



**School of Arts & Science
BIOLOGY DEPARTMENT**
**BIOL 253-all sections
Pathophysiology for Nursing 2
Spring 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

Dr. Ahmed Vawda (~~Biology~~) _____ F342D 370-3479
vawda@camosun.bc.ca

Paula Littlejohn (~~Nursing~~) RN, BSN, MA _____ F314E 370-3244
littlejohnp@camosun.bc.ca

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	May 5 – 9	Neurological Disorder
2	May 12 – 16	Neurological Disorders Gastrointestinal Disorders
3	May 19 – 23 May 22	Victoria Day Holiday (May 19) Test 1 (0900) Gastrointestinal Disorders
4	May 26 – 30 May 29	Gastrointestinal Disorders Final date for client profile submission Musculoskeletal Disorders
5	June 2 – 6 June 5	Musculoskeletal Disorders Test 2 (0900) Integumentary Disorders
6	June 9 – 13	Disorders of the Male Reproductive System Disorders of the Female Reproductive System
7	June 16 - 20	Renal Pathophysiology
8	June 23 – 25	Final Examination

COURSE OUTLINE

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 (**covered in 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 (covered in 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-esophageal fistula
Hirschsprung'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 erythematosus (**self-study**)

Muscular dystrophy

Bone cancer

INTEGUMENTARY DISORDERS

Eczema and Dermatitis (**self-study**)

Cellulitis

Psoriasis

Skin cancer

URINARY AND GENITAL DISORDERS

Male

Hydrocele, spermatocele and varicocele
Benign prostatic hyperplasia (BPH)
Prostate cancer

Female

Menstrual disorders

dysmenorrhea
amenorrhea
menorrhagia
metrorrhagia
Pelvic inflammatory disease (PID)

Cancers

Breast
Ovary
Uterus
Cervix

Renal

Pyelonephritis
Glomerulonephritis
Urinary tract infection (UTI)
Renal calculi
Urinary incontinence

Cancers (self-study)

Renal
Bladder

Hypospadias and epispadias

Renal failure

Sexually transmitted diseases

Genital herpes
Genital warts
Syphilis
Chlamydial infection
Gonorrhea
HIV / AIDS (**covered in nursing applications**)

5. Basis of Student Assessment (Weighting)

(a)	Assignments	15%
(b)	Quizzes	
(c)	Exams	Term exams(x2) 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	<i>Incomplete:</i> 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	<i>In progress:</i> 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 3 rd course attempt or at the point of course completion.)
CW	<i>Compulsory Withdrawal:</i> 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 pathology [physiology](#) 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. Moreover, the course is condensed into 7 weeks from the regular 14 weeks. This will be an added challenge.

NURSING APPLICATIONS

NURSING APPLICATIONS SEMESTER OVERVIEW TOPIC OUTLINE

Week	Date	Topic
1	Mon. May 5, 2008	CNS: Brain Injury
1	Thurs. May 8, 2008	CNS: Spinal Cord Injury OFFICIAL PINK FORM DUE
2	Mon. May 12, 2008	Seizure
2	Thurs. May 15, 2008	Care of the Oncology Patient
3	Mon. May 19, 2008	Victoria Day Holiday – No CLASS STUDY!
3	Thurs. May 22, 2008	Inflammatory Bowel Disease (IBD) OFFICIAL YELLOW FORM DUE
4	Mon. May 26, 2008	Hepatic Failure
4	Thurs. May 29, 2009	Shock ASSIGNMENT DUE at 1000 AM: Client Assessment Profile (15%)
5	Monday June 2, 2008	Cellulitis / Necrotizing Fasciitis
5	Thurs. June 5, 2008	Urinary Obstruction
6	Mon. June 9, 2008	Acute Renal Failure
6	Thurs. June 12, 2009	Chronic Renal Failure
7	Mon. June 16, 2008	HIV/AIDS

7	Thurs. June 19, 2008	HIV/AIDS
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~~1.~~
~~2.~~

3.1. General Information -Regarding Nursing Application

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 twice a week for only 50 minutes each. 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 **via email**. Topics are listed on the Semester Overview listed above. 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.
 - After class, spend time reviewing your preparation (preview) notes, additional notes made in class, and the professional journal articles related to the topic.

