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**

Leslie Dafoe, Room D1201, leslie.dafoe@saultc.on.ca **AUTHOR:**

DATE: June/05 PREVIOUS OUTLINE DATED: June/04

APPROVED:

ASSOCIATE DEAN DATE

6 **TOTAL CREDITS:**

PREREQUISITE(S):

HOURS/WEEK: 6

> Copyright © 2005 The Sault College of Applied Arts & Technology Reproduction of this document by any means, in whole or in part, without prior written permission of Sault College of Applied Arts & Technology is prohibited. For additional information, please contact the Associate Dean,

School of Health and Human Services

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

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.

COURSE NAME CODE #

III. TOPICS:

- 1.. Introduction to the Human Body
- 2. Cell Structure and Function
- 3. Histology
- 4. Integumentary System
- 5. Skeletal System
- 6. Articulations
- 7. The Muscular System
- 8. The Nervous System
- 9. The Special Senses
- 10. The Endocrine System
- 11. The Circulatory System
- 12. The Lymphatic System
- 13. The Immune System
- 14. The Respiratory System
- 15. The Digestive System and Basic Metabolism
- 16. The Urinary System
- 17. Fluid, Electrolyte, and Acid-Base Balance
- 18. The Male Reproductive System
- 19. The Female Reproductive System

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

The following text package from John Wiley & Sons, Inc. is <u>required</u> (special package ISBN # 0471769231) and contains:

- Tortora, Gerard J. and Bryan Derrickson. (2006). *Principles of Anatomy & Physiology* (11th ed.). Hoboken, N.J.: John Wiley & Sons, Inc.
- Prezbindowski, K.S. (2005). *Learning Guide, Principles of Anatomy & Physiology G.J.Tortora and B. Derrickson*, (11th ed.). Hoboken, N.J.: John Wiley & Sons, Inc.
- Allen, Connie and Valerie Harper. (2006). *Laboratory Manual for Anatomy & Physiology,* including *Cat Dissection Guide,* (2nd ed.). Hoboken, N. J.: John Wiley & Sons, Inc.

The following text is also **required**:

De Graaff, Kent M. and John L. Crawley. (2003). *A Photographic Atlas for the Anatomy & Physiology Laboratory*. Englewood, California: Morton Publishing Company, ISBN 0-89582-630-5.

The following texts are highly **recommended**:

- Sebastiani, Aurora M. and Dale W. Fishbeck. (2005). *Mammalian Anatomy: The Cat* (2nd ed). Englewood, California: Morton Publishing Company. ISBN 0-89582-683-6
- Krieger, Paul A. (2005). *A Visual Analogy Guide to Human Anatomy* (1st ed.). Englewood, California: Morton Publishing Company. ISBN 0-89582-659-3

Additional materials required include the following:

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

2-3 Boxes of disposable surgical gloves (for dissection purposes). Obtainable at any drug store.

One ring bound notebook of 8.5" X 11" drawing paper (available at Essentials Stationery in the Station Mall.). No other size notebook will be accepted for grading!

Drawing pencils of 3H (very hard) lead. You will need several. A good eraser (i.e. Staetler Mars white) is also recommended.

A clean, white, full-length lab coat is required. This lab coat is NOT to be used in any clinical settings!

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> (a "D" grade). It is composed of lecture tests, a final lecture exam, laboratory tests, laboratory quizzes and laboratory technique (drawings, dissection technique and exercises).
- 2. Evaluation Methods:

<u>Lecture Portion</u> :	% of Final Grade
Term Test 1	10%
Term Test 2	10%
Term Test 3	10%
Term Test 4	10%
Final Exam (Lecture Material)	25%
Laboratory Portion:	
Lab Test 1	10%
Lab Test 2	10%
Lab Quizzes	10%
Lab Technique	5%

MIDTERM GRADES:

The determination of midterm grades as "S" or "U" will be based on the cumulative grades of all tests and/or laboratory work completed up to the date of submission of midterm grades. Any student who does not achieve a passing grade on the majority of graded work will receive a "U" grade at midterm. Those who do receive a "U" grade at midterm are encouraged to schedule a meeting with the professor for additional help towards success in the course

- 3. Failure to attend a test is valid ONLY with a medical certificate or on VALID compassionate grounds, under which conditions a makeup test MAY 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.

CODE#

- 5. Students receiving borderline marks (59, 69, 79, 89) may have their mark advanced to the next category if they have attended at least 80% of the classes. An advance of a mark of 49% to a passing grade of 50% will ONLY occur if the student has met attendance criteria and has succeeded on at least two of the term tests and the final exam. NO ADVANCE OF MARKS OF 47-48 WILL OCCUR.
- 6. Course Grading Scheme:

The following semester grades will be assigned to students in post-secondary courses:

<u>Grade</u>	<u>Definition</u>	Grade Point <u>Equivalent</u>
Α	80 – 100%	4.00
В	70 - 79%	3.00
С	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical placement or non-graded subject area.	
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.	
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.	
NR	Grade not reported to Registrar's office.	
W	Student has withdrawn from the course without academic penalty.	
	without academic penalty.	

NOTE:

For such reasons as program certification or program articulation, certain courses require minimums of greater than 50% and/or have mandatory components to achieve a passing grade.

It is also important to note, that the minimum overall GPA required in order to graduate from a Sault College program remains 2.0.

All NURS courses require 60% for a passing grade.

All <u>science courses</u>, including BIOL2105, BIOL2111, CHMI2220 and <u>elective</u> <u>courses</u> require 50% for a passing grade.

COURSE NAME CODE #

VI. SPECIAL NOTES:

Attendance

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

<u>PLEASE NOTE</u>: As is stated in your B.Sc.N. Student Manual: "Punctual and regular attendance at the various academic exercises is required of all students. Unexcused absences in excess of 20% may jeopardize receipt of credit for the course. An unexcused absence is one in which the professor was not notified of the absence. An excused absence includes absences where the professor is notified via voice mail, in person or a written note." This policy will be adhered to RIGOROUSLY. It is imperative that for success to occur in this course, attendance be at least 80% <u>for both lectures</u> and laboratory exercises.

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 and must be closed-toe (i.e. NO SANDALS). No headgear (hats, bandanas, etc.) will be permitted in the laboratory at any time.

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 E1101 or call Extension 703 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.

COURSE NAME CODE #

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.

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.

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.