CAMOSUN COLLEGE	***School of Arts & Science*** ***BIOLOGY DEPARTMENT*** **BIOL 253-all sections** **Pathophysiology for Nursing 2** **Winter 2008**

COURSE OUTLINE

The Approved Course Description is available on the web @ _____

Ω *Please note: this outline will be electronically stored for five (5) years only. It is strongly recommended students keep this outline for your records.*

1. Instructor Information

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2. Intended Learning Outcomes

(No changes are to be made to this section, unless the Approved Course Description has been forwarded through EDCO for approval.)

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

1. With reference to respiratory, genitourinary, gastrointestinal, musculoskeletal and integumentary disorders, explain how and why normal physiology is altered in the pathogenesis of specific diseases.
2. Correlate disease with treatment and nursing management in one's patients.
3. Explain in lay terms the major features of a patient's disease to the patient.

3. Required Materials

Porth, C.M. (2005). *Pathophysiology. Concepts of Altered Health States.* 7th ed. Lippincott Williams & Wilkins.

Day, R.A., Paul, P., Williams, B., Smeltzer, S.C. and Bare, B. (2007). *Brunner & Suddarth's Textbook of Medical-Surgical Nursing, First Canadian Edition.* Lippincott Williams & Wilkins.

Lilley, L., Harrington, S., Snyder, J. and Swart, C. (2007). *Pharmacology and the Nursing Process in Canada*. 1st ed. Mosby.

Pillitteri, A. (2007). Maternal and Child Health Nursing. Care of the Childbearing and Childrearing Family *5th ed. Lippincott Williams & Wilkins.*

Van Leeuwen, A.M., Kranpitz, T.R. and Smith. (2006). Davis's Comprehensive Handbook of Laboratory and Diagnostic Tests with Nursing Implications. *2nd ed. F.A. Davis Company. Philadelphia.*

OPTIONAL TEXTBOOK

Prezbindowski, K.S. (2005). *Study Guide to Accompany* Porth's *Pathophysiology. Concepts of Altered Health States* (7th ed). Lippincott Williams & Wilkins.

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Course website: http://vawda.disted.camosun.bc.ca

4. Course Content and Schedule

(Can include: class hours, lab hours, out of class requirements and/or dates for quizzes, exams, lectures, labs, seminars, practicums, etc.)

Week	Date	Lecture Topic
1	January 7 – 11	Respiratory Disorders cont'd Neurological Disorders
2	January 14– 18	Neurological Disorders
3	January 21 – 25	Neurological Disorders
4	January 28 – February 1	Neurological Disorders Gastrointestinal disorders
5	February 4 – 8 **February 6 (16h30 – 17h30)**	Gastrointestinal disorders **Exam 1**
6	February 11 - 15 February 14 and 15	Gastrointestinal disorders Reading Break
7	February 18 – 22	Gastrointestinal disorders
8	February 25 – 29	Musculoskeletal disorders
9	March 3 – 7	Musculoskeletal disorders
10	March 10 – 14	Integumentary disorders

	March 12 (16h30 – 17h45)	**Exam 2**
11	March 17 – 20 March 21	Urinary / Genital disorders Good Friday
12	March 24 March 25 - 28	**Easter Monday** **Urinary / Genital disorders**
13	March 31 - April 4	Urinary / Genital disorders
14	April 7 – 11	Urinary / Genital disorders
15 / 16	April 14 – 22	Final Examination

COURSE OUTLINE

RESPIRATORY DISORDERS continued

Lung cancer
Cystic fibrosis

NEUROLOGICAL DISORDERS

Degenerative Disorders
- Alzheimer's disease
- Multiple sclerosis
- Parkinson's disease **(self study)**
- Amyotrophic lateral sclerosis
- Myasthenia gravis **(self study)**

Neoplasia
- Brain tumors
- Tumors of supporting structures

Infections
- Meningitis (bacterial, viral)
- Encephalitis

Seizure disorders
- Seizure and epilepsy

Brain Injury
- Increased intracranial pressure
- Hemorrhage & hematomas

Spinal cord injury **(nursing applications)**

Cerebrovascular disorders
- CVA (stroke)
  - Ischemic
  - Hemorrhagic
  - Transient ischemic attack
- Neurogenic shock

Inflammatory / Paralytic Disorders
- **Guillan Barre syndrome**

Congenital Malformations **(self study)**
- Myelomeningocele
- Hydrocephalus

Genetic disorders (**self study)**
- Down syndrome

GASTROINTESTINAL DISORDERS

Inflammatory disorders
- Appendicitis

Peritonitis
Inflammatory bowel disease (nursing applications)
Ulcerative colitis
Crohn's disease
Irritable bowel syndrome
Diverticular disease

