

# Faculty of Nursing, Prince Songkla University

## Course Syllabus

1. Course Title: Advanced Pathophysiology and Pharmacology for Adults and Elderly
2. Code: 646-531
3. Credits: 3(3-0-6) Lecture/Discussion/Presentation 45 hours, Self-study 90 hours
4. Program: Master of Nursing Science, Year 1, Academic Year 2017, Semester 1
5. Course Coordinator: Asst. Prof. Dr. Hathairat Sangchan  
Course Coordinator Assistant: Assoc Prof. Dr. Kittikorn Nilmanat

### 6. Course Description:

Advanced concept of diseases' occurrence; causes of pathology; pathophysiological alterations in each organ; signs and symptoms; principles of pharmacology and pharmacotherapeutics; rational drug use

### 7. Course Goal:

Students will demonstrate in-depth knowledge of pathophysiology of complicated diseases and principles of pharmacotherapy in adult and elderly patients.

### 8. Course Objectives:

After completion of this course, students will be able to

- 1) describe concepts of diseases' occurrence, causes of pathology, pathophysiological alterations in each organ
- 2) describe and analyse signs and symptoms of disease
- 3) describe principles of pharmacology and pharmacotherapeutics; rational drug use in adult and elderly patients

### 9. Course Requirements:

- 1) Participation in classroom discussion
- 2) Presentation of an assigned case analysis
- 3) Submitting report of an assigned case analysis
- 4) Examination 3 times

Students need to be done all of the course requirements otherwise they will not be evaluated in this course.

### 10. Learning Activities:

- 1) Discussion
- 2) Self-study

*Ploenpit*  
*Aug 2, 2018*

- 3) Analysis an assigned case
- 4) Assignment working
- 5) Presentation
- 6) Written report

11. Course Evaluation: Total score is 100% as following:

- |   |     |
|---|-----|
| 1) Participation in classroom discussion          | 15% |
| 2) Presentation of an assigned case analysis      | 20% |
| 3) Submitting report of an assigned case analysis | 15% |
| 4) Examination                                    | 50% |

12. Learning Materials/Resources:

Capriotti, T. (2017). *Pathophysiology made incredibly visual!* (3rd ed.). Philadelphia: Wolters Kluwer.

Frazier, M. S. & Drzymkowski, J. W. (2013). *Essentials of human diseases and conditions* (5th ed.). St.Louis, MO: Saunders Elsevier.

Grossman, S. C. & Porth, C. M. (2014). *Porth's pathophysiology: Concepts of altered health states* (9th ed.). Philadelphia, PA: Wolters Kluwer.

Huether, S. E., McCance, K. L., Brashers, V. L., & Rote, N. S. (2017). *Understanding physiopathology* (6th ed.). St. Louis, MO: Saunders Elsevier.

Linton, A. D. (2016). *Introduction to Medical-Surgical Nursing* (6th ed.). St. Louis: Saunders Elsevier.

Nair, M. & Peate, I. (2015). *Pathophysiology for nurses at a glance*. West Sussex: John Wiley & Sons, Ltd.

Patton, K. T. C., Thibodeau, G. A., Anthony, C. P. (2013). *Anthony's textbook of anatomy & physiology* (20th ed.) St.Louis, MO: Mosby Elsevier.

Porth, C. (2015). *Essentials of pathophysiology: Concepts of altered health states* (4th ed.). Philadelphia, PA: Wolters Kluwer

Story, L. (2015). *Pathophysiology: A practical approach* (2nd ed.). Burlington, MA: Jones & Barlett Learning.

VanMeter, K. C. & Hubert, R. J. (2014). *Gould's pathophysiology for the health professions* (5th ed.). St. Louis, MO: Elsevier Saunders.

Willis, L. M. (2015). *Fluids & electrolytes made incredibly easy* (6th ed.). Philadelphia, PA: Wolters Kluwer.

- CINAHL Plus with FullText

*Plampitt  
Aug 2, 2018*

[http://web.ebscohost.com/ehost/search/basic?sid=f199f212-d8a2-4a61-](http://web.ebscohost.com/ehost/search/basic?sid=f199f212-d8a2-4a61-90aea7d50a82ef80%40sessionmgr15&vid=1&hid=25)

[90aea7d50a82ef80%40sessionmgr15&vid=1&hid=25](http://web.ebscohost.com/ehost/search/basic?sid=f199f212-d8a2-4a61-90aea7d50a82ef80%40sessionmgr15&vid=1&hid=25)

- ProQuest Nursing & Allied Health

<http://www.nur.psu.ac.th/nur/proquest.html>

- Website

<https://www.amsn.org/practice-resources/patient-care/joining-forces/pathophysiology>

