

Physics courses taught in English at JKU

Sem.	Title	Course Type	Hours per week	ECTS Credits	Language
WS	Theoretical Physics III (Electrodynamics)	Lecture	4	8	G/E
WS	Theoretical Physics III (Elektrodynamics)	Tutorial	2	3	E
WS	Literature seminar theoretical physics	Seminar	2	3	G/E
WS	Theory of condensed matter I	Lecture	2	3	G/E
WS	Theoretical Physics III (Elektrodynamics)	Tutorial	2	3	E
WS	Astrophysics	Lecture	3	5	G/E
WS	Mathematical methods of physics III	Lecture	2	3	G/E
WS	Theoretikum	Practical C.	6	9	G/E
WS	Introduction to surface science II	Lecture	2	3	G/E
WS	Introduction to surface science II - exercises	Tutorial	2	3	G/E
WS	Seminar of atomicphysics and surface science	Seminar	2	3	G/E
WS	Electronics	Lecture	2	3	G/E
WS	Electronics exercises	Tutorial	1	2	G/E
WS	Nuclear and Particle Physics	Lecture	2	3	G/E
WS	Discussion of new topics in atomic physics and surface science	Seminar	2	3	G/E
WS	Tutorial for diploma and graduate students	Seminar	2	3	G/E
WS	Materials science	Lecture	2	3	E
WS	Surface analytics	Lecture	2	3	G/E
WS	Surface analytics	Tutorial	1	2	G/E
WS	Seminar Physics of soft materials	Seminar	2	3	G/E
WS	Lab Course II in Physics of soft materials	Practical C.	6	9	G/E
WS	Lab course in physics of soft materials	Practical C.	2	3	G/E
WS	Molecular biology of the cell I	Lecture	2	3	G/E
WS	Biophysics I	Lecture	3	5	G/E
WS	Biophysics I	Tutorial	1	2	G/E
WS	Biophysics III	Lecture	2	3	G/E
WS	Biospecific detection I	Lecture	2	3	G/E
WS	Biospecific detection I	Tutorial	1	2	G/E
WS	Methods in biochemistry I	Lecture	2	3	G/E
WS	Practical course biochemistry I	Practical C.	2	3	G/E
WS	Biological signalling I	Lecture	2	3	G/E
WS	Literature seminar biophysics I	Seminar	2	3	G/E
WS	Selected issues on theoretical biophysics I	Lecture	2	3	G/E
WS	Theoretical biophysics I	Tutorial	2	3	G/E
WS	Biophysical colloquium	Seminar	1	2	G/E
WS	Characterization of Bio-Nanostructures	Lecture	2	3	G/E
WS	Genetics I	Lecture	1	2	G/E
WS	Practical course in the characterization of Bio-Nanostructures	Practical C.	2	3	G/E
WS	Molecular biology of the cell I	Tutorial	1	2	G/E
WS	Semiconductor physics laboratory I	Practical C.	3	3	G/E
WS	Practical Training in Nanotechnology I	Practical C.	2	3	G/E
WS	Semiconductor devices	Lecture	2	3	G/E
WS	Advanced practical course	Practical C.	4	6	G/E
WS	Crystal growth I	Lecture	2	3	G/E
WS	Solid State Physik for Teacher Training Physics and Biophysics	Lecture	2	3	G/E
WS	Semiconductor physics for advandes students	Lecture	3	5	G/E
WS	Seminar in semiconductor physics	Seminar	2	3	E
WS	Selected topics in solid state physics	Lecture	2	3	E
WS	Discussion of recent projects and results in solid state and semiconductor physics	Seminar	2	3	E

