

Justice Institute of British Columbia
COURSE OUTLINE

Course Code: PATH214

Course Title: Pathophysiology

Prerequisite Courses: PARA100 – Clinical Sciences and Biology 11 (or equivalent)

School: School of Health, Community and Social Justice

Division/Academy/Centre: Health Sciences Division

Previous Course Code & Title:

Course First Offered: January 2011

# of Credits:	3.0
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Course Description:

Pathophysiology (PATH 214) is an introductory course that examines the cellular and organ changes that occur with disease and the effects that these changes have on total body functions. Pathophysiology also focuses on the mechanisms of the underlying disease and provides the background for preventive as well as therapeutic health care measures and practices. The course explores the cause of disease, clinical manifestations that disease may take, and the diagnosis and treatment of selected health challenges.

Course Goal(s):

The goal of this course is to provide the student with knowledge of the causes, manifestations, diagnoses and treatments of anatomical and physiological disorders and diseases.

Learning Outcomes:

Upon successful completion of this course, the learner will be able to:

1. Acknowledge various perspectives of health and disease on individuals and populations
2. Describe growth and development in children
3. Discuss physiologic changes of aging
4. Identify the components of the cell
5. Describe cellular adaptation, injury, and death
6. Discuss genetic and congenital disorders
7. Identify the characteristics, clinical manifestations, diagnosis, and treatment of benign and malignant neoplasm
8. Characterize the composition of blood
9. Explain the process of hemostasis
10. Discuss red and white blood cell disorders
11. Define infectious diseases

12. Identify the characteristics, clinical manifestations, diagnosis, and treatment of infectious diseases
13. Describe the body's immune, inflammation, and healing response
14. Examine alterations in the immune response
15. Describe the control of cardiovascular function
16. Identify disorders of blood flow, blood pressure regulation, cardiac conduction, heart failure and circulatory shock
17. Describe the control of respiratory function
18. Identify disorders of ventilation of gas exchange and common respiratory tract infections
19. Describe the control of renal function
20. Identify disorders of fluid and electrolyte balance, acid-base balance, renal failure, and urine elimination
21. Describe the control of gastrointestinal function
22. Identify disorders of gastrointestinal function
23. Describe the control of endocrine function
24. Identify disorders of endocrine function including diabetes mellitus
25. Identify the structures of the male and female reproductive systems
26. Identify disorders of the male and female reproductive systems including sexually transmitted diseases
27. Describe the control of neural function
28. Identify disorders of motor function, brain function, and memory and mood function
29. Identify disorders of visual function and hearing function
30. Describe the control of musculoskeletal and integumentary function
31. Identify disorders of skeletal function including trauma, neoplasm, metabolic, and rheumatic
32. Identify the structure of the skin
33. Identify skin disorders

Course Topics/Content:

- Concepts of health and disease
- Cell function and growth
- Hematopoietic function
- Infection, inflammation, and immunity
- Cardiovascular function
- Respiratory function
- Renal function and fluids and electrolytes
- Gastrointestinal function
- Endocrine function
- Genitourinary and reproductive function
- Neural function
- Special sensory function
- Musculoskeletal and integumentary function

Text and Resource Materials:

Required:

Porth, C., & Matfin, G. (2014). Pathophysiology: Concepts of Altered Health States (9th edition). Lippincott Williams & Wilkins, USA.

Recommended:

Course Level:

	First Year	X	Second Year		Third Year		Fourth Year
	Graduate		Other (describe):				

Equivalent Course(s) within the JIBC:

Class Delivery Methods:

Delivery Methods	Class Option A (Hours)	Class Option B (Hours)	Class Option C (Hours)	Class Option D (Hours)
Classroom/Lecture/Discussion				
Simulation/Lab				
Praxis Exercise				
Practicum/Fieldwork				
Online	42			
Correspondence				
Total Class Hours	42			

Comments on Delivery Methods:

PATH214 is an online course, and consists of multiple units delivered over a single semester. It is expected that students spend 6 - 9 hours per week to complete all the course requirements. Posting of answers to assignments and discussion among peer learners and the facilitator is a required component of the course.

Course Grading System:

	Letter Grades	X	Percentage		Pass/Fail
	Complete/Incomplete		Attendance Only		

Passing Grade:	60%
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Evaluation Activities and Weighting:

Final Exam	25%	Assignments	10%	Project	20%	Capstone Project	%
Midterm 1 Exam	15%	Portfolio	%	Participation	20%	Other	%
Midterm 2 Exam	10%	Simulations	%	Practicum	%	TOTAL	100%

Comments on Evaluation Activities and Weighting:

Midterm and final exams will be timed online examinations.

The project must be submitted electronically.

The participation mark is comprised of interactions with peers and instructors during pre-established times.

The mark on an individual assignment will be reduced by 20% for each day that it is late.

Other Course Guidelines, Procedures and Comments:

Requests for extensions of time to complete assignments and/or tests must be submitted to the instructor at least one week in advance and are only permitted for justifiable reasons. Requests to extend time beyond the last day of the course must be submitted to the Program Manager for approval.

Assignments missed due to medical reasons must be substantiated by a note issued by a qualified health practitioner in order to receive full credit for the assignment.

All course assignments and tests must be completed in order to successfully complete the course.

View official versions of related JIBC academic regulations and student policies in the *JIBC Calendar* on the following pages of the JIBC website:

Academic Regulations:

<http://www.jibc.ca/programs-courses/jibc-calendar/academic-regulations>

Student Academic Integrity Policy
Academic Progression Policy
Admissions Policy
Academic Appeals Policy
Evaluation Policy
Grading Policy

Student Policies:

<http://www.jibc.ca/about-jibc/governance/policies>

Access Policy
Harassment Policy – Students
Student Records Policy
Student Code of Conduct Policy

JIBC Core Competencies

The JIBC promotes the development of core and specialized competencies in its programs. Graduates of our programs will demonstrate high levels of competence in the following areas:

Critical thinking

Identify and examine issues and ideas; analyze and evaluate options in a variety of fields with differing assumptions, contents and methods.

Communication, oral and written

Demonstrate effective communication skills by selecting the appropriate style, language and form of communication suitable for different audiences and mediums.

Leadership

Inspire individuals and teams to reach their potential by embracing innovation through strategic thinking and shared responsibility.

Independent learning

Show initiative by acting independently in choosing effective, efficient and appropriate applied learning, research and problem solving strategies.

Globally-Minded

Self-aware of own identity and culture, recognize the interconnectedness of world events and issues; interact respectfully and authentically across cultures; value multiple perspectives; utilize curiosity to learn with and from others.

Problem solving

State problems clearly; effectively and efficiently evaluate alternative solutions; choose solutions that maximize positive and minimize negative outcomes.

Interpersonal relations

Know and manage ourselves; recognize and acknowledge the needs and emotions of others including those with diverse cultures, backgrounds and capabilities.

Inter-professional teamwork

Understand and work productively within and between groups, respect others' perspectives and provide constructive feedback with special attention to inter-professional relationships.

Information literacy

Recognize and analyze the extent and nature of an information need; efficiently locate and retrieve information; evaluate it and its sources critically, and use information effectively and ethically.