

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



**SAULT
COLLEGE**

COURSE OUTLINE

COURSE TITLE: Human Anatomy & Physiology
CODE NO. : BIOL2105 **SEMESTER:** 1, 2
PROGRAM: Collaborative B.Sc.N.
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DATE: Sept./16 **PREVIOUS OUTLINE DATED:** Sept./15

APPROVED: *Marilyn King* *June, 2016*

CHAIR, HEALTH PROGRAMS

DATE

TOTAL CREDITS: 6

PREREQUISITE(S):

HOURS/WEEK: 6

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For additional information, please contact the Chair, Health Programs
School of Health Wellness and Continuing Education
(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
20. The Female Reproductive System

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

The following text package from John Wiley & Sons, Inc. is **required** and contains:

Tortora, Gerard J. and Bryan Derrickson. (2014). *Principles of Anatomy & Physiology, 14e*. Hoboken, N.J.: John Wiley & Sons, Inc.

Nielsen, M. And S. Miller (2008). Real Anatomy 1.0 (DVD software package) John Wiley & Sons, Inc. ISBN 978-0-470-11483-4

Allen, Connie and Valerie Harper. (2014). *Laboratory Manual for Anatomy & Physiology, including Cat Dissection Guide, 5e*. Hoboken, N. J.: John Wiley & Sons, Inc.

The entire package, including all of the above resources, is available as a Binder Ready Version (BRV), at lower cost, or as a hardbound set, at higher cost.

The following text is also **required**:

De Graaff, Kent M. and John L. Crawley. (2011). *A Photographic Atlas for the Anatomy & Physiology Laboratory, 7e*. Englewood, California: Morton Publishing Company. ISBN 9780895828750.

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 9780895826831

Krieger, Paul A. (2013). *A Visual Analogy Guide to Human Anatomy and Physiology, 2e*. Englewood, California: Morton Publishing Company.
ISBN 9781617310669

Chabner, D-E. (2015). *Medical Terminology: A Short Course, 7e*. St. Louis, Missouri: Elsevier Publishing Company. ISBN: 978-1-4557-5830-2

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Additional materials required include the following:

One dissecting kit. Contains scalpel, fine scissors, forceps and probe, etc. **2-3 Boxes of disposable surgical gloves** (for dissection purposes).

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

V. EVALUATION PROCESS/GRADING SYSTEM:

1. **The pass mark for this course is 60% (a "C" grade).** It is composed of lecture tests, a final lecture exam, laboratory tests, laboratory quizzes and laboratory participation (dissections, active participation in activities).

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%
<u>Laboratory Portion:</u>	
Lab Test 1	10%
Lab Test 2	10%
Lab Quizzes	10%
Lab Participation	5%

Please note: Lab technique includes dissections 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. 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. Students are also highly recommended to use the tutorial times available to you for additional learning opportunities.

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, and provide supporting documentation. 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 59% to a passing grade of 60% 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 57-58 WILL OCCUR.**
6. Course Grading Scheme:

The following semester grades will be assigned to students:

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	2.00
C	60 - 69%	1.00
D	50 – 59%	0.00
F (Fail)	49% and below	
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.

If a faculty member determines that a student is at risk of not being academically successful, the faculty member may confidentially provide that student's name to Student Services in an effort to help with the student's success. Students wishing to restrict the sharing of such information should make their wishes known to the coordinator or faculty member.

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, email, 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 in place in order 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 or other electronic media are permitted in the laboratory setting.

VII. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located in D2L and on the portal form part of this course outline.