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2. Client Profile Assignment:

- This assignment is worth **15%** of the total course mark.
- 3.▪ **Due Date: Papers are due and to be handed in on Thurs May 29, 2008, at the beginning of the Patho class – 10:30 am.** (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.

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- **Client profiles will be accepted for only two of the following situations:**

1. With prior approval from their semester 4 instructor, students **may have been pre-approved** to prepare and research a client for whom they provided care for during their nursing practice in this past semester 4 (2008). These students will be given an “**official pink form**” to have their past semester 4 instructor sign. The semester 4 instructor signature will indicate that permission was granted for the student to perform assessments and a chart review for a pre-approved client and for this Biology 253 assignment. **(Pink forms are due back on Thursday May 8, 2008 to Paula at the beginning of Nursing Applications class)**
2. For all other students you will be placed with an Instructor presently in CPE 2 on a unit. The CPE 2 instructor will give you a choice of several appropriate clients to choose from. With your pre-approved chosen client you will spend this pre-arranged time on the unit (approximately 4 hours) meeting the client, performing an assessment and doing a chart review for your Client Profile Assignment. You will be given an “**official yellow form**” ~~for~~ which your assigned CPE Instructor will sign. The CPE instructor's signature will indicate the pre-approval of the client you chose and the date and time you attended to do your research on this pre-approved client.
 - Students will be given the opportunity to sign up and choose a unit ~~to for in~~ which they will do their client assessment and research (two per CPE group). This sign up will occur in week 1.
 - Students will connect by phone or email with the CPE instructor they have signed up with and will confirm with the CPE instructor the date and time they will be coming to do their client assessment and research. The dates available for research are: **May 12, 13, 14, 20, & 21, 2008 (ONLY)** and days or evenings depending on the CPE you are assigned to. Students will arrange to come on the unit from **1000 am to 1400 pm on the day shift and from 1800 to 2200 on the evening shift.**
 - Students will be required to find and meet with their assigned CPE instructor upon arrival and to find and meet with their assigned CPE instructor before leaving the unit (the CPE instructor will be indicating on the official yellow form the time the student arrived and left the unit).
 - Students must come to the unit wearing appropriate professional attire and WCB approved shoes (no wearing of scrubs and not high heels or boots).
 - Students will clearly display on their dress their name tag and VIHA ID tag
 - Students can not photocopy information from the client chart so be prepared by bringing pens, a highlighter and paper to write down all the pertinent information required for this assignment **(the CPE instructor will probably ask to see this information to ensure you have adequately obtained enough data on your approved client)**
 - Students must also have a VIHA Confidentiality form on file.
 - **The official yellow form needs to be completed and handed back in to Paula on or before Thursday May 22, 2008 at the beginning of class (there will be no extensions to this date).**

**(ONLY HARD PAPER COPIES OF THIS ASSIGNMENT WILL BE
ACCEPTED –
NO EMAIL OR FAX COPIES WILL BE ACCEPTED).**

*****Note*****

It is not permitted to make photocopies of information from the client's Health Record (the chart); it breaks the client's right to confidentiality and it is illegal!

- **Client Profile Format (APA 5TH EDITION FORMAT 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"**-are**.
- **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 of the Client Profile:

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 or could emerge?
- 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? If you weren't there to see the evaluation, what might the evaluation have looked like if things went as planned?
- 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, Paula, 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 will be provided during week 1.~~
- Late assignments will be marked down 2% per every day (this includes weekend days and holidays) after the assigned due date.
- The assigned due date for this assignment is **10030 am Thursday May 29, 2008**. Handing the assignment in anytime after this **time and date** is considered late and marks **will be** deducted.

- Only hard copies of this assignment will be accepted – no email copies will be accepted. If you are handing in your assignment late you must hand the assignment to the secretaries directly in the Nursing Office in Fisher 256 during office hours, Monday to Friday. They will sign and date your assignment and put the assignment in my mail box. No other form of handing in late assignments will be accepted.