Lectures in Dept. Structural Molecular Science

Field	Subject Code	Subject	Credit	Content of subject	Lecturer		Lecture Schedule
	11070091	Theoretical Chemistry	2	The electronic structure of molecules and chemical reaction are systematically understood based on the methodologies of quantum chemistry. The dynamic behaviors of molecules and molecular assemblies are investigated with the analysis of molecular dynamics simulations.	Prof. Assoc.Prof.	Masahiro Ehara Hisashi Okumura	2014 school year
	11070198	Structural Photo-Molecular Science	2	How to develop various spectroscopic methods such as laser spectroscopy, nonlinear and time-resolved spectroscopy and microscopic methods, for investigation of structures and dynamics of small molecules to molecular assemblies, and how to apply those methods for control of functionalities of materials.	Prof. Prof.	Hiromi Okamoto Yasuhiro Ohshima	2014 school year
	11070074	Materials Chemistry	2	The basic concept and experimental methods in molecular science including organic chemistry, macromolecular chemistry, and solid physics are provided in this class. The case studies are also provided for the molecular design, structural analysis, measurement of molecular properties, and expression of function in the multi-disciplinary research fields.	Assoc.Prof. Assoc.Prof.	Toshiyasu Suzuki Donglin Jiang	2014 school year
		Structural Biomolecular Science	2	The molecular mechanisms of various biological processes will be lectured in this course. Especially, the molecular mechanisms of the following topics will be provided: DNA replication, transcription and translation of DNA, cellular homeostasis, biological energy conversion such as respiration and photosynthesis, sensory receptors, bioelectronics in a neuron, and some recent research topics.	Prof. Assoc. Prof.	Shigetoshi Aono Yuji Furutani	2013 school year Intensive Course in 2nd semester
	11070200	Exercise on Structural Molecular Science Ⅰ	4	Discussion, experimental instructions, and/or theoretical studies for the student to perform the individual fundamental and applied research in the field of structural molecular science. This program is provided by appropriate teaching stuffs based on the research subject of the individual student.			every year
	11070100	Exercise on Structural Molecular Science Ⅱ	4				every year
	11070101	Exercise on Structural Molecular Science Ⅲ	4				every year
	11070102	Exercise on Structural Molecular Science Ⅳ	4				every year
	11070103	Exercise on Structural Molecular Science Ⅴ	4				every year
	11070201	Seminar on Structural Molecular Science Ⅰ	4	Small size seminar to gain scientific knowledge, competence for scientific consideration, discussion, and research formance, and original scientific conceptions in the field of fundamental and applied structural molecular science. This program is provided by appropriate teaching stuffs based on the research subject of the individual student.			every year
	11070106	Seminar on Structural Molecular Science Ⅱ	4				every year
	11070107	Seminar on Structural Molecular Science Ⅲ	4				every year
	11070108	Seminar on Structural Molecular Science Ⅳ	4				every year
	11070109	Seminar on Structural Molecular Science Ⅴ	4				every year
	11070111	English for scientific research	2	The principal aim of this course is to improve academic reading, acadimic writing, listenig, and speaking in English for scientific research.			