Herniations
Hiatus hernia
Inguinal hernia

Peptic ulcer
Hepatitis
Cirrhosis
Portal hypertension, Ascites
Cholelithiasis
Pancreatitis

Infant disorders
Cleft lip and cleft palate
Pyloric stenosis
Gastro-esophageal reflux
Tracheo-eosophageal fistula
Hirschprung's disease
Intussusception

Cancers
Esophageal **(self-study)**
Stomach **(self-study)**
Colorectal **(self-study)**
Liver
Pancreas

MUSCULOSKELETAL DISORDERS

Fractures
Osteoporosis
Gout
Osteoarthritis
Rheumatoid arthritis
Systemic lupus erythematosis **(self-study)**
Muscular dystrophy
Bone cancer

INTEGUMENTARY DISORDERS

Eczema and Dermitis **(self-study)**
Cellulitis
Psoriasis
Skin cancer

URINARY AND GENITAL DISORDERS

Male
Hydrocele, spermatocele
Benign prostatic hyperplasia (BPH)
Prostate cancer

Female
Menstrual disorders
Pelvic inflammatory disease (PID)
Cancers
Breast
Ovary
Uterus
Cervix

Renal
Renal failure
Pyelonephritis
Glomerulonephritis
Urinary tract infection (UTI)
Renal calculi
Urinary incontinence
Cancers **(self-study)**
Renal
Bladder
Hypospadias

Sexually transmitted diseases
Genital herpes
Genital warts
Syphilis
Chlamydia
Gonorrhea
HIV / AIDS **(nursing applications)**

5. Basis of Student Assessment (Weighting)

(a)	Assignments	15%
(b)	Quizzes	
(c)	Exams	Term exams 50%, Final Exam 35%
(d)	Other (eg, Attendance, Project, Group Work)	

6. Grading System

(No changes are to be made to this section, unless the Approved Course Description has been forwarded through EDCO for approval.)

Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency

90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		2
50-59	D	Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.	1
0-49	F	Minimum level has not been achieved.	0

Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at **camosun.ca** for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	*Incomplete*: A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	*In progress*: A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. *(For these courses a final grade will be assigned to either the 3rd course attempt or at the point of course completion.)*
CW	*Compulsory Withdrawal:* A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.

7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College calendar, at Student Services or the College web site at camosun.ca.

STUDENT CONDUCT POLICY

There is a Student Conduct Policy **which includes plagiarism**. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, at Student Services and on the College web site in the Policy Section.

Biology 253 is the second half of a two-semester course for students in the second year of the Collaborative Curriculum for the Bachelor of Science in Nursing Program. The course focuses on the basic concepts of pathologyphysiology that are used to define dysfunction of the major organ systems.

The course integrates both pathophysiology and nursing applications. It is taught jointly by Faculty from Biology and Nursing. The intent is to enable students to apply and integrate the theory of pathophysiology to nursing practice. Physical assessment skills, use of diagnostic tests, pharmacology and treatment regimes will be included with each unit of study.

> *A good understanding of physiology and the associated anatomy of the organ systems being taught is essential for success in this course as this forms the basis for studying pathophysiology. There will be no time to review or re-teach this in class. You MUST review this information on your own.*

During the course, you will obtain information from several sources including lectures, class discussions, textbooks, websites, client profiles, current journal articles and clinical practice. Do not rely exclusively on any one, or only some of these sources. Attending lectures regularly is necessary to succeed in this course. Relying exclusively on class notes obtained from a colleague or through other means, will generally NOT ensure success in this course. This course outline lists the various topics that will be covered. You are encouraged to review these topics in the textbook before classes and to consolidate information obtained in lectures with that in the textbook after each class. **Some of the topics are covered through self-study (indicated in the outline) and will not be taught in class. Self-study topics are the student's responsibility and are examinable.** All required information on self-study topics is available in the prescribed textbooks. Guidelines on how to approach each topic will be posted on the course website.

This is a challenging course because it is both content and concept driven. There is a large volume of information to cover. In addition, the course requires skills in critical thinking, problem solving, integrating and assimilating information, and working with clinical scenarios. Since these skills develop with experience, applying them regularly to course content is important. Your text books are good resource for clinical scenarios. Refer to the CD ROM and websites accompanying the books.

NURSING APPLICATIONS

1. General Information

Attending lectures is critical because information presented in class is necessary for informed care of clients during Nursing Practice. Information presented in class is examinable.

