



**School of Arts & Science
BIOLOGY DEPARTMENT**
BIOL 252-1 to 6
Pathophysiology for Nursing 1
2008W

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	F 342D	370-3479	vawda@camosun.bc.ca
Patty Foster RN, BSN, MN(c)	F 256A	370-3268	fosterp@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. Explain basic concepts of disease processes.
2. With reference to endocrine, cardiovascular, and respiratory disorders, explain how and why normal physiology is altered in the pathogenesis of specific diseases.
3. Correlate disease with treatment and nursing management in one's patients.
4. 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.

OTHER RESOURCES

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

4. Course Content and Schedule

Week	Date	Lecture Topic
1	January 7 - 11	Foundational Concepts of Pathology
2	January 14 - 18	Foundational Concepts of Pathology
3	January 21 – 25 January 23	Foundational Concepts of Pathology Quiz 1
4	January 28 - February 1 January 30	Endocrine Disorders Self-study 1 submission
5	February 4 - 8 February 6 (16h30 – 17h30)	Endocrine Disorders Exam 1
6	February 11 - 15 February 14 and 15	Endocrine Disorders Reading break
7	February 18 – 22 February 20	Endocrine Disorders Self-study 2 & 3 submission
8	February 25 – 29 February 27	Cardiovascular Disorders Quiz 2
9	March 3 - 7	Cardiovascular Disorders
10	March 10 – 14 March 12 (16h30 – 17h45)	Cardiovascular Disorders Exam 2
11	March 17 - 20 March 19 March 21	Cardiovascular Disorders Self-study 4 & 5 submission Good Friday
12	March 24 March 26 March 25 - 28	<i>Easter Monday</i> Quiz 3 <i>Respiratory Disorders</i>
13	March 31 – April 4	Respiratory Disorders

14	April 7 - 11	Respiratory Disorders
15	April 14 - 22	Final Examination

5. Basis of Student Assessment (Weighting)

(Should be linked directly to learning outcomes.)

Quizzes (7%) and self-study assignments (3%)	10%	
Test 1	15%	
Test 2	25%	
Individual client profile		215%
Group client profile	8%	
Comprehensive Final exam	35%	

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.
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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.

COURSE CONTENT

Foundational Concepts of Pathology

- Introductory terminology (see list of terms on course website)
- Cell injury
- Inflammation
- Abnormal immune responses
- Neoplasia
- Congenital and genetic disorders
- Fluid-electrolyte and acid-base imbalances
 - Review** from year 1:
 - fluid compartments & distribution within
 - electrolytes & their functions
 - transcapillary exchange

Endocrine Disorders

Pancreas

- Diabetes mellitus (Type 1 & 2)
 - Acute complications
 - DKA
 - hyperosmolar hyperglycemic state
 - hypoglycemia
 - Chronic complications
 - vascular damage
 - atherosclerosis, MI, CVA
 - nephropathy
 - neuropathy
 - retinopathy
 - infections

Thyroid gland

- Hyperthyroidism
 - Grave's disease
 - thyrotoxicosis
- Hypothyroidism
 - myxedema
 - cretinism

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Hashimoto's thyroiditis

Adrenal gland

- Adrenocortical hyperfunction
 - Cushing's syndrome
 - Conn syndrome

Adrenocortical insufficiency
Addison's disease

Pituitary gland

Hyperpituitarism
hyperprolactinemia
GH hypersecretion
gigantism
acromegaly
SIADH
Hypopituitarism
hypoprolactinemia
diabetes insipidus

Cardiovascular Disorders

Disorders of blood vessels and pressure
atherosclerosis
peripheral vascular disease

Diseases of the heart
angina pectoris
myocardial infarction
cardiomyopathy
arrythmias
valvular disease
Infectious, inflammatory and immunologic disorders
endocarditis
rheumatic heart disease
Congestive heart failure

Pericardial disorders
pericarditis
cardiac tamponade

[leukemia](#)
[lymphoma](#)
[Leukemia](#)
[Lymphoma \(self study 2\)](#)

Anemia
..... Disseminate

[Lymphatic disorders \(self study\)](#)
[Hemorrhagic disorders](#)
[disseminated](#) intravascular coagulation (self study 3)

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Respiratory Disorders

Chronic obstructive pulmonary disease (COPD)
[asthma](#)

- chronic~~Chronie~~ bronchitis
- emphysema
- Disorders of lung inflation
- atelectasis
- pleural effusion
- Pulmonary vascular disorders
- pulmonary edema
- pulmonary embolism
- pulmonary hypertension
- acute respiratory distress syndrome (ARDS)
- Respiratory failure
- Respiratory tract infections
- the common cold and rhinosinusitis (self-study 4)
- influenza
- pneumonia
- pulmonary tuberculosis (self-study 5)
- Emphysema
- Asthma

- Sinusitis, pharyngitis, tonsillitis, rhinitis, laryngitis (self-study)
- Lung cancer
- Atelectasis
- Pleural effusion
- Pulmonary edema
- Acute respiratory failure
- Adult (Acute) Respiratory Distress Syndrome (ARDS)
- Pulmonary embolism
- Pulmonary hypertension
- Chest wall configuration and deformities (self-study)
- Cystic fibrosis
- Influenza
- Pneumonia
- Pulmonary tuberculosis (self-study)

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** Information on self-study topics can be found in your textbook. Scan the index for the appropriate pages. Guidance on how to approach each self-study topic will be posted on the course website.

