

**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 B.Sc.N.

**AUTHOR:** Leslie Dafoe, Room D1201, [leslie.dafoe@saultc.on.ca](mailto:leslie.dafoe@saultc.on.ca)  
Phone: 759-2554 extension 2630

**DATE:** June/06      **PREVIOUS OUTLINE DATED:** June/05

**APPROVED:**

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**ASSOCIATE DEAN**

\_\_\_\_\_  
**DATE**

**TOTAL CREDITS:** 6

**PREREQUISITE(S):**

**HOURS/WEEK:** 6

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*For additional information, please contact the Associate Dean,*  
*School of Health and Human Services*  
*(705) 759-2554, Ext.2689*

**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.

**III. TOPICS:**

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

**IV. REQUIRED RESOURCES/TEXTS/MATERIALS:**

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

Tortora, Gerard J. and Bryan Derrickson. (2006). *Principles of Anatomy & Physiology, 11e*. Hoboken, N.J.: John Wiley & Sons, Inc.

Prezbindowski, K.S. (2005). *Learning Guide, Principles of Anatomy & Physiology G.J. Tortora and B. Derrickson, 11e*. Hoboken, N.J.: John Wiley & Sons, Inc.

Allen, Connie and Valerie Harper. (2006). *Laboratory Manual for Anatomy & Physiology, including Cat Dissection Guide, 2e*. 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, 2e*. Englewood, California: Morton Publishing Company. ISBN 0-89582-683-6

Krieger, Paul A. (2005). *A Visual Analogy Guide to Human Anatomy, 1e*. Englewood, California: Morton Publishing Company. ISBN 0-89582-659-3

Chabner, D-E. (2005). *Medical Terminology: A Short Course, 4e*. St. Louis, Missouri: Elsevier Publishing Company. ISBN 1-4160-0165-4

Additional materials required include the following:

One dissecting kit. Contains scalpel, fine scissors, forceps and probe, etc. Kits can be purchased from Achieve Health Care, 331 Wellington St. W., 253.3301

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. Staedtler 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 50% (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>	<u>% of Final Grade</u>
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%

**Please note:** Lab technique includes dissections, drawings, and lab experimental results. ALL work must be done by the individual student. Any failure to participate in dissection exercises will result in a zero grade for this portion of the lab grade. Any plagiarism of drawings will also result in a zero grade for this portion of the lab grade. There will be NO EXTENSIONS for the deadlines for handing in drawings. The work MUST BE DONE in the lab period in which it is assigned. If extra time is required and requested, **in writing** (including the provision of a reason for why the work was not completed during the regular lab period), arrangements may be made by the lab instructor or the course instructor for the student to have access to the lab outside of regular class times.

**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 lecture 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 must be notified by the student of an absence no later than one week after the original test date. The makeup test may not follow precisely the same format as the originally scheduled test. There will be NO makeup tests available for missed laboratory quizzes.**

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) **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:

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 – 100%	4.00
A	80 – 89%	4.00
B	70 – 79%	3.00
C	60 – 69%	2.00
D	50-59%	1.00
F (Failure)	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 &amp; 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.	
W	Student has withdrawn from the course 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 science courses, including BIOL2105, BIOL2111, CHMI2220 and elective courses require 50% for a passing grade.

**VI. SPECIAL NOTES:****Attendance**

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

**PLEASE NOTE:** 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% **for both lectures 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, drink, or cosmetics be allowed in the laboratory. All clothing must be stored away from the laboratory benches. Proper shoes MUST be worn at all times and must be closed-toe and closed-heel (i.e. NO SANDALS). No headgear (hats, bandanas, etc.) will be permitted in the laboratory at any time. NO CELL PHONES are permitted in the laboratory setting.***

**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 2703 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 the *Student Code of Conduct* (available on-line). 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.