

CAMOSUN COLLEGE
Biology Department

BIOL 253 Pathophysiology for Nursing 2
Winter 2004

COURSE OUTLINE

INTRODUCTION

Biology 253 (Pathophysiology) 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 that are used to define dysfunction of the major organ systems.

The course is taught by faculty from Biology and Nursing. The intent is to enable students to apply and integrate the theory of pathology to the clients they care for during clinical practice. Physical assessment skills, use of diagnostic test results, pharmacology and treatment regimes used by the health team will be included with each unit. It is important to note that this is an integrated course comprising both pathology and nursing components.

During the course, you will obtain information from several sources including lectures, class discussions, textbooks, client profiles and clinical practice. Do not rely exclusively on any one, or only some, of these sources. The course outline lists the various topics that will be covered. You are urged to review these topics in the text before classes and to consolidate information obtained in lectures with that in the text after each class. **Some of the topics involve self-study (indicated in the outline) and will not be covered in lectures. They too are examinable.**

It is essential that students have a good understanding of normal physiology and some of the associated anatomy of the organ systems being covered as this forms the basis for studying pathophysiology. There will be no time to review or re-teach this in class. If necessary, you must review this information.

Intended Learning Outcomes

On successful completion of this course, you should be able to:
recognize and explain how and why normal physiology is altered in the pathogenesis of specific diseases
correlate disease with treatment and nursing management in your patients
explain in lay-terms the major features of a patient's disease to the patient.

Instructors

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Stephen Bishop (Nursing)	F262E	370-3249	rb@uvic.ca

Required Materials

Black, J.M., Hawks, J.H. & Keene, A.M. (2001). *Medical-Surgical Nursing: Clinical Management for Positive Outcomes* (6th ed.). W.B. Saunders Company, Toronto.

Eisenhauer, L., Nicols, L., Spencer, R., Bergan F., (1998). *Clinical Pharmacology and Nursing Management* (5th ed.). Lippincott, New York.

Estes, M. (2002). *Health Assessment and Physical Examination*. (2nd ed) Delmar, New York.

Pagana, K. & Pagana, J. (2001). *Diagnostic and Laboratory Test Reference* (5th ed.). Mosby, New York.

Pillitteri, A. (2003). *Maternal & Child Health Nursing. Care of the Childbearing and Childrearing Family*. (4th ed) Lippincott, Philadelphia.

Optional

Porth, C.M. (2002). *Pathophysiology. Concepts of Altered Health States* (6th ed). Lippincott, Philadelphia.

Evaluatuion

Client Profiles	20%
Mid-term exam	35%
Comprehensive final exam (college exam period)	45%

Tests and exams will integrate both the pathology and nursing components of the course. However, the OVERALL weighting will reflect the disparity in number of lectures for each component. Examinations must be written at the time specified, unless there is a medical emergency that prevents you from doing so. **You must notify one of the Instructors before the time of the examination and submit a doctor's note that indicates the doctor's evaluation that you were unable to write.**

Although the pass mark for this course is 60%, in order to continue in the nursing program, you must "achieve a cumulative GPA of at least 3.5 on a 9.0 scale". This translates to an overall grade of C+ and must be considered an absolute minimum.

Letter Grades

The following percentage conversion to letter grade will be used:

A+ = 95 - 100%	B = 75 - 79%	D = 50 - 59%
A = 90 - 94%	B- = 70 - 74%	F = 0.0 - 49%
A- = 85 - 89%	C+ = 65 - 69%	
B+ = 80 - 84%	C = 60 - 64%	

The following is a **tentative** schedule of lectures. Changes may be announced in class.

Week	Date	Lecture Topic
1	January 5 – 9	Respiratory disorders
2	January 12 – 16	Respiratory disorders
3	January 19 – 23	Respiratory disorders
4	January 26 – 30	Gastrointestinal disorders
5	February 2 - 6 February 2	Gastrointestinal disorders Client profile # 1 due
6	February 9 – 13 February 11	Gastrointestinal disorders Midterm examination
	February 12 – 13	Reading Break
7	February 16 – 20	Gastrointestinal disorders
8	February 23 – 27	Musculoskeletal disorders
9	March 1 – 5	Musculoskeletal disorders
10	March 8 - 12	Integumentary disorders
11	March 15 – 19 March 15	Urinary / Genital disorders Client profile # 2 due
12	March 22 – 26	Urinary / Genital disorders
13	March 29–Ap 2	Urinary / Genital disorders
14	April 5 – 8	Urinary / Genital disorders
15	April 13 – 21	Final Examination

COURSE OUTLINE

RESPIRATORY DISORDERS

Chronic obstructive pulmonary disease COPD

Chronic bronchitis

Emphysema

Asthma

Sinusitis, rhinitis, pharyngitis, tonsillitis, laryngitis (**self-study, Black pages 1676-1680**)

Lung cancer

Atelectasis

Pleural effusion

Pulmonary edema

Acute respiratory failure

Adult Respiratory Distress Syndrome (ARDS)

Pulmonary embolism

Pulmonary hypertension

Chest wall deformities (**self-study, Black pages 1627, 1629 & Fig 59-3**)

Cystic fibrosis

Influenza

Pneumonia

Pulmonary tuberculosis (**self-study, Black page 1716**)

GASTROINTESTINAL DISORDERS

Inflammatory disorders:

