

Graduate School of Nursing, Midwifery & Health



www.victoria.ac.nz/nmh/

FACULTY OF HUMANITIES AND SOCIAL SCIENCES

2013

HLTH 502: Applied Pathophysiology

30 points

Trimester 2

Course Coordinator: Dr Brian Robinson

Trimester dates: 15 July to 17 November 2013

Mid-trimester break: 26 August to 8 September 2013

IMPORTANT NOTICE

The Graduate School of Nursing, Midwifery & Health at Victoria University of Wellington, uses all reasonable skill and care in an effort to ensure the information and course content information contained in this outline is accurate at the time of going to print.

Students should be aware, however, that in the event course timetables and venues need to be changed, all attempts will be made to notify the students.

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Section 1: Operational Information

COURSE COORDINATOR & CONTACT DETAILS

Dr Brian Robinson, Senior Lecturer
Ph: 04 463-6155
Email: brian.robinson@vuw.ac.nz
Office Hours: 8.30am - 4.30pm Monday to Friday
Student appointments: 1.00pm - 4.00pm Tuesday

POSTGRADUATE STUDENT ADMINISTRATOR

Annemarie Thorby
Ph: 04 463-6647
Email: annemarie.thorby@vuw.ac.nz

POSTAL ADDRESS

Graduate School of Nursing, Midwifery & Health
Victoria University of Wellington
P O Box 7625
Newtown
Wellington 6242

PHYSICAL ADDRESS

Level 7, Clinical Services Block (CSB)
Wellington Regional Hospital
Riddiford St, Newtown
Wellington 6021

OFFICE HOURS

The Graduate School office will be open Monday 7 January 2013 and close on Friday 20 December 2013 from 9.00am – 4.00pm weekdays.

In keeping with the practice of other years, academic staff will not be available on Fridays, except for the times they are involved in Schools. Please contact the course coordinator directly either by telephone or email should you wish to make an appointment or discuss course related issues.

SCHOOL TIMETABLE

1st SCHOOL

Dates: Monday 15 & Tuesday 16 July 2013
Times: 8.30am – 4.30pm
Venue: CS801, Level 8, Clinical Services Block, Wellington Regional Hospital, Riddiford St, Newtown, Wellington.

2nd SCHOOL

Dates: Monday 9 & Tuesday 10 September 2013
Times: 8.30am – 4.30pm
Venue: CS801, Level 8, Clinical Services Block, Wellington Regional Hospital, Riddiford St, Newtown, Wellington.

3rd SCHOOL

Dates: Friday 4 October 2013
Times: 8.30am – 4.30pm
Venue: CS801, Level 8, Clinical Services Block, Wellington Regional Hospital, Riddiford St, Newtown, Wellington.

Section 2: Academic Requirements

COMMUNICATION OF ADDITIONAL INFORMATION

All course information and information on changes that occur during the course will be conveyed to students via Blackboard or student Victoria email.

COURSE PRESCRIPTION

Pathophysiological states confronted by advanced clinicians are explored in relation to current theoretical frameworks and emerging evidence. This course provides a foundation for clinical decisions related to interventions, management and expected outcomes of pathophysiological states across the lifespan.

COURSE CONTENT

This programme is suitable for all health practitioners who have an involvement in patient/ client care. The course consists of seven school days focussing on different body systems and disease processes from birth, adolescence and adulthood. These school days will provide a combination of pathophysiology and specialist area expertise to enables health practitioners to apply pathophysiological processes to their clinical context.

- Central concepts of pathophysiology:-
 - Cellular biology
 - Genetics
 - Mechanisms of self-defense
- Pulmonary system
- Cardiovascular and lymphatic systems
- Renal and urological systems
- Endocrine system
- Digestive system
- Neurological system
- Musculoskeletal system
- The reproductive system
- Cultural variations in disease incidence and prevalence

COURSE LEARNING OBJECTIVES

This course has been designed to facilitate development of advanced knowledge of the human body during disease and illness that is consistent with the Nursing Council of New Zealand competencies for Nurse Practitioner Practice Programmes (NCNZ, 2008). By the end of this course students will be able to:

1. Demonstrate advanced knowledge and comprehension of human pathophysiology
2. Analyse responses related to complex pathophysiological processes
3. Apply knowledge of selected disease processes within specific specialty areas across the lifespan

TEACHING FORMAT

This course is delivered via 3 face-to-face seminar type “schools” at the Graduate School of Nursing Midwifery & Health. The days will be a mix of lectures and small group activities. A distance component supported by Blackboard forms part of the course and supports student achieving their learning objectives.

