Test 3	February 11	10%
Term Test 4	April 3	10%
Final Exam (Lectur	25%	
Laboratory Portion	:	
Lab Test 1	Dec. 10 & 12	10%
Lab Test 2	April 8 & 10	10%
	•	

Random

- 3. Failure to attend a test is only valid with a medical certificate or on compassionate grounds, under which conditions a makeup test can be arranged with the instructor. The instructor <u>must be notified by the student of an absence no later than one week after the original test date</u>. The makeup test may not follow precisely the same format as the originally scheduled test.
- 4. Students missing the final exam because of illness or other SERIOUS reason must inform the professor BEFORE the exam. Those students who have informed the instructor of their absence, according to policy, will be eligible to arrange an opportunity as soon as possible to write the exam at another time. Those students who DO NOT NOTIFY the professor will receive a zero grade for that exam.
- 5. Students receiving borderline marks (59, 69, 79, 89) will have their mark advanced to the next category if they have attended at least 80% of the classes.

6. Course Grading Scheme:

<u>Grade</u>	<u>Definition</u>	Grade Point Equivalent	
A+ A B C D	90 - 100% 80 - 89% 70 - 79% 60 - 69% 50-59%	4.00 3.75 3.00 2.00 1.00	
R (Repeat)	49% or below	0.00	
CR (Credit)	Credit for diploma requirements has been awarded		
S	Satisfactory achievement in field placement or non-graded subject areas		
U	A temporary grade. This is used in limited situations with extenuating circumstances giving a student additional time to complete the requirements for a course (see <i>Policies & Procedures Manual – Deferred Grades and Make-up</i>)		
NR	Grade not reported to Registrar's Office. This is used to facilitate transcript preparation when, for extenuating circumstances, it has not been possible for the faculty member to report grades.		

VI. SPECIAL NOTES:

Lectures

The lecture material is drawn from more than one source in addition to the assigned text for this course. Recording of lectures is permitted ONLY with the permission of the instructor. It is expected that students will be in attendance at every lecture; it is always the student's responsibility to obtain missed handouts, notes, etc. All material covered in lecture and readings assigned from the text or other outside sources, will be used for the purposes of tests. Each test covers the material since the preceding test (i.e. tests are not cumulative), with the exception of the final exam, which will cover the entire lecture portion of the course.

Laboratory

The following laboratory policies are to PROTECT YOU and your fellow students. Students who fail to observe the laboratory policies will be ejected from that laboratory period and possibly from the entire laboratory portion of the course.

At NO TIME will ANY food or drink be allowed in the laboratory. All clothing must be stored away from the laboratory benches. Shoes MUST be worn at all times.

Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your instructor and/or the Special Needs office. Visit Room E1204 or call Extension 493, 717, or 491 so that support services can be arranged for you.

Retention of course outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Plagiarism:

Students should refer to the definition of "academic dishonesty" in *Student Rights and Responsibilities*. Students who engage in "academic dishonesty" will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

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Course outline amendments:

The Professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Attendance

Students are expected to attend all classes. Various handouts may be given out during class and students are responsible for keeping up with the material missed. the easiest way to keep up is to ATTEND CLASS.

Substitute course information is available in the Registrar's office.

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

VIII. DIRECT CREDIT TRANSFERS:

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.