

	<p>School of Arts & Science BIOLOGY DEPARTMENT BIOL 253 Pathophysiology for Nursing 2 Quarter or Semester/Year</p>
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COURSE OUTLINE

The course description is online @ <http://camosun.ca/learn/calendar/current/web/biol.html>

Ω Please note: the College electronically stores this outline for five (5) years only.
It is **strongly recommended** you keep a copy of this outline with your academic records.
You will need this outline for any future application/s for transfer credit/s to other colleges/universities.

1. Instructor Information

(a)	Instructor:	Ahmed Vawda		
(b)	Office Hours:			
(c)	Location:	F342D		
(d)	Phone:	250 3703479	Alternative Phone:	
(e)	Email:	Vawda@camosun.bc.ca		
(f)	Website:			

2. Intended Learning Outcomes

(No changes are to be made to these Intended Learning Outcomes as approved by the Education Council of Camosun College.)

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

1. With reference to neurological, 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

Hannon, R.A., Pooler, C. and Porth, C.M. (2010). Porth Pathophysiology, Concepts of Altered Health States. 1st Canadian edition. Wolters Kluwer Health / Lippincott Williams & Wilkins.

OPTIONAL TEXTBOOK

Study Guide for *Pathophysiology. Concepts of Altered Health States* 8th edition. Lippincott Williams & Wilkins (2009).

OTHER RESOURCES

This course utilizes Desire2Learn (D2L), the college's adopted learning management system, to provide important additional resources. This source contains useful information to assist you in progressing successfully through the course. It is the student's responsibility to regularly monitor and review information posted on D2L. You can access D2L from the Camosun homepage (<http://camosun.bc.ca>) by clicking on "Programs/Courses". If you experience any difficulty with D2L, contact the College's Distributed Education Department (desupport@camosun.bc.ca) for assistance.

(See nursing course package for other required textbooks. Some of those books will also be required for parts of the pathophysiology component of the course).

4. Course Content and Schedule

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

The following is a **tentative** schedule of lectures. Changes may become necessary depending on progress in class.

Week	Date	Lecture Topic
1	January 10 – 14	Gastrointestinal Disorders
2	January 17 - 21	Gastrointestinal Disorders
3	January 24 – 28	Gastrointestinal Disorders
4	January 31 – February 4	Gastrointestinal Disorders Respiratory Disorders
5	February 7 – 11	Respiratory Disorders
6	February 14 - 18	Respiratory Disorders
7	February 21 – 25 February 24 and 25	Respiratory Disorders Reading Break
8	February 28 – March 4 March 5 (09:00)	Urinary / Genital disorders Pathology Midterm Exam
9	March 7 – 11	Urinary / Genital disorders
10	March 14 – 18	Urinary / Genital disorders
11	March 21 – 25	Urinary / Genital disorders
12	March 28 – April 1	Integumentary disorders
13	April 4 - 8	Musculoskeletal disorders
14	April 11 - 15	Musculoskeletal disorders
15 / 16	April 18 – 21 and 26 - 29	Final Examination

COURSE CONTENT
GASTROINTESTINAL DISORDERS

Inflammatory disorders

Appendicitis
Peritonitis

Inflammatory bowel disease

Ulcerative colitis
Crohn's disease

Irritable bowel syndrome

Diverticular disease (**self-study**)

Herniations

Hiatus hernia
sliding
rolling
Inguinal hernia

Peptic ulcer

Hepatitis

- viral hepatitis A, B and C
- autoimmune hepatitis, Types I & II

Cirrhosis

including portal hypertension and ascites

Cholelithiasis

Acute pancreatitis

Cancers

- Colorectal (**self-study**)
- Liver cancer
- Pancreatic cancer

Infant disorders (synopsis of each of the following)

- Cleft lip and cleft palate (**self-study**)
- Pyloric stenosis
- Gastro-esophageal reflux
- Tracheo-esophageal fistula
- Hirschprung's disease
- Intussusception

RESPIRATORY DISORDERS

Chronic obstructive pulmonary disease (COPD)

- chronic bronchitis
- emphysema
- asthma (including early and late phase responses)

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**)
- influenza
- pneumonia
- pulmonary tuberculosis (**self-study**)

Lung cancer

- small cell lung cancer
 - small cell carcinoma
- non small cell lung cancer
 - squamous cell carcinoma
 - adenocarcinoma
 - large cell carcinoma

Cystic fibrosis

URINARY AND GENITAL DISORDERS

Male

- Benign prostatic hyperplasia (BPH)
- Prostate cancer

Female

Menstrual disorders (self-study)