NURSING COUNCIL OF NEW ZEALAND NURSE PRACTITIONER COMPETENCIES THIS COURSE MEETS (NCNZ 2008)

The learning objectives meet the following Nurse Practitioner Scope of Practice competency:

- 1.1 Practices within a nursing model to apply advanced nursing practice in the provision of health care services to client/population groups.
- 2.1 Demonstrates accountability for practice in relation to the population/client group and the parameters of practice within healthcare settings.
- 2.2 Demonstrates advanced practice in direct client care within a range of contexts and situations.
- 2.4 Demonstrates confident and independent practice that is based on the synthesis of theory and practice knowledge from nursing and other disciplines.
- 2.5 Uses a formal approach to monitor and evaluate client responses to interventions.

MANDATORY COURSE REQUIREMENTS

In order to successfully complete this course you are required to attend all Schools unless under special circumstances prior arrangements have been made with the course coordinator.

Students must complete all pieces of assessment and achieve a minimum pass score of 20/50 (40%) in Assessment Three: Final course test to pass the course.

Students who do not achieve a minimum pass score of 20/50 (40%) in Assessment Three: Final course test will be notified on Friday 11 October 2013 and offered the opportunity to attend a re-sit test. The re-sit test will be held at 1.00pm to 2.20pm on Friday 18 October 2013. Students are required to achieve a minimum score of 20/50 (40%) in the re-sit test. The maximum score awarded for the re-sit test is 25/50 (50%).

Lectures, tutorials, electronic and other distance learning resources, practical and fieldwork may all be an integral part of the learning experience and participation in such activities is regarded as necessary.

EXPECTED WORKLOAD

As a guide each 30-point course at the Graduate School requires students to allocate approximately 10 hours per point for self-directed study, research, assessments and attendance at Schools. Consequently 300 hours should be spread evenly over the 12 week trimester, break, study week and exam period.

WITHDRAWAL DATES

Refer to www.victoria.ac.nz/home/admisenrol/payments/withdrawalsrefunds. If you cannot complete an assignment or sit a test or examination (aegrotats), refer to www.victoria.ac.nz/home/study/exams-and-assessments/aegrotat

STUDENT FEEDBACK

This course has had minor changes in format. Assignment One now includes online short answer questions to provide feedback to students. Case examples for Assignment Two are now presented to fit the reported clinical experiences of the enrolled students.

Student feedback on University courses may be found at:

www.cad.vuw.ac.nz/feedback/feedback_display.php

REQUIRED TEXT

Porth, C. M., & Matfin, G. (2009). *Pathophysiology: Concepts of altered health states* (8th ed.). Philadelphia: Lippincott Williams and Wilkins.

You will be required to work from the required text in preparation for and during school days.

RECOMMENDED READINGS/TEXTS

Craft, J., Gordon, C., & Tiziani, A. (2011). *Understanding pathophysiology*. St Louis: Mosby Elsevier

McCance, K. L., & Huether, S. E. (2009). *Pathophysiology: The biological basis for disease in adults and children* (6th ed.). St Louis: Mosby Elsevier.

McCance, K. L., & Huether, S. E. (2009). *Study guide for pathophysiology: The biological basis for disease in adults and children* (6th ed.). St Louis: Mosby Elsevier.

PRE-READINGS

Links to articles will be made available via Blackboard.

RECOMMENDED WEBSITES

The point learning system

<http://thepoint.lww.com/porth8e>

This website is an online student learning resource to accompany your required text.

Additional links to recommended websites will be updated throughout year and made available via Blackboard.

