

Oyama College		Year	2022		Course Title	Molecular Structure	
Course Information							
Course Code	0009		Course Category		Specialized / Elective		
Class Format	Lecture		Credits		Academic Credit: 2		
Department	Advanced Course of Materials Chemistry and Bioengineering		Student Grade		Adv. 1st		
Term	First Semester		Classes per Week		2		
Textbook and/or Teaching Materials							
Instructor	SAKAI Hiroshi						
Course Objectives							
Rubric							
	Ideal Level		Standard Level		Unacceptable Level		
Achievement 1							
Achievement 2							
Achievement 3							
Assigned Department Objectives							
学習・教育到達度目標 ④ JABEE (A) JABEE (d-1)							
Teaching Method							
Outline							
Style							
Notice							
Characteristics of Class / Division in Learning							
<input type="checkbox"/> Active Learning		<input type="checkbox"/> Aided by ICT		<input type="checkbox"/> Applicable to Remote Class		<input type="checkbox"/> Instructor Professionally Experienced	
Course Plan							
			Theme	Goals			
1st Semester	1st Quarter	1st	Bohr model				
		2nd	Wave-particle duality				
		3rd	Schrödinger equation				
		4th	Schrödinger equation				
		5th	Fundamentals of Quantum Chemistry				
		6th	Schrödinger equation in three dimensions				
		7th	Hydrogen atom				
		8th	Exam				
	2nd Quarter	9th	Hydrogen atom				
		10th	Many-electron atoms				
		11th	Hydrogen molecular ion				
		12th	Homonuclear diatomics				
		13th	Heteronuclear diatomics				
		14th	Vibrational spectroscopy				
		15th	Rotational spectroscopy				
		16th	Exam				
Evaluation Method and Weight (%)							
	Examination	Presentation	Mutual Evaluations between students	Behavior	Portfolio	Other	Total
Subtotal	0	0	0	0	0	0	0
Basic Proficiency	0	0	0	0	0	0	0
Specialized Proficiency	0	0	0	0	0	0	0
Cross Area Proficiency	0	0	0	0	0	0	0