FI580 Statistical Physics

Module name:	Statistical Physics						
Module level, if applicable:	Undergraduate						
Code:	FI-580						
Sub-heading, if applicable:	-						
Classes, if applicable:	asses, if applicable: -						
Semester:	7 th						
Module coordinator:	Lilik Hasanah						
Lecturer(s):	Lilik Hasanah						
Language:	Bahasa Indonesia						
Classification within the curriculum:	Compulsory course						
Type of Teaching:	Contact hours per week during the semester	Class Size					
 Lecture (conceptual, contextual and problem-solving approaches through expository, discussions, exercises and presentations). Structured activities (assignments based on conceptual, contextual and problem-solving approaches) Self-study (reading literature) 	2 hour 30 minutes	35					
Workload:	The total workload is 136 hours/8160 minutes (4.8 ECTS) per semester, consisting of 35 hours/2100 minutes lectures (1.24 ECTS), 42 hours/2520 minutes structured activities (1.48 ECTS) and 42 hours/2520 minutes self-study (1.71 ECTS) per week for 14 weeks, 17 hours/1020 minutes for two exams (0.6 ECTS).						
Credit points:	4.8 ECTS						
Pre-requisites course(s):	Pre-requisites course(s): FI222 Mathematical Physics I, FI240 Mathematical Physics II, FI341 Thermodynamics, FI350 Modern Physics, FI560 Quantum Physics						
Course Learning Outcomes (CLO):							

	CLO	/	alyse the Maxwell-Bo lications.	Itzmann Statistics	and their			
Content:	 Characteristics of macroscopic and equilibrium systems. Basic concepts of probability Statistical description of particle system Thermal interactions Maxwell-Boltzmann, Bose-Einstein, Fermi-Dirac statistics and their applications. The final mark will be weight as follow: 							
	No	CLO	Assessment Object	Assessment Techniques	Weight			
Study/exam achievements:	1 2 Tota	CLO1 – CLO7 CLO5, CLO6, CLO7	Subject specific competences: a. Assignments b. Exam - Mid exam - Final exam Subject specific competences: - Presentation	Written Written test Written test Performance	20 % 30% 25% 25% 100%			
Forms of media:	Board, LCD Projector, Laptop/Computer, LMS							
Literature:	 Stowe K. (2007). An Introduction to Thermodynamic and Statistical Mechanics. Cambridge University Press. Reif F. (2018). Statistical Physics. Berkeley Physics Course, New York. Olla, P. (2014). An introduction to thermodynamics and statistical physics. Springer. Setiya Utari, Lilik Hasanah, Endi Suhendi. (2016). Pengantar Fisika Statistik. UPI Press. 							

PLO and CLO mapping

	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	PLO11	PLO12
CLO1		√										
CLO2	\checkmark	\checkmark										
CLO3		\checkmark										
CLO4		\checkmark										
CLO5												
CLO6		\checkmark										
CLO7		\checkmark										