Course	Practice on Pharmacotherapeutics (薬物治療設計学演習)		Teacher	Kenji Kishihara, Shigeru Oiso, Taku Yamaguchi, Tsuyoshi Nishioku, Takuhiro Uto, Tsukasa Fujiki, Yoko Nawata			
Type of course	Practice	Credits	2 units	Period	1st-3rd/1st period	Compulsory/ Elective	Optional

## Aim of Course

The aim of this course is, in order to be able to practice appropriate pharmacotherapy as a pharmacist, 1) to acquire the ability to properly collect the information of a patient, 2) to evaluate the pathological condition correctly, and 3) to propose, implement, and evaluate the optimal pharmacotherapy for individual patients. Furthermore, for this aim, our lectures provide students with the latest topic of pharmacotherapy for various diseases and students are expected to be able to acquire those knowledges accurately in our lectures.

Point of view	Attainment target of Course	Evaluation tool/method	Ratio of		
1 omt of view	The animone target of Course	Evaluation tool method	Evaluation		
Interest · Motivation	To be able to search and examine papers related to pharmacotherapy design and appropriately point out the problems.	Attitudes towards classes and efforts towards lessons Group discussion Final presentation	10%		
Consideration •  Judgement	To be able to explain how to properly implement pharmacotherapy.	Report	30%		
Skill • Expression	To be able to read papers related to pharmacotherapy design and explain their own opinions.	Final presentation Discussion	30%		
Knowledge •		Final presentation	30%		
Understanding	To be able to discuss and explain lecture's topics.	Report			
Attendance					
Total Score					

Evaluation criteria and supplementary explanation of evaluation means or methods

Attitude towards classes: 10% (interest, motivation, attitude), 2 types of reports: 60% (thinking · judgment, knowledge · understanding) and oral presentation · discussion: 30% (skill/expression).

## Overview of course

In order for pharmacotherapy to be effective and safe, proper use of medicines and practice of safety management are indispensable, and pharmacists predict and evaluate the effect of drug treatment on individual patients based on scientific evidence. Moreover, it is also important to be able to judge whether to continue treatment. This course provides the latest topic of pharmacotherapy for various diseases and students learn scientific basis of pharmacotherapy based on clinical data such as laboratory values and patient information, furthermore, the evaluation of medication based on the clinical information, and the evaluation method of pharmacokinetics for it.

## Textbook · Reference book

Text: None

Reference book: Distribute handouts, as necessary.

Out of class learning and expectations for students

The students are expected to read English and Japanese academic articles related to the topic on classes.

#	topic	Details (Teacher)	Preparation • Review
1	Pharmacotherapy of psychiatric disorders #1	Outline and discussion on pharmacotherapy for major depression/bipolar disorder (Dr. Yamaguchi)	(Preparation) Read references (Review) Review questions
2	Pharmacotherapy of psychiatric disorders #2	Outline and discussion on pharmacotherapy for developmental disorders (Dr. Yamaguchi)	(Preparation) Read references (Review) Review questions
3	Pharmacotherapy of psychiatric disorders #3	Outline and discussion on pharmacotherapy for schizophrenia/drug addiction (Dr. Nawata)	(Preparation) Read references (Review) Review questions
4	Pharmacotherapy of cancer #1	Outline and discussion on basic knowledge of tumor immunology and cancer immunotherapy (Dr. Kishihara)	(Preparation) Read references (Review) Review questions
5	Pharmacotherapy of cancer #2	Outline and discussion on cancer immune- therapy with monoclonal antibodies, T cell transfer and vaccines. (Dr. Kishihara)	(Preparation) Read references (Review) Review questions
6	Pharmacotherapy based on pharmacokinetics and pharmacodynamics #1	Outline and discussion on therapeutic drug monitoring. (Dr. Oiso)	(Preparation) Read references (Review) Review questions
7	Pharmacotherapy based on pharmacokinetics and pharmacodynamics #2	Outline and discussion on pharmacokinetics and pharmacodynamics (PK/PD) theory. (Dr. Oiso)	(Preparation) Read references (Review) Review questions
8	Pharmacotherapy of metabolic bone diseases #1	Outline and discussion on pharmacotherapy for rheumatoid arthritis (Dr. Nishioku)	(Preparation) Read references (Review) Review questions
9	Pharmacotherapy of metabolic bone diseases #2	Outline and discussion on pharmacotherapy for osteoporosis and malignant bone tumors (Dr. Nishioku)	(Preparation) Read references (Review) Review questions
10	Pharmacotherapy using traditional and Kampo medicine	Outline and discussion on pharmacotherapy using traditional and Kampo medicine in modern medicinal treatment (Dr. Uto)	(Preparation) Read references (Review) Review questions
11	Pharmacotherapy using natural products	Outline and discussion on pharmacotherapy using natural products and natural product-derived compounds (Dr. Uto)	(Preparation) Read references (Review) Review questions
12	Pharmacotherapy of allergic diseases #1	Outline and discussion on basic knowledge of pharmacotherapy for allergic diseases (Dr. Fujiki)	(Preparation) Read references (Review) Review questions
13	Pharmacotherapy of allergic diseases #2	Outline and discussion on pharmacotherapy using anti-allergic drugs (Dr. Fujiki)	(Preparation) Read references (Review) Review questions
14	Group Discussion and Presentation #1	Group discussion and presentation on interest subject in past lectures. (All instructors)	(Preparation) (Review)
15	Group Discussion and Presentation #2	Group discussion and presentation on interest subject in past lectures. (All instructors)	(Preparation) (Review)