

(Table 5.2) Course unit description

Study program : Physics			
Type and level of studies: Masters studies			
Course unit: Quantum Statistical Physics			
Teacher in charge: Dragica Knežević			
Language of instruction : <i>English</i>			
ECTS: 7			
Prerequisites: enrolled semester			
Semester: Summer <i>Semester</i>			
Course unit objective			
To learn basic theoretical methods and models used in statistical physics			
Learning outcomes of Course unit			
The gain knowledge needed for study models of interacting systems in statistical physics			
Course unit contents			
Nonideal gases, The virial expansion, Distribution functions, Ornstein-Zernicke equation, Monte-Carlo methods, Quantum fluids, Bose-condensation, Superconductivity, BCS theory, Theory of fluctuation and stochastic processes, Critical phenomena, Disordered systems			
Literature			
1. M. Plishke and B. Bergerson, Equilibrium statistical physics, Prentice Hall, (1989)			
2. L. Reichl, A modern course in statistical physics, University of Texas Press, (1980)			
3. 3. D.Knežević, S. Janićević, Zbirka zadataka iz kvantne statističke fizike, Skver, Kragujevac (2008)			
Number of active teaching hours			Other classes
Lectures:	Practice:	<i>Mentoring system:</i> 2	
Teaching methods			
Mentoring system			
Examination methods (maximum 100 points)			
Exam prerequisites	No. of points:	Final exam	No. of points:
Student's activity during lectures	10	oral examination	30
practical classes/tests	40	written examination	
Seminars/homework	20	
Project			
Other			
Grading system			
Grade	No. of points	Description	
10	91-100	Excellent	
9	81-90	Exceptionally good	
8	71-80	Very good	
7	61-70	Good	
6	51-60	Passing	
5	0-50	Failing	