

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



Sault College

COURSE OUTLINE

COURSE TITLE: Structure and Function II

CODE NO. : BIO120 **SEMESTER:** 2

PROGRAM: Massage Therapy

AUTHOR: Lise St. Hilaire

DATE: Jan/02 **PREVIOUS OUTLINE DATED:**

APPROVED:

DEAN

DATE

TOTAL CREDITS: 3

PREREQUISITE(S): BIO110

HOURS/WEEK: 3

Copyright © 2001 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 Judi Maundrell, Dean
School of Health and Human Services
(705) 759-2554, Ext. 603/689

I. COURSE DESCRIPTION:

This course continues to explore the structure and function of the healthy human body. Muscle tissue, the respiratory system, the digestive system and metabolism are studied in depth. Students are expected to apply knowledge from the previous structure and function course.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Describe the structure and function of muscle tissue.

Potential Elements of the Performance:

- a) Label and describe the function of all the parts of a muscle fibre.
- b) Explain how a muscle fibre contracts.
- c) Explain the mechanisms of muscle contraction.
- d) Describe the metabolism of muscle tissue.
- e) Compare the 3 types of muscle tissue (focusing on skeletal and smooth muscle).

2. Describe the structure and function of the respiratory system.

Potential Elements of the Performance:

- a) Label and describe the function of the parts of the respiratory system.
- b) Describe the mechanics and control of breathing.
- c) Describe the exchange and transport of gases in the body.

3. Describe the structure, function and location of the organs of the digestive system.

Potential Elements of the Performance:

- a) Label and describe the function of the parts of the digestive system.
- b) Describe the digestive processes and enzyme reactions occurring in each of the parts of the digestive system.
- c) Describe the physiology of chemical digestion and absorption.

4. Describe the metabolic processes occurring in the body.

Potential Elements of the Performance:

- a) List, give examples and describe the uses of each type of nutrient.
- b) Define the various metabolic processes that occur in the body.
- c) Describe the metabolism of each type of nutrient in the body.
- d) Describe the processes involved in maintaining energy balance in the body.
- e) Describe the processes involved in the regulation of body temperature.

III. TOPICS:

1. Muscle Tissue
2. Respiratory System
3. Digestive System
4. Metabolism

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Marieb, Elaine. (2001). Human Anatomy and Physiology (5th ed.). Benjamin Cummings.

Stedman's Concise Medical Dictionary for the Health Professions (4th ed.). Lippincott, Williams & Wilkins.

V. EVALUATION PROCESS/GRADING SYSTEM:**Evaluation Methods:**

The evaluation methods and procedures for missed exams will be discussed and a written copy will be given to students during the first two weeks of class.

Supplemental Exam:

One opportunity for a supplemental exam will be offered to students who meet the following criteria:

- a) have a grade of 50 – 59% in the course
- b) have attended at least 80% of the scheduled class time

The final grade for the semester will be based solely on the supplemental exam. The grade achieved will not be higher than a "C".

The following semester grades will be assigned to students in postsecondary courses:

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 - 100%	4.00
A	80 - 89%	3.75
B	70 - 79%	3.00
C	60 - 69%	2.00
R (Repeat)	59% 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	Unsatisfactory achievement in field placement or non-graded subject areas.
X	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:

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.

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.