<https://www.cdc.gov/diseasesconditions/>

[http://www.heart.org/HEARTORG/Conditions/Conditions\\_UCM\\_001087\\_SubHome](http://www.heart.org/HEARTORG/Conditions/Conditions_UCM_001087_SubHome)

Page.jsp

<https://www.cancer.org/cancer.html>

<https://www.youtube.com/watch?v=mzfnxCEsck4>

[https://www.youtube.com/watch?v=\\_x13XDNR39o](https://www.youtube.com/watch?v=_x13XDNR39o)

### 13. Schedule (Room 3201)

Date	Time	Content	Teaching/ Learning	Faculty
Aug. 18, 2017	10.00-10.30 am.	Orientation	Discussion	Asst.Prof.Dr. Hathairat
	10.30-12.00 am.	1. Concepts of diseases and pathophysiology	Discussion	Assoc. Prof. Dr. Urai
Aug. 21, 2017	09.00-10.30 am.	Meet advisor: an assigned case analysis	Discussion	Asst.Prof.Dr. Hathairat Assoc.Prof.Dr. Kittikorn Asst.Prof.Dr. Ploenpit Asst.Prof.Dr. Luppana Dr.Ratjai Asst.Prof.Dr. Chantra Asst.Prof.Dr. Tippamas
Aug. 28, 2017	09.00-11.00 am.	2. Principle of pharmacology 2.1 Rational drug use	Discussion	Dr.Thitima
	11.00-12.00 am.	2.2 Herbal medicines	Discussion	Assoc.Prof.Dr. Pakphoom
Sept. 4, 2017	09.00-12.00 am.	3. Pathophysiology of disease or disorders and pharmacotherapy		

*Ploenpit  
Aug 2, 2017*



Date	Time	Content	Teaching/ Learning	Faculty
	09.00-11.00 am.	3.1 Cell and genetic disorders: 3.1.1 Cancer	Discussion	Assoc. Prof. Dr. Surasak, MD.
	11.00-12.00 am.	Meet advisor: an assigned case analysis	Discussion	Asst.Prof.Dr. Hathairat Assoc.Prof.Dr. Kittikorn Asst.Prof.Dr. Ploenpit Asst.Prof.Dr. Luppana Dr.Ratjai Asst.Prof.Dr. Chantra Asst.Prof.Dr. Tippamas
Sept. 14, 2017	09.00-12.00 am.	2.3 Phamacokinetics and Phamacodynamics	Discussion	Assoc. Prof. Dr. Benjamas
Sept. 18, 2017	09.00-12.00 am.	3.2 Disorders of immune systems – Immunodeficiency – Anti-HIV drugs	Discussion	Assoc.Prof.Dr. Kittikorn
Sept. 21, 2017	10.00-12.00 am.	3.1.2 Chemotherapies	Lecture/ Discussion	Assoc. Prof. Dr.Pattarapim, MD.
	13.00-14.00 pm.	Case analysis: cancer	<b>Presentation by student /Discussion</b>	Asst.Prof.Dr. Ploenpit
Sept. 25, 2017	09.00-10.00 am.	Case analysis: HIV/AIDS	<b>Presentation by student /Discussion</b>	Assoc.Prof.Dr. Kittikorn
	10.30-12.00 am.	Exam I (1 – 3.1)	Examination	Asst.Prof.Dr. Hathairat
Oct. 2, 2017	09.00-11.00 am.	3.3 Fluid, eletrolytes and acid- base imbalances	Discussion	Asst.Prof.Dr. Hathairat
	11.00-12.00 am.	Case analysis: Renal failure	<b>Presentation by student /Discussion</b>	Asst.Prof.Dr. Hathairat
Oct. 9, 2017	01.00-03.00 pm.	3.4 Disorders of endocrine system - Hypoglycemia - Hyperglycemia - Diabetic ketoacidosis - Hyperosmolar	Lecture/ Discussion	Asst.Prof.Dr. Ploenpit

