

平成30年度大学院共通科目シラバス（英語ページ用）

General Graduate Education Courses in 2018-Syllabus-

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| Course Number | 01ZZ426 |
| Course Name(Japanese) | 国際性養成科目群・シリーズ講義 「地球規模課題と国際社会：環境汚染と健康影響」 |
| Course Name(English) | Category in Lecture series for Retaining Internationalized Characters: [Global Issues and Global society: Environmental Pollution & Health Effects] |
| Course Structure | Omnibus style lecture coordinated by Prof. Dr. Yoshito Kumagai (Faculty of Medicine) |
| Standard Registration Year | Not specified (For All graduate students at any grade) |
| Term | Intensive courses (Fall A) |
| Day and Time | Wednesday 5,6 Period |
| Location | 4E608 |
| Credit | 1 |
| Instructor | Prof. Yoshito Kumagai (Faculty of Medicine) |
| T F / T A | Yunjie Ding |
| Office Information | Prof. Yoshito Kumagai (Students need appointment via e-mail: yk-em-tu@md.tsukuba.ac.jp) |
| Link between Academic Goal and Coursework | <ul style="list-style-type: none"> • Category of GGEC: Retaining Internationalized Characters-Developing proficiency towards becoming internationalized individuals. • This course series promote students' motivation to work and play a role in international societies. • This course series are closely linked to various activities in global societies and cultural diversity of the world. Students are able to polish their sense to be global personnel resources. |
| Course Objective | In a multinational environment, cultivate the international sence and improve the understanding for an international society. Develop the ability to act as a global talent, finally cultivate skills and resourcefulness to play an active role in the international society. |
| Course Overview | <p>1. The international community is facing various problems caused by several chemical exposure as "environmental pollution and health effects". In this course, substances that affect the human body and that are extensively present in the environment such as nanoparticles, exogenous endocrine disrupters such as dioxin, cadmium, arsenic, organochlorine compounds, methylmercury and organic tin will be covered.</p> <p>2. It is related to the 3rd goal of the "Global Sustainable Developmental Goals (SDGs)" posed by the United Nations.</p> <p>3. Clarification of issues related to sociality in the international community. Research to find solutions for the problems caused by the lack of sociality, actual situation of environmental pollution and health damage on the regional and global scale, lecture on the possibility of a scientific approach</p> |

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| | <p>to problem solving. time for Q&A after the lecture.</p> <p>4. Regarding "Roles of course coordinator", "class form" and "output", please follow the application form (attached document) stated in the general coordinator.</p> <p>This Course series focuses on the topics of "Sustainable Developmental Goals" set by the United Nations, especially Goals 3.</p> |
| Course Key Words | Environmental pollution, health damage, biological response, exposome, toxicity |
| Course Schedule | <p>Day 1 (10/3)</p> <p>1. Introduction (Prof.Yoshito Kumagai)</p> <p>2. Nanomaterials! Let's broaden our minds, Asbestos? (Prof. Jun Kanno)</p> <p>Day 2 (10/10)</p> <p>1. Dioxin and Endocrine Disrupting Chemicals and Health (Prof.chiharu Tohyama)</p> <p>2. Effects of chemical exposure on central nervous system in animal models (Prof. TinTin Win Shwe)</p> <p>Day 3 (10/17)</p> <p>1. Global pollution of groundwater by arsenic and its versatile health effects in humans (Prof. Seiichiro Himeno)</p> <p>2. Exposome (life-course total exposure): A paradise shift in epidemiology (Prof.Shoji Nakayama)</p> <p>Day 4 (10/24)</p> <p>1. Cadmium contamination of foods and its potential health risk (Prof. Yasuhiro Shinkai)</p> <p>2. International regulation on ozone-depleting substances and health impact of alternatives (Prof. haku Ichihara)</p> <p>Day 5 (11/7)</p> <p>1. Biological factors related to health effects of methylmercury exposure (Gi-Wook Hwang)</p> <p>2. Environmental organotin and its mammalian neurotoxicity (Prof. Yaichirou Kotake)</p> |
| Course Prerequisites and Advisories | <p>Interests in Environmental Pollution & Health Effects about global problems derived from a lack of stable social relationships. Motivation to actively participate in discussion during the lecture.</p> <p>Learn about "Sustainable Developmental Goals (SDGs), especially Goals 3 proposed by the United Nations and associated matters.</p> |
| Grading Philosophy | Class Attendance (40%); Positive contribution to discussion in class (30%); Essay Assignment (30%) |

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| Textbooks, References, and Supplementary Materials | <p>Web site of the United nations on SDGs. https://sustainabledevelopment.un.org/</p> <p>References and supplementary reading materials will be provided to registered students.</p> |
| Self-directed Learning Other Than Coursework | <p>Web site of the United nations on SDGs. Attend seminars and workshops on related topics. Study suggested reading materials (books, articles, public reports, etc.) provided by instructors during the class.</p> |
| Other | None |
| Posters, Leaflets | TBA |
| Lecture Day | TBA |
| Additional Information | None |
| Syllabus/Course program (English) | Intensive course |