Sem.	Title	Course Type	Hours per week	ECTS Credits	Language
WS	Problem Session Solid State Physics for Biophysics and Physics Education	Tutorial	1	2	G/E
WS	Physics of lowdimensional systems	Lecture	3	4	E
WS	Characterization of Micro- and Nanostructures I	Lecture	2	3	E
WS	Characterization of Micro- and Nanostructures I	Tutorial	1	2	E
WS	Fundamental Physics Laboratory III	Practical C.	2	3	G/E
WS	Solid state physics	Lecture	4	6	G/E
WS	Solid state physics work groups	Tutorial	2	3	G/E
WS	Seminar nanostructures	Seminar	2	3	G/E
WS	Nanoelectronics, Nanooptics and Nanosensorics II	Lecture	2	3	G/E
WS	Micro- and Nanostructures, Nanokomposites	Lecture	2	3	G/E
WS	Exercises on Micro- and Nanostructures, Nanokomposites	Tutorial	1	2	E
WS	Laser physics I	Lecture	2	3	E
WS	Working Group in Laserphysik	Working Gr.	2	3	G/E
WS	Practical course in Applied Physics I	Practical C.	2	3	G/E
WS	Practical course in Applied Physics II	Practical C.	4	6	G/E
WS	Seminar on applied physics	Seminar	2	3	G/E
WS	Seminar on novel topics in applied physics	Seminar	2	3	G/E
SS	Hydrodynamics	Lecture	2	3	G/E
SS	Literature seminar theoretical physics	Seminar	2	3	G/E
SS	Theoretical Physics II (Quantum Mechanics)	Lecture	7	5	G/E
SS	Theoretical Physics II (Quantum Mechanics)	Tutorial	2	3	G/E
SS	Theoretical Physics IV (Thermodynamics and statistical Physics)	Lecture	3	6	E
SS	Theoretical Physics IV (Thermodynamics and statistical Physics)	Tutorial	1	2	G/E
SS	Advanced Quantum Theory	Lecture	3	6	G/E
SS	Advanced Quantum Theory	Tutorial	1	2	G/E
SS	Seminar theoretical physics	Seminar	2	3	G/E
SS	Special topics in theoretical physics	Lecture	2	3	E
SS	Theoretikum	Practical C.	6	9	G/E
SS	Discuss of new topics in atomic physics and surface science	Seminar	2	3	G/E
SS	Electronics Laboratory	Practical C.	3	5	G/E
SS	Electronics laboratory II	Practical C.	2	3	G/E
SS	Atomic physics	Lecture	2	3	G/E
SS	Electronics Laboratory	Practical C.	3	5	G/E
SS	Characterization of Micro- and Nanostructures II	Lecture	2	3	G/E
SS	Atomic physics and surface science laboratory II	Practical C.	6	9	G/E
SS	Introduction to surface science I	Lecture	2	3	G/E
SS	Characterization of Micro- and Nanostructures	Tutorial	1	2	G/E
SS	Introduction to surface science I	Tutorial	2	3	G/E
SS	Practical course in radiation physics	Practical C.	2	3	G/E
SS	Practical course in atom and surface physics	Practical C.	2	3	E
SS	New developments on topics of soft materials	Seminar	2	3	G/E
SS	Seminar Physics of soft materials	Seminar	2	3	G/E
SS	Lab Course II in Physics of soft materials	Practical C.	6	9	G/E
SS	Lab course I in physics of soft materials	Practical C.	2	3	G/E
SS	Molecular biology of the cell II	Lecture	2	3	G/E
SS	Biophysics II	Lecture	2	4	G/E
SS	Practical course in biophysics	Practical C.	4	6	G/E
SS	Biophysics IV	Lecture	2	3	G/E
SS	Biospecific detection II	Lecture	2	3	G/E
SS	Biospecific detection II (WV)	Tutorial	1	2	G/E
SS	Molecular biology of the cell II	Tutorial	1	2	G/E
SS	Practical course biochemistry II	Practical C.	2	3	G/E
SS	Biological signalling II	Lecture	1	2	G/E
SS	Microscopy on biomelecules	Lecture	2	3	G/E
SS	Literature seminar biophysics	Seminar	2	3	G/E

Sem.	Title	Course	Hours	ECTS	Language
		Type	per week	Credits	
SS	Biophysical colloquium	Seminar	1	2	G/E
SS	Molecular biology I	Lecture	2	3	G/E
SS	Practical course in molecular biology I	Practical C.	2	3	G/E
SS	Advanced practical course in biophysics	Practical C.	6	9	G/E
SS	Selected issues on theoretical biophysics II	Lecture	2	3	G/E
SS	Theoretical biophysics II	Tutorial	2	3	G/E
SS	Biophysics II	Tutorial	1	2	G/E
SS	Practical Course on Microscopy	Practical C.	2	3	G/E
SS	Genetics II	Lecture	1	2	G/E
SS	Cell culture	Lecture	1	2	G/E
SS	Practical course in cell culture	Practical C.	2	3	G/E
SS	Electron microscopy	Lecture	2	3	G/E
SS	Scanning electro microscopy	Practical C.	1	2	G/E
SS	Semiconductor-Hetero-quantum-well-structures	Lecture	2	3	E
SS	Advanced practical course	Practical C.	4	6	G/E
SS	Semiconductor physics laboratory II	Practical C.	6	9	G/E
SS	Production of Micro- and Nanostructures	Lecture	2	3	E
SS	Seminar in solid state physics	Seminar	2	3	G/E
SS	Selected topics in solid state physics	Lecture	2	3	E
SS	Semiconductor devices	Lecture	2	3	E
SS	Discussion of recent projects and results in solid state and semiconductor physics	Seminar	2	3	E
SS	Practical Training in Nanotechnology II	Practical C.	6	9	G/E
SS	Introduction to Nanotechnology	Lecture	2	3	G/E
SS	Selected topics in semiconductor physics	Lecture	2	3	E
SS	Introduction to semiconductor physics	Lecture	3	5	G/E
SS	Fundamentals of semiconductor physics	Tutorial	1	2	G/E
SS	Crystal growth II	Lecture	2	3	E
SS	Solid state spectroscopy I	Lecture	2	3	E
SS	Fundamentals of physics exercises IV	Tutorial	2	3	G/E
SS	Practical course in applied physics	Practical C.	4	6	G/E
SS	Seminar on novel topics in applied physics	Seminar	2	3	G/E
SS	Applied physics tutorial for diploma students	Practical C.	2	3	G/E
SS	Modern Optics	Lecture	2	3	E
SS	Modern optics exercises	Tutorial	2	3	E
SS	Physics of Polymers	Lecture	2	3	G/E
SS	Exercises on Polymer Physics	Tutorial	1	2	G/E
SS	High temperature superconductors	Lecture	2	3	G/E
SS	Seminar on applied physics	Seminar	2	3	E
SS	Practical course in Applied Physics	Practical C.	2	3	G/E