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| Course Name [科目名] | Process Safety and Health Management |
| Instructor Name [教員] | Yoshiyuki Yamashita, Wuled Lenggoro, Teiji Kitajima |
| Office Hours and Contact Information[オフィスアワー、連絡先] | Office hours: encourage appointments by e-mailLocation: 13-804, e-mail: yama\_pse@cc.tuat.ac.jp (Yamashita)Base-224, e-mail: lenggoro@cc.tuat.ac.jp (Lenggoro)1-108, e-mail: teiji@cc.tuat.ac.jp (Kitajima) |
| Course Number |  |
| Course Structure [授業形態] | Lecture |
| Term, Meeting Days, Time andLocation[開講時期、時間、場所] |  |
| Course Credits [単位数] | 3 |
| Course Overview [概要] | This course will provide the students with the necessary knowledge and ability to manage process safety, abnormal situation, and environmental health issues in chemical industry.  |
| Course Key Words [キーワード] | Process Safety, Abnormal Situation, Environmental Health  |
| Academic Goal [目標] | 1. capable to understand process safety, abnormal situation, and environmental health.2. capable to manage safety and health. |
| Course Schedule [授業内容] | Introduction to Process Safety Management (by Dr. Kitajima)* Process Safety Basics
* The Four Pillars of Risk Based Process Safety (RBPS)
* The Process Safety Management System

Introduction to Abnormal Situation Management (by Dr. Yamashita)* Definition of Normal and Abnormal Situation
* Detection of Abnormal Situation
* Diagnosis of Abnormal Situation

Introduction to Environmental Health (by Dr. Lenggoro)* Properties of particulate matters (in the gas-phase)
* Transport processes: From molecular to global scales
* Engineered nanomaterials: Measurement and risk assessment
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| Textbooks, References, and Supplementary Materials[テキスト、参考書、その他] | CCPS: Introduction to Process Safety for Undergraduates and Engineers, Wiley, 2016.Handouts and materials given on or before the lectures. |
| Grading Philosophy(Percentage / Criteria / Methodology)[成績評価の方法] | Examinations, Hands-on Exercises, and Reports |
| Other(i.e. Expectations on Classroom Conduct and Decorum etc.)[その他] |  |