Nursing Applications Component of the Course

1. General Information

Lectures are content-laden and held once a week for only 50 minutes. It is imperative that you come to class prepared to optimize your chance for success in the course and to prepare you to provide informed care for your clients in Nursing Practice.

- Preparation for class: **“Focus Points”** about class material (in outline format) will be available weekly on the course website. **You must know how to access this website.** 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, Laboratory and Diagnostic textbooks and reading the applicable Nursing Journal article before class. Journal articles will be made available for each topic on E-reserve through the Camosun Library.
- 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.
- After class, spend time reviewing your preparation (preview) notes, additional notes made in class, and the professional journal article related to the topic.

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

2. Client Profile Assignment:

The Client Profile provides a learning opportunity to relate theory from all of your courses to health challenges that you are observing in the client population in your Nursing Practice area. Client profiles are based on a client for whom you have done research and provided care during your nursing practice.

- This assignment is worth **15%** of the total course mark.
- **Due Date: February 29, 2008** (Papers may be submitted earlier)
- See attached document for details and criteria for this assignment
Extensions will not be granted and re-reads will not be done. Ask your questions before you submit your paper. All papers will be returned by March 31.

Students not in Nursing Practice will consult with the Instructor regarding the Client Profile Assignments. 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.**

APA Guidelines must be utilized:

- Information regarding APA Guidelines is 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.
- Amongst other criteria, APA Guidelines include spelling, punctuation, grammar, sentence structure, and referencing requirements. Remember - font size is 12.
- *Charts and/or tables may be utilized 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 (this includes the Title page and the References page). An additional 2 pages only may be included as Appendices (be clear about the use of Appendices in a paper). **If you fail to comply with page length, it will impact your overall mark.**
- **References** - In addition to textbook references, you must cite at least two Nursing Journal articles. Refer to the Camosun College Library for information about access to and designation of articles from 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.)

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

Use only Approved Abbreviations from the VIHA Recording Manual.

Introduction:

The purpose of this section is to introduce your reader to the topic of your paper, in this case a particular patient with a/some particular health care challenge/s.

- Pseudonym, age, gender, allergies, advanced directives.
- Admission diagnosis and symptoms (presentation).
- Client understanding of the reason for admission.
- Brief health history that relates to the present admission.
- Social history as it relates to the present admission.
- Members of the health care team involved in the care of this client (by occupation, not name). What care did these professionals provide for this client?

“Patho Links”

The purpose of this section is to comprehensively discuss the health care challenge, including etiology, pathophysiology, symptoms, investigation (lab and diagnostic tests) and common treatments - to link the client with the health care challenge.

Explore the following relationships:

- Presenting diagnoses (e.g., diabetes and below knee amputation)
- Diagnostic procedures (on the unit and off), 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. Provide the names of medications and describe their classification, modes of action, side effects and nursing implications for administration as they relate to this client. Include nursing implications for administration of these medications. These must be included in the appropriate part of the paper to demonstrate that you know why the medication has been prescribed/ordered.
- 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:

You must demonstrate your nursing knowledge and the nursing application of pathophysiology. All assessment aspects of care must be included (all systems).

- What nursing **assessments** were performed for this client? What did you observe?
- Based on your assessment findings, what **problem, need, strength** emerged? Actual and potential problems must be included.
- What did you learn when interviewing this person?
- What client -centered **planning/goals** were indicated for optimal care of this client? Why?
- What **interventions** were done in response to the assessment findings and problems, needs, strengths?
- Were the interventions effective (**Evaluation**)? How did you determine this? Was another plan required?

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

Conclusion:

Considering the above findings, was the best medical and nursing care provided for your client? What do you think the outcome will be for this client?

What role do you see yourself having as a client advocate for “best practice” care for this client? Be clear what client advocacy involves. Required care is not advocacy.

Marking Criteria: (2% per day deduction for late assignments)

Marking criteria for the client profile are available on the Biology 252 website.

A 'grade' designation for "What Constitutes an 'A, B, C, D' Paper" will be available on the Biology 252 website (University of Victoria marking guideline).