TEXT BOOK PURCHASE

Customers can order textbooks and student notes online at www.vicbooks.co.nz or can email an order or enquiry to enquiries@vicbooks.co.nz. Books can be couriered to customers or they can be picked up from nominated collection points at each campus. Customers will be contacted when they are available.

Copies may also be obtained online from <http://www.fishpond.co.nz/> or <http://www.amazon.com/>

BLACKBOARD INFORMATION

Students enrolling for this course will need access to the Victoria flexible learning system (Blackboard) via the Internet.

Blackboard is an online environment that supports teaching and learning at Victoria by making course information, materials and learning activities available online via the internet. Blackboard provides web-based access to course content, assessment, communication and collaboration tools. Instructions for using this will be provided as part of timetable during the 1st School. Students will need to be able to access the Internet on a regular basis.

The following software, which is necessary for using material on Blackboard, is freely available to download from the internet if you don't already have it:

- Netscape Communicator v 4.78 or higher (v. 7.1 recommended) OR
- Microsoft Internet Explorer v. 5.2.x or higher
- MS Windows 2000 or XP/ MacOS 9 or Mac OS X.2 or higher

Other software: Adobe Acrobat Reader - free download from <http://www.adobe.com/products/acrobat/>

Microsoft Office or Microsoft Viewers. The viewers can be downloaded free of charge from: <http://www.microsoft.com/office/000/viewers.asp>

Computer skills required:

- Internet browsing skills
- Basic word processing skills

How to log onto Blackboard

- Open a web browser and go to myVictoria.ac.nz
- Enter your account username which you can find in your *Confirmation of Study* sheet
- It is usually made up of 6 letters of your last name and 4 letters of your first name
- Enter your password. If you have never used Victoria computer facilities your initial password is your student ID number
- Click on the Blackboard icon
- Alternatively, if you want to access Blackboard without going through the myVictoria portal, just log on at <http://blackboard.vuw.ac.nz>

Off Campus access

Blackboard is available from any location where you can access the Internet. This may be your home, work or an Internet café.

Problems with access? Contact ITS service desk **04 463 5050**

OTHER IMPORTANT INFORMATION

The information above is specific to this course. There is other important information that students must familiarise themselves with, including:

- Academic Integrity and Plagiarism: www.victoria.ac.nz/home/study/plagiarism
- Aegrotats: www.victoria.ac.nz/home/study/exams-and-assessments/aegrotat
- Academic Progress: www.victoria.ac.nz/home/study/academic-progress (including restrictions and non-engagement)
- Dates and deadlines: www.victoria.ac.nz/home/study/dates
- FHSS Student and Academic Services Office: www.victoria.ac.nz/fhss/student-admin
- Grades: www.victoria.ac.nz/home/study/exams-and-assessments/grades
- Resolving academic issues:
www.victoria.ac.nz/home/about/avcacademic/publications2#grievances
- Special passes: www.victoria.ac.nz/home/about/avcacademic/publications2#specialpass
- Statutes and policies including the Student Conduct Statute:
www.victoria.ac.nz/home/about/policy
- Student support: www.victoria.ac.nz/home/vicliffe/student-service
- Students with disabilities: www.victoria.ac.nz/st_services/disability
- Student Charter: www.victoria.ac.nz/home/vicliffe/student-charter
- Student Contract: www.victoria.ac.nz/home/admisenrol/enrol/studentcontract
- Turnitin: www.cad.vuw.ac.nz/wiki/index.php/Turnitin
- University structure: www.victoria.ac.nz/home/about
- VUWSA: www.vuwsa.org.nz

ASSIGNMENT NUMBER ONE

Assignment Name: **4 Multiple choice question and short answer tests (open book)**

Due Date: On-going assessment

Word limit: N/A

This assignment is worth 20% of your final grade.

This assessment should demonstrate your understanding of normal anatomy and physiological processes of different body systems that underpin advanced pathophysiological processes across the lifespan. To complete this assessment you are required to use the course text book:

Porth, C.M., & Matfin, G. (2009). *Pathophysiology: Concepts of altered health states* (8th ed.). Philadelphia: Lippincott Williams and Wilkins.

