

<b>Course title</b> <English>	中毒学入門 Introduction to Toxicology	<b>Affiliated department, Job title, Name</b>	Graduate School of Medicine Associate Professor, HARADA KOUJI Graduate School of Medicine Professor, KOIZUMI AKIO		
<b>Grade allotted</b>	Professional degree students	<b>Number of credits</b>	2	<b>Course offered year/period</b>	2016/First semester
<b>Day/period</b>	Wed.4	<b>Class style</b>	Lecture	<b>Language</b>	Japanese and English
<b>[Outline and Purpose of the Course]</b>					
I. Course Description The hazardous effects of chemicals on human health have been traditionally investigated in toxicology while therapeutic ones have been investigated in pharmacology. In this course, selected known episodes of environmental pollutions, metals and organic substances will be given. We will discuss the toxicities of common chemicals in our modern lives: mercury, dioxin, lead, thallium and cannabinoids. The aim of this course is to provide a scientific basis of modern toxicology. In this year, ancient medical book 'Ishinbo' is used for course material.					
<b>[Course Goals]</b>					
II. Course Goals and Objectives Introduction to basic toxicology Knowledge for the toxic effects of some environmental pollutants, metals and organic substances familiar to us. Knowledge for developmental toxicology and carcinogenesis Analytical skill for toxicokinetics and toxicodynamics Skill for regulatory strategy to minimize the toxic effects of chemicals					
<b>[Course Schedule and Contents]</b>					
Course Schedule 1 April 13 Orientation 2 April 20 Introduction to 'Ishinbo' (Takeda) 3 April 27 Murder by insulin (Kobayashi) 4 May 11 Minamata disease and ecotoxicology (Harada) 5 May 18 Neonicotinoid pesticides and honey bee decline (Harada) 6 May 25 Toxicity of alcohol (Koizumi) 7 June 1 'Ishinbo' and Modern Medicine; Acute & chronic arsenic toxicities (Takeda & Kobayashi) 8 June 8 An old Chinese medical book, Reikyu, says "Cold exposure causes pain" (Kobayashi and Zhao) 9 June 15 Cannabinoids and obesity (Harada) 10 June 22 Chemical terrorism in Tokyo subway using Sarin (Kobayashi) 11 June 29 Murder by aconite (Koizumi) 12 July 6 Modern medicines from natural products (Koizumi and Kusakawa) 13 July 13 Toxins in 'Ishinbo' 1 (Group discussion) 14 July 20 Toxins in 'Ishinbo' 2 (Group discussion) 15 July 27 Additional topic August 3 Examination					
----- Continue to 中毒学入門(2) ↓ ↓ ↓					

## 中毒学入門(2)

### [Class requirement]

Elective.

Required for the students of department of Health and Environmental Sciences.

### [Method, Point of view, and Attainment levels of Evaluation]

V. Course Grade

Attendance and active participation in the lecture 50%; Examination 50 %

### [Textbook]

Not used

IV. Course Text and Readings

Handouts

### [Reference books, etc.]

(Reference books)

### [Regarding studies out of class (preparation and review)]

III. Methods of Instruction

Lectures and discussion

Active participation will be evaluated

### (Others (office hour, etc.) )

VI. Message

“Introduction to Toxicology” , “Toxicology” and “On the Bench Training” are in series. Those who wish to take “Toxicology” and “On the Bench Training” should take “Introduction to Toxicology” .

\*Please visit KULASIS to find out about office hours.