Lecture Cources 2001/2002
Low Temperature Physics and Superconductivity Department
Moscow State University

Disciplines	Hours/ total	Hours/ weekly	Lectures	Seminars	Practical	Exams	Tests
6th semester (16 weeks., 1 test)							
Computing methods in physics	32	2	2	-	-	-	+
Introduction to low temperature physics	32	2	2	-	-	-	-
7th semester (18 weeks, 2 exams+4 tests)							
Exitations in crystals	72	4	2	2	-	+	+
Basic magnetism. Part I	36	2	2	-	-	-	+
Low temperature physics: experimental. Part I	36	2	2	-	-	-	+
Practical	108	6	-	-	6	-	+
Laboratory	90	5	-	-	5	-	+
Physics of open systems	36	2	2	-	-	-	
8th semester (16 weeks., 2 exams+4 tests)							
Low temperature physics: experimental. Part II	32	2	2	-	-	+	-
Superconductivity	32	2	2	-	-	+	-
Semiconductors. Part I	32	2	2	-	-	-	+
⎡Basic magnetism. Part II ⎤32		2	2	-		+	-
⎣Low temperature phase transitions ⎦							
Practical	96	6	-	-	6	-	+
Laboratory	80	5	-	-	5	-	+
9th semester (18 weeks, 4 exams+3 tests)							
Semiconductors. Part II	36	2	2	-	-	+	-
Physical properties of disordered materials	36	2	2	-	-	+	-
Quantum solid state theory. Part I	36	2	2	-	-	-	+
⎡Narrow gap semiconductors ⎤							
⎢High Tc superconductors ⎥36		2	2	-	-	+	-
⎢Quantum theory of magnetism ⎥36		2	2	-	-	+	-
⎣Quantum field theory ⎦							
Practical	108	6	-	-	6	-	+
Laboratory	216	12	-	-	12	-	+
Diffusive phenomena in solid state physics	36	2	2	-	-	-	-
Superconductive materials	36	2	2	-	-	-	-
Radiospectroscopy of solids	36	2	2	-	-	-	-
Low temperature physics: theoretical. Part I	36	2	2	-	-	-	-
10th semester (16 weeks, 2 exams+2 tests)							
Physics of low dimensional systems	64	4	4	-	-	+	-
Quantum solid state theory. Part II	32	2	2	-	-	+	-
⎡Elastic and thermal properties of solids ⎤							
⎣Electron tunneling in superconductors ⎦32		2	2	-	-	-	+
Laboratory	288	18	-	-	18	-	+
Low temperature physics: theoretical. Part II	32	2	2	-	-	-	-
Actual trends in low temperature physics	32	2	2	-	-	-	-
11th or 11th and 12th semesters							
Spesialist diploma or magister thesis							