Douglas College

CURRICULUM GUIDELINES

A: Division: **Instructional**

B: Department/ Program Area: **Health Sciences**

Date: **December 20, 2000**

New Course [ ]

Revision [X]

If Revision, Section(s) Revised: **Sections F, K, L, N, Q**

Date Last Revised: **October 2, 1995**

C:	**D:**	**E:**
NURS 207	**Health Science III: Pathophysiology**	**2.0**
Subject & Course No.	Descriptive Title	Semester Credits

F: Calendar Description:
This introductory pathophysiology course focuses on the study of homeostasis and how it is altered by physical, biochemical, microbial or genetic factors. The course includes etiology, pathogenesis, growth and developmental variations, clinical manifestations, complications, diagnosis and treatment of selected health challenges. This course relates directly to application in professional nursing practise.

G: Allocation of Contact Hours to Types of Instruction/Learning Settings

Primary Methods of Instructional Delivery and/or Learning Settings:

Lecture/Seminar

Number of Contact Hours: (per week / semester for each descriptor)

Lecture/Seminar **3.0/wk**

Number of Weeks per Semester: **15**

H: Course Prerequisites:

BIOL 203

I. Course Corequisites:

Nil

J. Course for which this Course is a Prerequisite:

NURS 217 + NURS 218 + NURS 219

K. Maximum Class Size:

36

L: PLEASE INDICATE:

[ ] Non-Credit

[ ] College Credit Non-Transfer

[X] College Credit Transfer: Requested [ ] Granted [X]

SEE BC TRANSFER GUIDE FOR TRANSFER DETAILS (www.bccat.bc.ca)
Direct transfer to Collaborative Nursing Program in B.C. partner sites.

M: Course Objectives/Learning Outcomes [Ends-in-view]

In this course students study pathophysiology concepts and their application to nursing practise. Students have opportunities to:

- develop an understanding of the basic concepts and mechanisms involved in alterations in homeostasis and the ability to apply these concepts to a variety of health challenges
- develop an understanding of the interrelatedness and relationships among a variety of health challenges
- develop an understanding of the impact of a variety of health challenges on clients
- integrate theory and apply concepts to client situations and clinical practise
- recognize individual differences in homeostasis and presentation of disease in clients
- develop the ability to use a variety of resources to facilitate independent study of health challenges

N: Course Content [Overview]

An outline of the concepts and mechanisms relative to homeostasis that are addressed in this course is presented below. Each of these is elaborated in relation to the foundational concepts, i.e. context/cultural, time/transitions, ways of knowing and personal meaning. Etiology, pathogenesis, growth and development variations, complications, clinical manifestations, diagnosis and treatment are presented for each of the selected health challenges.

Introduction to Pathophysiology
- terminology
- concept of disease
- causes of disease
- risk factors and predisposition to disease

Genetics
- classification of genetic disease
- congenital disorders
  - teratogens
  - prenatal screeening and diagnosis

Cellular Adaptation
- atrophy
- hypertrophy
- metaplasia
- hyperplasia

Cellular Injury
- causes of cell damage
- effects of cell damage
- reversible vs. irreversible injury

Inflammation and Healing
- acute inflammation
- healing
  - repair vs. regeneration
  - wound healing
  - factors influencing healing
  - complications of healing

Microbiology
- infectious agents
- host microbe interactions
- epidemiology and microbial transmission
- control of microbial growth
- prevention of spread of communicable diseases

N: Course Content [Overview] continued

Fluid and Electrolyte Imbalances
- abnormal distribution of ECF
- fluid volume excess and deficiency
- sodium imbalance
- potassium imbalance
- calcium imbalance

Change in the GI System
- ulcers
- inflammatory bowel disease
- cholelithiasis
- cancer of the bowel

Change in the Cardiovascular System
- atherosclerosis/arteriosclerosis
- hypertension (HTN in pregnancy covered with growth and development changes)
- peripheral vascular disease
- coronary artery disease, angina, myocardial infarction
- congestive heart failure
- shock

Change in the Respiratory System
- pneumonia
- pulmonary emboli
- respiratory distress syndrome
  - infant
  - adult

Changes in the Musculoskeletal System
- alteration in skeletal structure
- rheumatoid arthritis
- osteoarthritis
- fractures
- diagnostic evaluation
- management modalities e.g. traction, casts, surgery

O: Methods of Instruction [Learning Process]

It is the faculty's intent to facilitate student learning by focusing on ways of knowing about pathophysiology in relation to a wide variety of health challenges. Learning activities include lecture and group discussion, nursing case study analysis and group work, group or individual research and presentation. Students derive knowledge by actively engaging in learning activities, by relating course content to clinical practise situations and by critically reflecting on the application process.

P: Textbooks and Materials to be Purchased by Students [and other Learning Resources]

1. Planned Praxis Experience
   - Personal experience
   - Resource family
   - Generative family
   - Family experiencing episodic health challenge
   - Nursing practise experience

2. A list of recommended textbooks and materials is provided for students at the beginning of each semester.

P: Textbooks and Materials to be Purchased by Students [and other Learning Resources] continued

3. Other Resources
   - Medical-surgical nursing textbook
   - Pharmacology textbook
   - Pathophysiology textbook
   - Diagnostic test textbook
   - Nutrition textbook
   - Microbiology textbook
   - Selected readings from books and journals
   - Selected audio-visual and computer resources

Q: Means of Assessment

Evaluation is consistent with Douglas College Curriculum Development and Approval Policy. There will be a minimum of three assessments which will typically include exams, quizzes, papers and/or student presentations. An evaluation schedule is presented at the beginning of the course. Respect for individual choices and an openness to negotiation guide decisions about methods of evaluation.

This is a graded course.

R: Prior Learning Assessment and Recognition: specify whether course is open for PLAR

Yes.

Course Designer(s)

Education Council/Curriculum Committee Representative

Dean/Director

Registrar