



PN 105

KEYANO COLLEGE

COURSE OUTLINE

**PATHOPHYSIOLOGY FOR HEALTH
CARE PROFESSIONALS**

WINTER 2014

JANUARY 7, 2014–MARCH 11, 2014

INSTRUCTOR: Gregory Stewart

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**PRACTICAL NURSING 105
PATHOPHYSIOLOGY FOR HEALTH CARE PROFESSIONALS**

Course Outline

Table of Contents

CALENDAR STATEMENT	4
COURSE HOURS	4
COURSE DESCRIPTION	4
TUTOR INFORMATION	4
GENERAL LEARNING OUTCOMES	5
INSTRUCTIONAL METHODS	5
PRACTICAL NURSING PROGRAM POLICIES	6
LATE POLICY FOR ASSIGNMENTS	6
SPECIALIZED SUPPORTS & DUTY TO ACCOMMODATE	6
DISABILITY SUPPORT SERVICES: LEARNER ASSISTANCE PROGRAM	6
SPECIALIZED SUPPORTS AND DUTY TO ACCOMMODATE	6
OVERVIEW OF LEARNING EXPERIENCES	7
REQUIRED TEXTS	8
OVERVIEW OF COURSE ASSESSMENT	10

PATHOPHYSIOLOGY FOR HEALTH CARE PROFESSIONALS COURSE OUTLINE

CALENDAR STATEMENT

PATHOPHYSIOLOGY FOR HEALTH CARE PROFESSIONALS * Semester II

The course teaches the science of disease required by health professionals to plan and implement sound interventions that promote, maintain, or restore client health and well-being. The conceptual approach provides the student with a knowledge base of pathology to apply to client health alterations in subsequent courses and work experiences.

Prerequisites: PN 100, PN 101

COURSE HOURS

TOTAL HOURS: 45

LECTURE: 45

CREDITS: 3

COURSE DESCRIPTION

The Pathophysiology course focuses on the pathological processes underlying disease and disorders. The student is provided with a comprehensive foundation for understanding the phenomena that produce alterations in human physiologic function across the life span. Content in the course includes common disease entities as examples of the pathological processes. Each pathological process will be explained as a concept and illustrated by typical diseases and disorders. Diseases will be discussed in terms of manifestations, etiology and complications. The diagnosis and management of disease processes associated with pathophysiological dysfunction/alterations is also introduced. This is a theory course.

TUTOR INFORMATION

Instructor: Gregory Stewart
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Office Hours: Monday 0900 – 1100hr

GENERAL LEARNING OUTCOMES

Upon successful completion of this course, the learner will:

1. Describe common pathologic processes resulting in alteration of the structure and function of the body.
2. Correlate alterations in the physiologic function of the body to clinical presentation of signs and symptoms.
3. Identify common disease and disorders associated with pathophysiological processes.
4. Apply pathophysiological principles to the interpretation and treatment of symptoms and disease processes.
5. Identify and prioritize actual and potential problems associated with the pathological process.
6. Describe common diagnostic assessments of pathological processes.
7. Identify medical treatments for common pathological processes.

Instructional Methods

- This course uses a variety of teaching/learning methods including: discussion, experiential exercises, learner presentations, role-plays, case studies, lectures, reflection, lab demonstration and practice, and group activities. These course activities provide the opportunity for learners to learn with and from others who are undergoing a similar learning experience.
- The course emphasizes pre-class preparation, participation in interactive classes, and post-class reflection and review. The learner is expected to take an active part in class discussions and take responsibility for his/her own learning. The instructor's role is to facilitate learning.

PRACTICAL NURSING PROGRAM POLICIES

Please refer to Keyano College Practical Nurse Handbook for specific Practical Nursing Program policies and to Keyano College Calendar for general College policies.

Please review the Keyano College Nursing Program Policy on Clinical Attire, which is outlined in the student handbook. The following are required items for clinical: nametag, health centre ID, watch, penlight, black pen, bandage scissors and stethoscope.

LATE POLICY FOR ASSIGNMENTS

All assignments are to be passed in at the time and place they are due. Please see timetable. Extensions on assignments may be granted and must be negotiated with the tutor prior to the due date and with a date specified for late submissions. If prior arrangements are not made, a penalty of a letter grade for each working day that an assignment is submitted after the due date will be deducted from the final grade i.e. an assignment graded at B would receive an adjusted grade of B- if handed in one day late; if two days late, the grade is adjusted to C+ etc.

SPECIALIZED SUPPORTS & DUTY TO ACCOMMODATE

DISABILITY SUPPORT SERVICES: LEARNER ASSISTANCE PROGRAM

If you have a documented disability or you think that you would benefit from some assistance from a Disabilities Counselor, please call or visit the Disability Supports Office 780-792-5608 to book an appointment (across from the library). Services and accommodations are intended to assist you in your program of study, while maintaining the academic standards of Keyano College. We can be of assistance to you in disclosing your disability to your instructor, providing accommodations, and supporting your overall success at Keyano College.

SPECIALIZED SUPPORTS AND DUTY TO ACCOMMODATE

Specialized Support and Duty to Accommodate are aligned with the office of Disability Support Services: Learner Assistance Program (LAP) guided by federal and provincial human rights legislation and defined by a number of Keyano College policies. Keyano College is obligated by legislation to provide disability-related accommodations to students with identified disabilities to the point of undue hardship.