Pelvic inflammatory disease (PID)

Cancers

- Breast
 - ductal carcinoma in situ
 - infiltrating ductal carcinoma

Ovary

Uterus

Cervix

Renal

- Pyelonephritis
- Glomerulonephritis
 - acute proliferative GN (e.g. acute postinfectious GN)
 - rapidly progressive GN (e.g. Goodpasture syndrome)
 - membranous GN
 - minimal change GN
 - IgA GN (Berger disease)
 - chronic GN
- Lower urinary tract infection (UTI)
- Renal calculi
- Urinary incontinence
- Cancers
 - Renal (**self-study**)
 - Bladder (**self-study**)
- Renal failure
 - acute**
 - chronic

Sexually transmitted diseases

- Genital herpes
- Genital warts
- Syphilis
- Chlamydial infections
- Gonorrhea
- HIV / AIDS

INTEGUMENTARY DISORDERS

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

- Cellulitis
- Psoriasis

Skin cancer

- basal cell carcinoma
- squamous cell carcinoma
- malignant melanoma

MUSCULOSKELETAL DISORDERS

- Fractures
 - description by type, pattern & appearance
 - healing

- Osteoporosis
- Gout

Osteoarthritis

- Rheumatoid arthritis
- Systemic lupus erythematosus (**self-study**)

Muscular dystrophy

- Bone cancer
 - primary
 - osteosarcoma
 - chondrosarcoma
 - fibrosarcoma
 - secondary

Information on self-study topics can be found in your textbook. Guidance on how to complete each self-study topic is posted on D2L.

5. Basis of Student Assessment (Weighting)

(This section should be directly linked to the Intended Learning Outcomes.)

EVALUATION

Midterm Exam pathophysiology (Saturday, March 5th, 09:00)	35%
Midterm Exam nursing applications (see nursing course package for date)	10%
Nursing Applications Assignment	15%
Comprehensive Final exam (college exam period)	40%

- (a) Assignments
- (b) Quizzes
- (c) Exams
- (d) Other (e.g., 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 the Education Council of Camosun College 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. <i>(For these courses a final grade will be assigned to either the 3rd course attempt or at the point of course completion.)</i>
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 the College web site in the Policy Section.

ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED

INTRODUCTION

This document contains important information specifically on the pathology part of the course. Read through it carefully and take note of directives and other advisory information. Since the course comprises both pathology and nursing applications, it is taught jointly by Faculty from Biology and Nursing. You will receive information separately from your nursing Instructor for the nursing applications component of the course.

Biology 253 is the second of two pathophysiology courses for students in the second year of the Bachelor of Science in Nursing Program. The course focuses on the basic concepts of pathophysiology that are used to define dysfunction of the major organ systems and integrates pathophysiology with nursing management. The aim is to enable students to apply theoretical knowledge to nursing practice. Use of diagnostic tests, pharmacology and treatment regimes will be included with each unit of study.

A good prior understanding of the physiology and associated anatomy of the organ systems being studied is necessary for success in this course, as this forms the basis for studying pathophysiology. There will be no time to review or re-teach physiology and anatomy in class. Students are expected to review this information on their own prior to commencement of lectures on the appropriate organ system. While this is important for all students in class, it is particularly so for students who might have completed anatomy and physiology more than a year ago and those who achieved less than 70% in these courses.

Course content will be available from several sources including lectures, class discussions, textbooks, websites, nursing assignment, self-studies assignments and nursing practice. Do not rely exclusively on any one, or only some of these sources. **Attending lectures regularly is essential for success in this course.** Relying on class notes obtained from a colleague or through other means, will generally **NOT** ensure success in this course because important discussion occurs in class to supplement the notes. This course outline lists the various topics that will be studied in the pathophysiology part of the course. 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 involve self-study (indicated in the outline) and will not be taught in class. Self-study topics are the student's responsibility and while they will not be collected and marked, all 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 D2L web resource.

The course is challenging because it is both content and concept driven, with a large volume of information to cover. In addition, the course involves skills that some may not be adequately experienced in e.g. 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 resources for clinical scenarios. Refer to the CD ROM and online resources accompanying the books.

Wherever possible, establish the following standard format for each disease that is studied. The same approach will be used in lectures.

- a brief introduction to the disease (i.e. disease type, eg inflammatory, immune-based etc)
- etiology
- pathophysiology
- major manifestations (not an exhaustive list; where appropriate explaining why these occur)
- diagnosis
- treatment / management