

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

COURSE OUTLINE

COURSE TITLE: ANATOMY & PHYSIOLOGY I

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CODE NO: BIO107 SEMESTER: I

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PROGRAM: MASSAGE THERAPY PROGRAM

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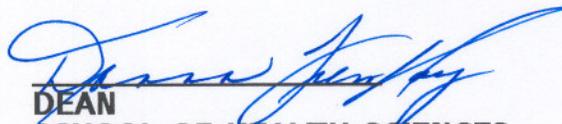
AUTHOR: RUTH WILSON

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DATE: SEPT/96 PREVIOUS OUTLINE DATED: N/A

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APPROVED:

  
DEAN  
SCHOOL OF HEALTH SCIENCES

96-06-11  
DATE

TOTAL CREDITS: 7

PREREQUISITES: NONE

LENGTH OF COURSE: 7 HOURS/WEEK

TOTAL CREDIT HOURS: 112





**ANATOMY & PHYSIOLOGY I**

**BIO107**

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**I COURSE DESCRIPTION:**

This course provides an overview of all the systems of the human body including the basic terminology used in describing the body. The cells, the tissue and the integumentary system are explored in depth and the concepts of microbiology are introduced. The structure and function of the skeletal system is explored as well as muscle physiology. A regional anatomical study of the lower limb completes the course.

**II LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:**

Upon successful completion of this course the student will be able to:

1. Utilize specified terminology related to the structure and function of the human body.
2. Describe the location, structure and function of the major organs and systems of the body.
3. Describe the structural and functional organizations of the human body at the cellular and tissue level.
4. Describe the structure and function of the integumentary system.
5. Explain basic concepts relevant to the field of microbiology.
6. Discuss the structure, the function and the location of the bones and joints of the human body.
7. Discuss muscle physiology.
8. Describe the regional anatomy of the lower limb.

**III TOPICS**

1. Overview of the major organs and systems of the body
2. Terminology
3. The cells and tissues
4. The integumentary system (structure and function)
5. Basic concepts of microbiology:
  - common infective agents
  - structure and function of bacterial cell and virus
  - chain of infection
  - body's defense mechanism
  - prevention of infection

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**III TOPICS (Continued)**

6. Skeletal system (an overview)
  - a) Bones
    - histology
    - classification
    - function
    - structure
  - b) Joints
    - histology
    - classification
    - structure/supports
    - functional movement
7. Muscular Physiology
  - a) Skeletal muscle
    - structure of skeletal muscle and skeletal muscle fibre
    - contraction of a skeletal muscle and skeletal muscle fibre
    - muscle metabolism
  - b) Smooth muscle
    - structure
    - contraction
    - types
8. Regional Anatomical Study of the Lower Limb
  - a) Detailed description of bones
  - b) Detailed description of joints
    - structure
    - movement
    - supports
  - c) detailed description of muscles
    - histology
    - location
    - insertions
    - origins
    - nerve/supply
    - actions
  - d) Major blood supply
  - e) Lymphatic drainage
  - f) Palpable surface landmarks

**IV REQUIRED RESOURCES:**

1. Marieb, Elaine. (1995). Human Anatomy and Physiology (3rd ed.). The Benjamin/Cummings Publishing Co. Inc.
2. Snell, R. (1995). Clinical Anatomy for Medical Students (5th ed.). Little, Brown and Co.

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**IV REQUIRED RESOURCES:  
(Continued)**

3. Stone, R. and Stone J. (1990). Atlas of Skeletal Muscles. Wm. C. Brown Publishers.
4. Kapit and Elson. (1993). The Anatomy Coloring Book (2nd ed.). Harper and Row Publishers.
5. Marieb, Elaine. (1995). Study Guide to Accompany Human Anatomy & Physiology (3rd ed.). The Benjamin/Cummings Publishing Co. Inc.

**V EVALUATION PROCESS/GRADING SYSTEM**

1. The pass mark for the course is 60%. The letter grades for this course will be assigned in accordance with those established by Sault College.
2. The evaluation methods will be determined and discussed with students within the first two weeks of the course.
3. Students are eligible for one rewrite in this course. Please refer to Student Resource Guide for details.

**VI SPECIAL NOTES**

Students with special needs (eg. physical limitations, learning disabilities, visual/hearing impairments) are encouraged to discuss required accommodations with the instructor and/or contact the Special Needs Office.

The instructor reserves the right to modify the course as deemed necessary to meet the needs of students.

**VII PRIOR LEARNING ASSESSMENT/ADVANCED CREDIT**

Students who wish to apply for advanced credit in the course should consult the Instructor/Coordinator.

