

Syllabus for “principles of Epidemiology

[流行病學原理]” course

Date	Lecture topic	Instructor	Reading
09/17/20	Course Introduction/ History of Epidemiology/ Epidemiology & Public Policy	CC Yang	1
09/24/20	Measures of Disease Frequency	CC Yang	2
10/01/20	Measures of Association	CC Yang	3, 5
10/08/20	Overview of Study Design/ Study Design (I): Intervention Study	CC Yang	6, 7
	<i>Homework I</i>		
10/15/20	Classic Articles in Epidemiology (1)	WC Pan	--
10/22/20	Study Design (II): Cohort Study	CC Yang	8
10/29/20	Study Design (III): Case-Control Study	CC Yang	9
11/05/20	Study Design (IV): Other Study Designs	CC Yang	5, 6
11/12/20	Classic Articles in Epidemiology (2)	WC Pan	--
11/19/20	<i>Midterm exam & Discussion</i>	CC Yang/ WC Pan	--
11/26/20	Bias/Confounding/ Causal Inference (I)	WC Pan	10-12, 15
12/03/20	Bias/Confounding/ Causal Inference (II)	WC Pan	10-12, 15
12/10/20	Classic Articles in Epidemiology (3)	WC Pan	--
	<i>Homework II</i>		
12/17/20	Matching/Effect Modification (I)	WC Pan	11, 13
12/24/20	Effect Modification (II)/ Standardization	WC Pan	3, 11, 13
12/31/20	<i>Final exam & Discussion</i>	CC Yang/WC Pan	--
01/07/21	Screening (optional)	CC Yang/ WC Pan	16
01/14/21	Classic Articles in Epidemiology (4) (optional)	WC Pan	--

Chapters listed in “Essential of Epidemiology in Public Health, 4th edition.”

Recommended textbook:

1. Aschengrau A, Seage III GR. Essential of Epidemiology in Public Health, 4th ed. Sudbury, MA: Jones & Bartlett Learning, 2020.
2. Rothman KJ, Greenland S. Modern Epidemiology, 3rd ed. Philadelphia: Lippincott-Raven, 2008.
3. 楊振昌等人譯著：臨床研究設計第四版(Hulley SB, et al. eds. Designing Clinical Research, 4th ed) ，九州圖書總經銷，民國 105 年 7 月。

Principal Instructors:

Prof. Chen-Chang Yang (楊振昌教授):

- (1) Room 309, Medical Building-II (醫學二館), Yang-Ming campus; or
(2) Room 524, Chih-Teh Building (致德樓五樓), Taipei Veterans General Hospital.

Tel: (1) 02-2826-7901; (2) 02-2875-7525 ext 835.

E-mail: ccyang@vghtpe.gov.tw; ccyang2@ym.edu.tw

Prof. Wen-Chi Pan (潘文驥助理教授)

Room 307, Medical Building-II, Yang-Ming campus

E-mail: wenchipan@ym.edu.tw

Teaching Assistant

TBA

Class meetings:

The class will meet on every Thursday afternoon 15:30-17:20 at Room 104, Teaching Building (教學大樓 104 教室).

Course activities:

Lectures and class discussions, homework assignments, midterm exam, and final exam.

Objective of the course:

This course aims to provide an orientation to modern epidemiology as a basic science for public health and clinical medicine. It will address the principles of the quantitative approach to clinical and public health problems. The course will discuss measures of disease frequency and association, and introduce the design and validity of epidemiologic research. This course is an introduction to the skills needed by public health professionals to interpret critically the epidemiologic literature. It will provide students with the principles and practical experience needed to initiate the development of these skills. Lectures are complemented by homework assignments devoted to exercises or critique of current examples of epidemiologic studies.

Office hours (by appointment):

- Chen-Chang Yang: Tuesday 10:00am-12:00pm and Friday 10:00am-12:00pm.
- Wen-Chi Pan: Wednesday 10am -12pm, and 1pm-3pm

Grading:

- 2 Homework assignments: 30% (15% for each assignment)
- In-class performance (for the class meetings on “classical articles in epidemiology”): 10% (3.33% for each class meeting)
- Midterm exam: 30%
- Final exam: 30%

The first homework assignment is due on October 22, 2020 and the second homework assignment is due on December 24, 2020.

The midterm exam (2 hours) will take place in class on November 19, 2020; while the final exam will take place in class on January 14, 2021.

The midterm exam and the final exam will be close-book and close-note exams; calculators and dictionaries are allowed.

Epidemiologic studies are published in numerous SCI journals, such as the following journals.

(1) Selected Epidemiology Journals:

American Journal of Epidemiology
American Journal of Preventive Medicine
American Journal of Public Health
Clinical Epidemiology
Environmental Epidemiology
Environmental Health Perspectives
Epidemiology
International Journal of Epidemiology
Pharmacoepidemiology & Drug Safety
Preventive Medicine

(2) Selected General and Internal Medicine Journals:

American Journal of Medicine
Annals of Internal Medicine
Canadian Journal of Medicine
BMJ (British Medical Journal)
BMJ Open
Journal of American Medical Association (JAMA)
JAMA Internal Medicine (previously known as Archives of Internal Medicine)
Journal of the National Cancer Institute
Nature Medicine
The Lancet
The New England Journal of Medicine (NEJM)
PLoS Medicine
PLoS One