Cell and Molecular Biology I

Module name		Cell and Molecular Biology				
Module level		2nd year of Bachelor program				
Abbreviation, if applicable						
Sub-heading, if applicable						
Courses included in the module, if applicable		BI-2205 Cell and Molecular Biology I				
Semester/term		2nd Semester				
Module coordinator(s)		Dr. Sony Suhandono				
Lecturer(s)		Dr. Sony Suhandono& Dr. Anggraini Barlian				
Language		Indonesian				
Classification within the Curriculum		Compulsory courses for Bachelor Program in Biology				
Teaching format/ class hours per week during the semester		*2 parallel classes consists of 40 students / class:* 1) 1st-12th week Lecture (Face to face lecture & student presentation): 3 hr for 12 weeks 2) 13th-14th week Student class presentation/group (4-5 students/group):3 hr for 2 weeks				
Workload	Total Workload	class 14(3)+independent study 16(3)+ Assignment 16 (3) + Exam 2(2) =144 hours; 3 CU				
		Face to face teaching	Structured Activities	Independent study	Exam	Total
	Lecture	42	49	49	4	144
Credit points		Cell and Molecular Biology I (3 CU)				
Requirements						
Content		1. Introduction; 2. Membrane structure and function; endomembrane system: ER, Golgi apparatus; lysososme; vacuole; 3. Energy conversion: mitochondria, peroxisome, chloroplast 4. Nucleus; cytoskeleton and cell motility; 5. Cell communication and cell interaction; 6. Cell cycle, cel division, cell death; 7. Application of cell biology				
Learning goals/ competencies		*After completion of this module students are expected to be able to:* Knowledge : • *describe the structure and function of cell parts.* • *describe cell physiology &communication* Skill: • *perform & analyze of the structure and function of cell parts as well as cell physiology &communication* • *Search for and present relevant information from scientific publications dealing with cell & molecular biology* Competences : • *Interpret and apply knowledge in structure and function of cell parts as well as cell physiology &communication*				
Study/exam achieve		*Lecture (100%)*				
		Midterm exam	*Quiz*	*Final exam*	*Assignment/ Presentation*	*Total*
	Lecture	*35%*	*20%*	*35%*	*10%*	*100%*
Forms of media		*Classical teaching tools:*		*white board/ chalk and talk, power point, practical class, film, animation*		
		Integrated teaching tools:		-		
		Digital teaching tools:		-		
		Problem based teaching tools:		*Journal*		
Literature		*Karp, Gerald. 2008. Cell and Molecular Biology: Concepts and Experiments. John Wiley*				

	and Sons, Inc. 5th Ed.