OVERVIEW OF LEARNING EXPERIENCES

This course consists of the following units:

Unit 1: Cell Adaptation, Proliferation, and Differentiation

Topic 1.1: Introduction to Pathophysiology

Topic 1.2: Cell Injury, Adaptation, and Death

Topic 1.3: Alterations in Cellular Proliferation and Differentiation

Topic 1.4: Alterations in Genetics and Development

Topic 1.5: Alterations in Blood Cells

Unit 2: Alterations in Defence Mechanisms

Topic 2.1: Alterations in Skin Integrity

Topic 2.2: Inflammatory Process – Tissue Reaction to Injury

Topic 2.3: Tissue Repair – Recovering From Injury

Topic 2.4: Infectious Processes

Topic 2.5: Alterations in Immunity

Unit 3: Alterations in Communication and Regulation

Topic 3.1: Alterations in Hormonal Messaging and Effects on Regulatory Functioning

Topic 3.2: Alterations in Neuronal Transmission and Effects on Regulatory Functioning

Topic 3.3: Alterations in Fluid, Electrolyte, and Acid-Base Balance

Unit 4: Alterations in Communication, Regulation, and Patency

Topic 4.1: Alterations in Ventilation and Diffusion

Topic 4.2: Alterations in Perfusion

Unit 5: Alterations in Communication, Regulation, Patency, and Motility

Unit 6: Alterations in Communication, Regulation, Filtration, Transport, and Nutrient Metabolism

Topic 6.1: Alterations in Filtration

Topic 6.2: Alterations in Absorption, Secretion, and Nutrient Metabolism

Unit 7: Application of Combined Pathophysiologic Concepts

Unit 8: Alterations in Body Support and Movement

Unit 9: Alterations in Sensory Function and Pain Perception

REQUIRED TEXTS

Braun, C.A., & Anderson, C.M. (2011). *Pathophysiology: A clinical approach* (2nd ed.). Philadelphia, PA: Lippincott Williams & Wilkins.

Braun, C.A., & Anderson, C.M. (2011). *Study guide to accompany pathophysiology: A clinical approach* (2nd ed.). Philadelphia, PA: Lippincott Williams & Wilkins.

McConnell, T.H. (2007). *The nature of disease: Pathology for the health professions*. Philadelphia, PA: Lippincott Williams & Wilkins.

McConnell, T.H. (2007). *The nature of disease: Pathology for the health professions*. [Textbook CD-ROM]. Philadelphia, PA: Lippincott Williams & Wilkins.

Medical dictionary

Access to the Internet

Required Internet Readings

Library Database

Matteucci, R. & Caple, C. (2011). Deep vein thrombosis: Prevention. In *Evidence-Based Care Sheet* series. Glendale, CA: CINAHL Information Systems. Retrieved from CINAHL Plus with Full Text database.

Buckley, L., & Schub, T. (2010). Stroke, ischemic: Treatment with thrombolysis. In *Evidence-Based Care Sheet* series. Glendale, CA: CINAHL Information Systems. Retrieved from CINAHL Plus with Full Text database.

Caple, C. & Schub, T. (2011). Diabetes mellitus, type 2: Cardiovascular risk. In *Evidence-Based Care Sheet* series. Glendale, CA: CINAHL Information Systems. Retrieved from CINAHL Plus with Full Text database.

Buckley, L. & Caple, C. (2011). Diabetes mellitus, type 1: Prevention. In *Evidence-Based Care Sheet* series. Glendale, CA: CINAHL Information Systems. Retrieved from CINAHL Plus with Full Text database.

Strayer, D., & Caple, C. (2011). Crohn's disease: Inducing/maintaining remission with medications. In *Evidence-Based Care Sheet* series. Glendale, CA: CINAHL Information Systems. Retrieved from CINAHL Plus with Full Text database.

Caple, C. & Cabrera, G. (2011). Asthma: Management in older adults. In *Evidence-Based Care Sheet* series. Glendale, CA: CINAHL Information Systems. Retrieved from CINAHL Plus with Full Text database.

Caple, C., & Schub, T. (2011). Diabetes mellitus, type 2: Prevention. In *Evidence-Based Care Sheet* series. Glendale, CA: CINAHL Information Systems. Retrieved from CINAHL Plus with Full Text database.

Strayer, D., & Caple, C. . (2011). Diabetes mellitus, type 2: Treatment adherence. In *Evidence-Based Care Sheet* series. Glendale, CA: CINAHL Information Systems. Retrieved from CINAHL Plus with Full Text database.

OVERVIEW OF COURSE ASSESSMENT

Assessments

To complete course requirements for PN105 Pathophysiology for Health-Care Professions, you will be required to complete two exams and a final exam.

Distribution of Marks

Assessment Method	Description	Value	Date
Exam 1 Multiple choice, matching, ordering (steps of process)	Demonstrate knowledge of course content (Units 1–2)	30%	Jan 21 2014
Exam 2 Multiple choice, matching, ordering (steps of process)	Demonstrate knowledge of course content (Units 3–6)	30%	Feb 18 2014
Final Exam Cumulative; multiple choice	Demonstrate knowledge of course content	40%	Mar 11 2014
	Total	100%	

Passing Level and Grading Scale

A student must achieve a minimum grade of 1.7 (C-) or 60% to receive credit for PN 105 Pathophysiology for Health-Care Professions.

Students must complete all assignments and examinations to receive a final course grade. Students will not be allowed to rewrite the assignments or exam to raise their course grade.

Refer to the Practical Nurse Handbook and Keyano College Calendar for information regarding grading scale, extensions, writing exams, supplemental exams and other program/College standard practices.

Important Additional Information

Note to all students: It is the student's responsibility to retain course outlines for possible future use in support of applications for transfer credit to other educational institutions.