

Undergraduate Modules and Assessment

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- All students are required to return 120 credits at each level.
- The year marks are the credit weighted sum of the module marks at each level.
- The degree marks are a weighted sum of the year marks.
- Module marks are the credit weighted sum of component marks within the module.

For modules with credits marked A the mark is multiplied by a weighting factor

$$1 + \frac{F.C_{adv}}{C_{ret}}$$

or

$$1 + \frac{F.C_{exc}}{C_{ret}}$$

where

- $F = 0.2$ which may be adjusted from year to year
- C_{ret} is the credit weighting returned to the University
- C_{adv} is number of advanced credits within the C_{ret}
- C_{exc} is number of credits in excess of C_{ret}

Module sections with credits marked A can be advanced.

First Year - Level 1

PA1110	15	Dynamics		
PA1120	15	Light and Matter		
PA1130	15	Electricity and Magnetism		
PA1140	15	Atoms and Quanta		
PA1600	15	Speciality Options		
		opt/16**	2.5	Option courses
		opt/19**	5	Option GRePs
PA1900	15	Laboratory Physics 1		
PA1710	15	Mathematical Physics 1		
PA1720	15	Mathematical Physics 2		
YY1000	120	Level 1		

Students can do the mathematics PA1710 and PA1720 at a fast rate which allows advancement of level 2 mathematics.

Second Year - Level 2

PA2710	15A	Level 2 Mathematics 1		
		opt/212	7.5	Relativity and Particles
		opt/213	7.5	Vectors and Applications
PA2720	15A	Level 2 Mathematics 2		
		opt/214	7.5	Waves and Fields
		opt/215	7.5	Mathematical Methods
PA2230	15	Condensed Matter		
PA2240	15	Electromagnetic Fields		
PA2600	30A	Level 2 Speciality Options		
		opt/26**	7.5	Option courses
PA2900	15	Laboratory Physics 2		
PA2930	15	Computing Electronics GReP		
		prog2	2.5	Procedural Programming
		aelec	2.5	Analogue Electronics
		prog3	2.5	Programming Assignment
		opt/29**	7.5	Option GRePs
YY2000	120	Level 2		

If students have already done options within PA2710 and/or PA2720 then they have time to advance some Level 3.

Third Year - Level 3

PA3210	15A	Quantum Mechanics		
PA3220	15A	Atoms and Nuclei		
PA3651	15A	Physics Electives 3		
PA3610	15A	Level 3 Options		
PA3620	15A	Level 3 Options		
		opt/371	7.5A	Advanced Vector Calculus
		opt/372	7.5A	Fourier Transforms
		opt/36**	7.5	Option courses
		EG3030	10	Management B
PA3830	15	Physics Challenge		
PA3900	30	Projects and Workshops		
		opt/394	7.5	Workshop and GReP
		opt/392	22.5	Pair Project
YY3000	120	Level 3		

MPhys students advance courses from Level 4.

Some of these advancements are available to BSc students if they have gained a suitable advancement at Levels 1 and 2. The marks for these are included in PA3651 and are credit weighted as described above.

Fourth Year - Level 4

PA4480	15A	Advanced Core Physics		
		opt/4313.1	7.5A	Laser and Quantum Optics
		opt/4315.1	7.5A	Thermal Physics
		opt/4313.2	7.5A	Dynamical Systems
		opt/4315.2	7.5A	Fluids
PA4630	15A	Physics Electives 4		
		opt/4324	7.5A	Plasma Physics
		opt/4326	7.5A	Interaction of Radiation with Matter
		opt/4311	7.5	Quantum Theory of Solids
		opt/4312	7.5A	Scientific inference
		opt/4317	7.5	Applied Quantum Mechanics
		opt/4319	7.5	Space Plasmas
PA4600	30A	Speciality Options 4		
		opt/46**	7.5	Option courses
		opt/494	7.5	Workshop and GReP
PA4440	20	Advanced Study Topic		
PA4970	30	Research Project		
PA4980	10	Journal of Special Topics		
YY4000	120	Level 4		

The credit totals for modules PA4480, PA4630 and PA4600 can exceed the stated quotas because they contain the advancements. The marks returned for these modules are credit weighted as described above.