*Ploenpit*  
*Aug 2, 2018*

Date	Time	Content	Teaching/ Learning	Faculty
	03.00-04.00 pm.	Case analysis: Diabetes	<b>Presentation by student /Discussion</b>	Dr. Ratjai
Oct. 16, 2017	01.00-03.30 pm.	3.5 Disorders of cardiovascular system: Acute Coronary Syndrome, Heart Failure, Pulmonary Edema	Discussion	Asst.Prof.Dr. Tippamas
Oct. 25, 2017	09.00-10.00 am.	Case analysis: Heart failure	<b>Presentation by student /Discussion</b>	Asst.Prof.Dr. Tippamas
	10.00-12.00 am.	3.6 Disorders of respiratory system	Lecture/ Discussion	Asst.Prof.Dr. Ploenpit
Oct. 30, 2017	01.00-02.00 pm.	Case analysis: respiratory failure	<b>Presentation by student /Discussion</b>	Asst.Prof.Dr. Ploenpit
	02.30-04.00 pm.	Exam II (3.2 – 3.5)	Examination	Assoc.Prof.Dr. Kittikorn
Nov. 6, 2017	01.00-03.00 pm.	3.7 Disorders of gastrointestinal system - Hepatitis - Hepatic failure	Discussion	Asst.Prof.Dr. Ploenpit
	03.00-04.00 pm.	Case analysis: Hepatic failure	<b>Presentation by student /Discussion</b>	Asst.Prof.Dr. Chantra
Nov 13, 2017	01.00-03.30 pm.	- Acute problems of GI: Pancreatitis case analysis	Lecture/ Discussion	Asst.Prof.Dr. Ploenpit
Nov 20, 2017	01.00-04.00 pm.	3.8 Disorders of neurologic system: - Coma - IICP - Cerebrovascular diseases	Lecture/ Discussion	Asst.Prof.Dr. Luppana
Nov 27, 2017	01.00-02.00 pm.	Case analysis: neurological disorders	<b>Presentation by student /Discussion</b>	Asst.Prof.Dr. Luppana
	02.00-04.00 am.	3.9 Multiple organ dysfunction Syndrome (MODS)	Lecture/ Discussion	Asst.Prof.Dr. Hathairat
Dec 4, 2017	01.00-02.00 pm.	Case analysis: MODS	<b>Presentation by student /Discussion</b>	Asst.Prof.Dr. Hathairat
	02.00-03.30 am.	Exam III (3.6-3.9)	Examination	Asst.Prof.Dr. Hathairat
	03.30-04.00 am.	Course evaluation	Discussion	Asst.Prof.Dr. Hathairat Assoc.Prof.Dr. Kittikorn

*Ploenpit  
Aug 2, 2017*

**Note:**

1. Students are required an extra-time for self study, apart from the course schedule, approximately 11-12 hour/week (total 90 hour/course) for revised lesson, preparation for an assigned case presentation and discussion including writing its paper under advisor's supervision.

2. For analysis, discussion and written a report of an assigned case, an assigned case analysis is a group work (1-2 student/case) and will be done under your advisor's supervision. Each group will be provided an assigned case of his/her interest on Aug. 21, 2017 and Sept. 4, 2017. Each group has to self-study, analyze and compare the assigned case with theory and literature support, and discuss the case in the classroom at the time allocated on the timetable. Then, each group has to write a report of an assigned case analysis and submit a copy of the report to your advisor one week after discussion.

Outline of a report written of an assigned case include:

- 1) Title, table of content
- 2) Detail of an assigned case
- 3) Comparing causes, pathology, pathophysiological alterations, pathological adaptations, signs and symptoms, and principles and pharmacotherapy show in a patient with theory using research or literature support
- 4) Summarization and suggestions
- 5) References

\*Format, citation and reference follows APA format.

### 3. Case analysis advisors

Case analysis	Advisor	Students (ID and Name)
1. Cancer	Asst. Prof.Dr. Ploenpit	
2. HIV/AIDS	Asst. Prof. Dr. Kittikorn	
3. Renal failure	Asst. Prof. Dr. Hathairat	
4. Diabetes	Dr. Ratjai	
5. Heart failure	Asst. Prof.Dr. Tippamas	
6. Respiratory failure	Asst. Prof.Dr. Tippamas	
7. Hepatic failure	Asst. Prof.Dr. Chantra	
8. Neurological disorders	Asst. Prof.Dr. Luppana	
9. MODS	Asst. Prof. Dr. Hathairat	

*Ploenpit  
Aug 21, 2017*



### The regulations of giving graduate students feedback

According to the consensus of the graduate committee in the meeting 2/2017 on February 6, 2017, Faculty of Nursing, the regulations of giving graduate students feedback about their assignments/paper are as follows;

1. The lecturers must give feedback within 1-2 weeks after students have submitted their assignments/paper.
2. The students must submit the last assignments/paper before due date, so that they can be read and reviewed before giving feedback. The students will get feedback after their presentation of the final assignments/paper in class.

### Course evaluation and grading

Any incoming doubts or queries about the course evaluation and grading will be welcome, please email or contact a course coordinator within this semester or one semester following of this semester.

*Ploumpit  
Aug 2, 2018*