

Course Listing and Curriculum Map for the Physics Minor

Requirements	Semester Course Number	Course Title	Semester Units	Quarter Equivalent Course Number	Quarter Credits	Notes	Relevant Learning Goals Achieved (see below)
Possible Prerequisite Courses Outside of Physics							
Introductory Math	Math 1251	Calc I	5	Math 151	5	Semester sequence has same content as quarter sequence	2
	Math 1258	Calc II	5	Math 152	5		
				Math 153	5		
Possible prerequisites, depending on courses in the Physics core below which are chosen.	Math 2249	CalcIII	3	Math 254	5	Content of current 254	2
	Math 2431	LinAlg/DiffEq	3	Math 415	4	Merges 415 and 568 (topics still under discussion)	2
				Math 568	3		
	CSE 1211	Intro to C++	2	CSE 202	4	Same content	3
Physics Courses Which Could be taken to Satisfy the Physics Minor							
Introductory	Physics 1250/1250H	Mechanics, Thermal Physics, Waves	5	Physics 131/131H	5	Semester sequence has same content as quarter sequence	1,2
	Physics 1251/1251H	E&M, Optics, Modern Physics	5	Physics 132/132H	5		
				Physics 133/133H	5		
Intermediate	Physics 2300	Dynamics of Particles and Waves I	4	Physics 261	4	Semester sequence has same content as quarter sequence	1,2,4
	Physics 2301	Dynamics of Particles and Waves II	4	Physics 262	4		
				Physics 263	4		
	Physics 2095	Introductory Seminar	1	Physics 295	1	Same Content	4
Upper Division	Physics 5400/5400H	E&M I	4	Physics 555	4	Semester course has all of 555 and some of 656	1,2,4
				Physics 656	4		
		Physics 5500/5500H	Quantum I	4	Physics 631	4	Semester course has all of 631 and some of 632
				Physics 632	4		
Physics Labs Core	Physics 3700	Methods in Experimental Physics	3	Physics 416	4	Same content	3
	Physics 4700	Intro Electronics for Physicists	3	Physics 517	4	Same content	3
	Physics 5700	Advanced Laboratory	3	Physics 616	4	Same content	3
	Physics 3455H	Honors Holography	3	Physics H455	4	Same content	3
Physics Electives:							
	Physics 3470	Optics	3	Physics 570	4	Same content	4
	Physics 5401H	E&M II	4	Physics 656	4	Semester course has some of 656 and all of 657	1,2,4
				Physics 657	4		
	Physics 5501H	Quantum II	4	Physics 632	4	Semester course has some of 632 and all of 633	1,2,4
				Physics 633	4		
	Physics 5600	Statistical Physics	4	Physics 621	4	Semester course has all of 621 and some of 622	1,2,4
				Physics 622	4		
	Physics 5300	Theoretical Mechanics	4	Physics 664	4	Enhanced content	1,2,4
	Physics 6802	Topics in Elementary Particle Physics	4	Physics 780.xx	4	Enhanced content	4
	Physics 6803	Topics in Astroparticle Physics	4	Physics 780.xx	4	Enhanced content	4

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	Physics 6804	Topics in Atomic and Molecular Physics	4	Physics 780.xx	4	Enhanced content	4
<u>Physics Electives (continued):</u>	Physics 6805	Topics in Nuclear Physics	4	Physics 780.xx	4	Enhanced content	4
	Physics 6806	Topics in Condensed Matter Physics	4	Physics 780.xx	4	Enhanced content	4
	Physics 6809	Topics in Biophysics	4	Physics 780.xx	4	Enhanced content	4
	Physics 6810	Topics in Computational Physics	4	Physics 780.xx	4	Enhanced content	4
	Physics 6820	Special Topics	4	Physics 780.xx	4	Enhanced content	4
<u>Learning Goal</u>	1	Undergraduate Physics minors are introduced to the fundamental areas of physics, from classical mechanics, through electricity and magnetism, and finally to modern physics including quantum mechanics and relativity.					
	2	Undergraduate Physics minors are exposed to powerful analytical and problem solving techniques in areas involving both physics and mathematics.					
	3	Undergraduate Physics minors are introduced to experimental physics at the intermediate level.					
	4	Undergraduate Physics minors acquire training in at least one area of physics at the intermediate level or beyond.					