Appendicitis

Peritonitis

Inflammatory bowel disease

Irritable bowel syndrome

Diverticular disease

Hiatus / Inguinal hernia

Peptic ulcer

Congenital disorders:

Cleft lip and palate

Pyloric stenosis

Gastro-esophageal reflux

Tracheo-esophageal fistula

Hirschprung's disease

Intussusception

Cancer

Esophageal (**self-study, Black page 699**)

Stomach (**self-study, Black page 724**)

Bowel (colon) (**self-study, Black page 780**)

Liver

Pancreas

Hepatitis

Cirrhosis:

Portal hypertension

Ascites

Cholelithiasis

Pancreatitis

MUSCULOSKELETAL DISORDERS

Fractures
Osteoporosis
Gout
Osteoarthritis
Rheumatoid arthritis
Systemic lupus erythematosus (**self-study, Black page 2156**)
Muscular dystrophy
Repetitive motion injuries
Bone cancers

INTEGUMENTARY DISORDERS

Necrotizing fasciitis (Stephen)
Eczema and Dermatitis ((**self-study, Black page 1286**))
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:

Acute renal failure
Chronic renal failure
Pyelonephritis
Glomerulonephritis
Urinary tract infection (UTI)
Renal calculi
Urinary incontinence
Cancers (**self-study**)
 Renal (Black, page 858)
 Bladder (Black, page 809)
Hypospadias
Vesicoureteric reflux (**self-study, Pillitteri, page 1414**)

Sexually transmitted diseases (STD's):

Genital herpes
Genital warts
Syphilis
Chlamydia
Gonorrhea
AIDS

You are encouraged to consult the instructors if you require assistance or experience difficulty with the course. From time to time course material may be made available to you via the reserve section of the College library or the bulletin board.

The following services are also available to you.

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, Registrar's Office or the College web site at <http://www.camosun.bc.ca>

Your attention is drawn to the academic conduct policy of the College

ACADEMIC CONDUCT POLICY

There is an Academic Conduct Policy. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, Registration, and on the College web site in the Policy Section.

www.camosun.bc.ca/divisions/pres/policy/2-education/2-5.html

CLIENT PROFILES

Client profiles provide a learning opportunity to relate theory that you are learning in the classroom to the conditions that you are observing in the client population on your nursing practice area in hospital.

Format: APA Guidelines must be utilized (this includes spelling, grammar and references).
Use only Approved Abbreviations from the VIHA Recording Manual
Charts, tables may be located in the body of the text or can be added as appendices as per APA Guidelines.
Must be no longer than 8-10 pages (more pages will not be read).
Remove all information that would jeopardize client confidentiality.
(Use a pseudonym only.)

What to Include:

Introduction:

Pseudonym, age, gender, allergies, advanced directives.

Admission diagnosis and symptoms.

Client understanding of the reason for admission.

Discharge diagnosis.

Length of stay (in days).

Day (day 1, 2, 3, etc.) of diagnostic procedures (on the unit and off), laboratory tests, treatment procedures, OR's, etc.

Brief health history that relates to the present admission.

Social history as it relates to the present admission (e.g., person in highly stressful occupation admitted with myocardial infarction, person with IV substance use issues admitted with sepsis).

Members of the health care team involved in the care of the patient (by occupation, not name).

Body:

Description of the client's condition/s in terms as learned in pathophysiology. (Focus on one or two of the client's most significant conditions. Other conditions must be listed and a statement made indicating how these relate to the condition/s being discussed.)

"Patho Links" – Explore the relationships between:

- presenting diagnoses (e.g., diabetes and below knee amputation)
- what the diagnostic and laboratory tests tell us about the client's health status
- what impact medications and treatments have on the client's health status (list the medications and describe their classification and modes of action as they relate to this client).

Treatment Implications for the 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 are the nursing implications in the care of this client? Why? Justify your decisions. What nursing care planning is indicated for optimal care of this client? Why? Relate the above to the pathology occurring for this client as evidenced by signs and symptoms, laboratory results and results of diagnostic procedures.

Assessment-----Planning-----Intervention-----Evaluation

Conclusion:

Considering your findings above, are the right things being done for your client? What do you think the outcomes will be for this client? What role do you see yourself having as a client advocate for “best practice” care for this client?

Marking Criteria

Due Dates:	Group Profile	February, 2	10%
	Individual Profile	March, 15	10%

Groups are comprised of 3-4 students within a nursing practice group. One client will be chosen from the nursing practice area and the project submitted as a group paper. You can collaborate on the work but there must be evidence that each group member participates equally and has knowledge of the complete picture of this client. This will be evident by the flow and consistency of information in the presentation of the paper.

Individual client profiles are done based on a client in the student’s nursing practice area.

Students not in Nursing Practice must speak with the instructor regarding the Client Profiles.

Breakdown of Marks:

Introduction	20 marks
Body	60 marks
Conclusion	10 marks
APA format	10 marks

Participation/Contribution: For the group profile the above marks will be totalled and then reduced to a mark out of 80. The additional 20 marks will be assigned by the group to each individual, reflecting the contribution to the group effort of the individual. Beside the names of the authors please include their participation mark, and their area of responsibility.

Do not hesitate to make an appointment with me to discuss concerns about these assignments. Information re: APA Guidelines is available on the internet as well as from resources in the library. This is a standard format for submission of papers.