

Course	Advanced Social Pharmacy			Teacher	T. Kabashima, H. Nagaoka, T. Muro, S. Kamiya, K. Kanda, Y. Deguchi, T. Kawasaki, T. Yoshida, M. Suehiro		
Type of course	Lecture	Credits	2 units	Period	Spring	Compulsory/ Elective	Optional
Aim of Course							
<p>The aim of this course is to understand the basic and advanced scientific background of social pharmacy today, and explain such characteristics.</p> <p>Toward this aim, students are expected to be able to use those knowledges accurately in our lectures. Students will also choose a topic about the most advanced social pharmacy, based on the theme, and explain that topic to the class.</p>							
	Attainment target of Course				Evaluation tool/method		Ratio of Evaluation
Interest/Motivation/ Attitude	1: To be able to understand social pharmacy by giving a presentation. 2: To be able to experiment basic term of social pharmacy accurately.				Group discussion Final presentation		10% 20%
Consideration/ Judgement	To be able to do preparations and analyses consistently.				Review questions		10%
Skill/Expression	To be able to prepare the presentation slides for their interest topics.				Assignments Final presentation		10% 10%
Knowledge/ Understanding	To be able to discuss and explain lecture's topics.				Review questions Final presentation		20% 20%
Attendance							Requested to take exam
Total Score							100%
Evaluation criteria and supplementary explanation of evaluation means or methods							
Overall grade in this class will be decided based on the following: Group discussion (10%), Review questions (30%), Assignments (10%), and Final presentation (50%).							
Overview of course							
<p>This course is intended to introduce topics about social pharmacy and related scientific research. In the last class, students will choose the topic of most interest, and will present the latest or related news about selected topic to the other students. The official language of this class is English. Each class will consist of a 90min presentation.</p>							
Textbook · Reference book							
Textbook: none in particular (distribute related papers each time)							
Reference book: none in particular							
Out of class learning and expectations for students							
The students are expected to read the related reference and assigned material carefully. Also follow the latest news and reports released by mass media. Some of them will be used in the class.							

#	Topic	Details (Teacher)	Preparation • Review
1	Application of genome information to social pharmacy	Introduction of genome research and its outcome, and discussion about useful application to society. (Dr. Kabashima)	(Preparation) Read references (Review) Review questions
2	Risk of infectious diseases as social problem	Outline and discussion on infectious diseases such as HIV, prion, influenza, and so on. (Dr. Kabashima)	(Preparation) Read references (Review) Review questions
3	SPECIFICATIONS	Test procedures and acceptance criteria for drug substances and products. (Dr. Nagaoka)	(Preparation) Read references (Review) Review questions
4	Regulatory	Pharmaceutical Quality Assurance / Quality Control (Dr. Nagaoka)	(Preparation) Read references (Review) Review questions
5	Social issues associated with antimicrobial resistance: Importance of proper use of antibiotics	Outline and discussion on antimicrobial resistance and proper use of antibiotics. (Dr. Muro)	(Preparation) Read references (Review) Review questions
6	Pharmacovigilance and big data	Pharmacovigilance is an essential activity to encourage appropriate use of drugs. In this lecture, pharmacovigilance using big data will be reviewed. (Dr. Muro)	(Preparation) Read references (Review) Review questions
7	Bioavailability evaluation of pharmaceutical preparation	Overview and discussion of the bioavailability of different animals. (Dr. Kamiya)	(Preparation) Read references (Review) Review questions
8	Evaluation of bitterness in gel formulations	Analyzing physical properties in medicine bitterness evaluation: A study of diverse methods. (Dr. Kamiya)	(Preparation) Read references (Review) Review questions
9	Management of Adverse Effects of Anticancer Drugs #1	Introduction of the background and current status of management of adverse effects of anticancer drugs. (Dr. Kanda)	(Preparation) Read references (Review) Review questions
10	Management of Adverse Effects of Anticancer Drugs #2	Presentation and discussion on latest evidence: management of adverse effects of anticancer drugs. (Dr. Kanda)	(Preparation) Prepare papers for presentation (Review) Review questions
11	Drug-food interactions	Introduction of current status of health foods including their interactions with drugs. (Dr. Deguchi)	(Preparation) Read references (Review) Review questions
12	Asthma prevention	Introduction of recent studies about asthma prevention. (Dr. Deguchi)	(Preparation) Read references (Review) Review questions
13	Computational investigation for drug discovery	Modern computational approaches for understanding biomolecular events and for discovering new drugs rationally will be introduced. (Dr. Yoshida)	(Preparation) Read references (Review) Review questions
14	Regulatory aspects of drug transporter-mediated drug-drug interactions	Introduction of the regulatory guidance of drug-drug Interaction studies. (Dr. Kawasaki)	(Preparation) Read references (Review) Review questions
15	Clinical trials	Introduction of clinical trials of new drugs and new drug therapies. (Dr. Suehiro)	(Preparation) Read references (Review) Review questions