- You will be expected to complete four mandatory web based multiple choice and short answer tests located on blackboard. Each test is worth 5% towards your final grade. Each test comprises of twenty multiple choice questions and four short answer questions focussing on key physiological concepts and processes discussed within the core text book chapters and in additional reading material that will be provided to you as outlined below.
- For each test you will be required to revise the corresponding chapters and additional reading material provided online. You are then to complete the test via the blackboard portal. The test is open book which means that you can refer to the text and additional reading material during the test period. Instructions on how to answer the questions and submit the test is available on the test portal. Only one test will be available at any one time. As the test completion date closes the subsequent test will be made available.

Test One: Cellular biology, Pulmonary system

Revision chapter: Cell and tissue characteristics (P.58-93)

Revision chapter: Structure and function of the respiratory system (P.640-669)

Completion date: 5.00pm Monday 22 July 2013

Test Two: Endocrine system, Gastrointestinal System

Revision chapter: Mechanisms of endocrine control (P.1008-1021)

Revision chapter: Structure and function of the gastrointestinal system (P.894-915)

Completion date: 5.00pm Monday 29 July 2013

Test Three: Cardiovascular system, Renal system

Revision chapter: Structure and function of the cardiovascular system (P. 450-476)

Revision chapter: Structure and function of the kidney (P.740-760)

Completion date: 5.00pm Monday 5 August 2013

Test Four: Neurological system, Musculoskeletal system

Revision chapter: Organisation and control of neural function (P.1182-1224)

Revision chapter: Structure and function of the musculoskeletal system (P.1454-1464)

Completion date: 5.00pm Monday 12 August 2013

This assignment assesses the following course objective:

1. Demonstrate advanced knowledge and comprehension of human pathophysiology.

ASSIGNMENT NUMBER TWO

Assignment Name: **Case Example**

Due Date: **5.00pm Monday 9 September 2013**

Word limit: 3000 words

This assignment is worth 30% of your final grade.

You will be provided with three case examples. You will select one of these case examples. In this assignment you are to identify and describe molecular and cellular mechanisms that have become altered or disrupted in the disease or disorder and how these contribute to the presentation of this case example. You should discuss how the pathophysiological processes are responsible for the clinical presentation of this patient, the significance of clinical signs and symptoms and the physiological basis of patient care.

The case examples will be available shortly after the commencement of the course. These can be found on the Assignment Portal on Blackboard

This assignment addresses the following course objectives:

1. Demonstrate advanced knowledge and comprehension of human pathophysiology
2. Analyse responses related to complex pathophysiological processes
3. Apply knowledge of selected disease processes within specific specialty areas across the lifespan

Submission

This assignment is to be submitted electronically through Blackboard using the Turnitin portal. This is in the assignment section of the portal.

ASSIGNMENT NUMBER THREE

Assignment Name: **Course written test**

Test Date: **4 October 2013**

Test Time: **1.00pm- 3.30pm**

This assignment is worth 50% of your final grade.

Students must achieve a minimum pass score of 20/50 (40%) in Assessment Three: Course written test to pass the course.

The purpose of this test is for the student to demonstrate their knowledge of pathophysiological processes in relation to different body systems.

The written test comprises of a series of short answer questions in relation to a patient's history, presenting signs and symptoms, and disease sequelae:

You are required to answer four questions from a possible six. Each question is designed to test your knowledge of key pathophysiological concepts related to a particular patient history and presentation. Students must undertake the test on the set date or a fail will be awarded.

Students who are prevented by some **unexpected exceptional circumstance** beyond their control from undertaking the test at the scheduled time must contact the Course co-ordinator immediately to discuss the possibility of special arrangements.

Students who are prevented from completing the test due to significant illness must produce a medical certificate to indicate that they are medically unfit to sit the test. This certificate must be dated within 48 hours of the course test.

This assignment addresses the course objectives:

1. Demonstrate advanced knowledge and comprehension of human pathophysiology
2. Analyse responses related to complex pathophysiological processes
3. Apply knowledge of selected disease processes within specific specialty areas across the lifespan