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



COURSE OUTLINE

COURSE TITLE: Pathophysiology I

CODE NO.: BIO208 SEMESTER: 3

PROGRAM: Nursing

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DATE: May/02 PREVIOUS OUTLINE DATED: Sept/01

APPROVED:

DEAN DATE

TOTAL CREDITS: 3

PREREQUISITE(S): BIO109, NUR116

HOURS/WEEK: 3

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I. COURSE DESCRIPTION:

In this course, you will learn about the processes of human disease. Human disease is defined as structural or functional changes within the human body that are judged to be abnormal. You will examine the basic structural and functional changes; the study of causes that lead to the changes and manifestations that result. This course covers half of the systems. BIO218 will focus on the remaining systems.

It is imperative that you have a good understanding of the normal anatomy and physiology to understand the process of disease. (THUS, YOU MUST REVIEW THE ASSOCIATED ANATOMY AND PHYSIOLOGY BEFORE THE STUDY OF EACH SYSTEM.) You will find that by reviewing the material and then applying the knowledge, your understanding of anatomy and physiology will deepen and be retained longer. Keep an anatomy and physiology text close at hand so that you may refer to it.

You will need your pathophysiology text and your medical-surgical text for your classes. Find a partner who will bring the other text. Your pharmacology text, drug reference handbook and diagnostics text will also be valuable resources which will be utilized throughout the course.

II. LEARNING OUTCOMES:

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

- 1. explain the basic concepts of pathophysiology and the general principles of disease.
- 2. demonstrate how the human body deals with the dynamic aspects of a disease process.
- 3. analyze common dysfunctions of an organ or organ system, and the effect on the human body as a whole.
- 4. explain the principles and uses of diagnostic testing common in disease processes.
- 5. explain the principles of treatment modalities used for common health problems.

III. TOPICS:

Content will be examined under the following concepts:

- Homeostasis and Balances
- Stress Response
- Alterations in Temperature Regulation

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III. TOPICS:

Homeostasis & Imbalances

- Cell function
- Genetic controls
- Congenital disorders
- Neoplastic disorders
- Infectious disorders
- Immunity and immune disorders
 - AIDS
- Hematopoietic function
 - Disorders of hemostasis
 - Disorders of red blood cells
 - Disorders of white blood cells
 - Disorders of lymph
- Integumentary disorders
 - Burns
- Cardiac function and disorders
 - Disorders of systemic circulation
 - Disorders of venous circulation
 - Disorders of blood pressure
 - Disorders of cardiac function
- Shock
- Diabetes
- Endocrine disorders

IV. REQUIRED RESOURCES:

Karch, A. (2000) Focus on nursing pharmacology. Philadelphia. Lippincott.

Porth, C. (2002) <u>Pathophysiology: Concepts of altered health states</u>. (6th ed.) Philadelphia. Lippincott.

Smeltzer, S & Bare, B & Boyer, B. (2000) <u>Study Guide to Brunner & Suddarth's textbook of Medical Surgical Nursing.</u> Philadelphia. Lippincott.

Smeltzer, S. & Bare, B. (2000) <u>Brunner & suddarth's textbook of medical-surgical nursing.</u> (9th ed) Philadelphia. Lippincott.

Wilson, D. (1999) <u>Understanding laboratory and diagnostic tests.</u> Philadelphia. Lippincott.

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Recommended Resources on Reserve in the Learning Resources Centre:

- Bullock, B. & Henze, R. (2000). Focus on pathophysiology. Philadelphia: Lippincott.
- Burns, M. (1998) Pathophysiology: a self-instructional program. Toronto: Prentice-Hall.
- Corwin, E. (2000). <u>Handbook of pathophysiology</u>. Philadelphia: Lippincott.
- Damjanov, I. (2000). Pathology for health-related professions. Toronto: W.B. Saunders.
- Frizzel, J. (foreword) (2001) <u>Handbook of pathophysiology.</u> Springhouse, P.A., Springhouse.
- Huether, S. & McCance, K. (2000). Understanding pathophysiology. Toronto: Mosby.
- Lauer, K. & Brozenec, S. (1999) <u>Pathophysiology: the A+ review series</u> Springhouse, P.A. Springhouse.
- Marieb, E. (2000). Interactive Physiology. Adam.com Benjamin/Cummings.
- Paradiso, C. (1999). Pathophysiology. Philadelphia: Lippincott.
- Parkinson, C. (2000). Understanding pathophysiology: study guide and workbook. Toronto: Mosby.
- Porth, C. (2002). Pathophysiology: Study Guide. (6th ed.). Philadelphia: Lippincott. *(published April, 2002)*
- Roy, C. (ed) (1998) <u>Pathophysiology made incredibly easy</u>. Springhouse, P.A., Springhouse
- Sides, M. & Korchek, N. (1998) <u>Nurses' guide to successful test-taking</u>. Philadelphia: Lippincott.

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V. EVALUATION PROCESS/GRADING SYSTEM:

1. The pass mark for the course is 60%.

The course is composed of 5 tests and each are worth 18%. Only 4 tests will be counted in the calculation of your final mark.

Quiz #1	18%
Quiz #2	18%
Quiz #3	18%
Quiz #4	18%
Comprehensive Final Exam	28%
Total	100%

There are **NO** substitute dates for tests. If a student is unable to write at the assigned time, the professor must be notified by voice mail or email **PRIOR** to the test stating the extraordinary reason for this absence. A mark of zero will be assigned if prior notification has not occurred. The percentage for the missed test will be added to the final exam or may be used as the one dropped test result. Documentation may be required to verify absence from tests.

- 2. Students <u>may</u> be eligible for a rewrite of the final exam, subject to the following criteria:
 - a) the student <u>must have achieved a score of 50%</u> on each of the tests used to calculate the term mark **AND** the final exam;
 - b) students must have written at least 4 of the 5 term tests and the final exam;
 - c) the highest score which can be achieved for the course is 60% (C Grade);
 - d) the entire semester's material will be tested.
- 3. The policy regarding extensions and late submissions as detailed in the Student Success Guide is in effect.

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

0 1	D. C. W.	Grade Point
<u>Grade</u>	<u>Definition</u>	<u>Equivalent</u>
A+	90 - 100%	4.00
Α	80 - 89%	3.75
В	70 - 79%	3.00
С	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.	

V. EVALUATION PROCESS/GRADING SYSTEM:

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 *Policies & Procedures Manual – Deferred Grades and*

Make-up).

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.

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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.