Lectures are content-laden and held once a week for only 50 minutes. It is imperative that you come to class prepared to optimize this learning opportunity.

- Preparation for class: **"Focus Points**" about class material (in outline format) will be available weekly on the course website. Topics are listed on the Semester Overview handed out in week 1. It is important to prepare for each class by reviewing normal Anatomy and Physiology from Year 1 and appropriate information about the topic in your Medical-Surgical, Pharmacology, and Laboratory and Diagnostic textbooks before class.

- Class participation:
  - Reflect on your nursing practice experience related to the topic for discussion and come prepared to contribute to the class discussion and to ask questions.
  - Be prepared to take notes. The Learning Center provides a valuable "Note-taking, note-making" session during the first week of the semester.
  - Journal articles will be made available for each topic on E-reserve through the Camosun Library. Information about the article will be posted weekly on the Biology 253 website.

- After class, spend time reviewing your preparation (preview) notes, additional notes made in class, and the professional journal articles related to the topic.

2. Client Profile Assignment:

- This assignment is worth **15%** of the total course mark.
- **Due Date: Papers are due February 15, 2008.** (Papers may be submitted earlier)
  Due to the large number of students in the course and the excessive volume of marking, extensions will not be granted and re-reads will not be done. Ask your questions before you submit your paper.

Client profiles are based on a client for whom you have provided care during your nursing practice.

Students not in Nursing Practice must consult with the Instructor regarding the
Client Profile. You will be assigned to a Nursing Practice Teacher on a unit.

- **Current CRNBC student membership is required.**
- **You must have a VIHA Confidentiality form on file.**

Client Profile Format

Note: It is not permitted to make photocopies of information from the client's Health Record (the chart).

APA Guidelines must be utilized.

- Information re: APA Guidelines are available via the Internet and in the college library and Learning Center. Refer to your APA Publication

Manual that you purchased in Year 1. It will be a valuable resource for the remainder of your nursing education.

- The APA Guidelines include spelling, punctuation, grammar, sentence structure, and referencing requirements.
- *Charts and/or tables may be located in the body of the text or can be added as appendices as per APA Guidelines. Review use of appendices.*
- Must be no longer than **10 pages** and not less than 8 pages (including Title page and References page) and **no longer than 14 pages including Appendices**. Extra pages will not be read. This will impact your overall mark because information included on those pages will not be included in the final marking.
- **References** must include three professional journal articles (**two** of these must be from **Nursing** Journals**;** Wikipedia is not an acceptable reference**)** in addition to your textbook references. Refer to the Camosun College Library if you cannot discern which are Nursing Journals.

Remove all information that would jeopardize client confidentiality. (Use a pseudonym for identification of your client and do not include specific names of towns, cities, islands, or care facilities or actual names of caregivers e.g. physicians.)

Introduction:

- Pseudonym, age, gender, allergies, advanced directives.
- Admission diagnosis and symptoms (presentation).
- Brief health history
- Social history
- Members of the health care team involved and their role in this client's care.

Body:

Description of the client's health challenge(s). Focus on one or two of the client's most significant challenges.

- **"Patho Links"** – Explore the following relationships :
- Presenting diagnoses (e.g., diabetes and below knee amputation)
- Diagnostic procedures, laboratory tests, treatments, procedures, OR's, etc. and what the diagnostic and laboratory tests tell us about this client's health status
- Impact of Medications and treatments on this client's health status. List the medications, and describe their classification, mode of action and nursing implications for this client.
- Describe rationale for these treatment and medication choices from the pathophysiological perspective. Are these interventions effective or not?
- What evidence is there of this?
- **Nursing Implications:**
    - What nursing **assessments** were performed for this client?
    - Based on your assessment findings, what **problems, needs, strengths – potential and actual** emerged?
    - What client -centered **planning** was indicated for optimal care of this client? Why?

- What **interventions** were done in response to the assessment findings and problems, needs, strengths identified?
- Were the interventions effective (**Evaluation**)? How did you determine this? Was another plan required?
- Relate this plan to the pathology evident in this client as evidenced by signs and symptoms, laboratory results and results of diagnostic procedures.

Assessment------Problem/Need/Strength------Planning------Intervention------Evaluation

- **Conclusion:**

After reflecting on the care this client received, what are your perceptions of the actual outcome for the client and what would be optimal? If required, how might you have advocated to that end?

Do not hesitate to contact your Instructor if you have any questions about the assignment or course content.

Marking Criteria:
Marking criteria for the client profile are available on the course website. A 'grade' designation for "What Constitutes an 'A, B, C, D' Paper" will also be available on the website.