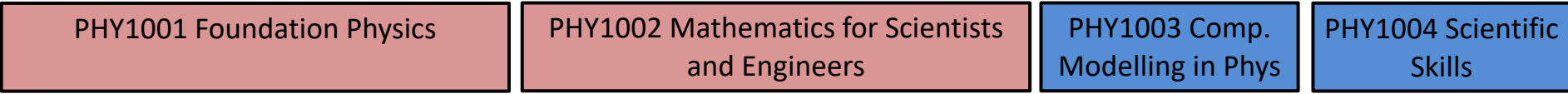


All Physics Modules 20/21

- Arrows indicate pre-requisites
- Pink fill – examined module
- Box size \propto CATS points

Level 1



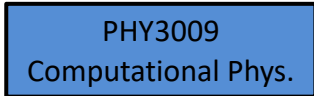
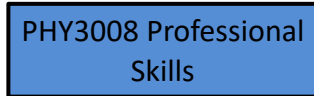
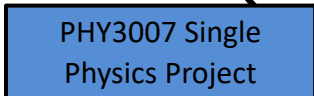
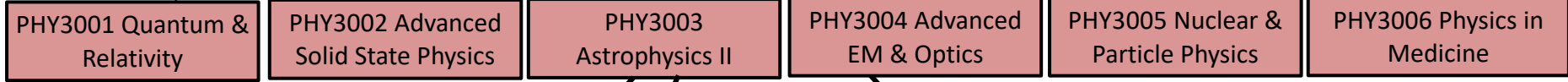
Level 2



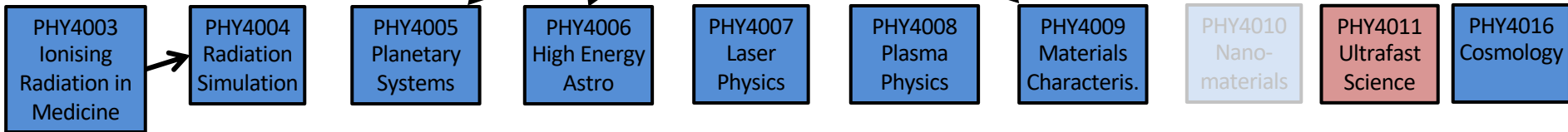
Placement /Internat. Year



Level 3



Level 4



1st Semester

Level 1

2nd Semester

PHY1001 – Foundation Physics

40 CATS

60% - 3h exam (April/May, must be passed)

10% - Class tests (1 at the end of the 1st semester)

20% - Tutorials (based on assignments submitted weekly and tutorial performance)

10% - Group Project (Middle of 2nd semester in tutorial groups culminating in oral presentation)

PHY1002 – Mathematics for Scientists and Engineers

40 CATS

60% - 3h exam (April/May, must be passed)

20% - Class tests (2 – end of 1st semester, and middle/end of 2nd semester)

20% - Tutorials (based on assignments submitted weekly and tutorial performance)

PHY1003 – Computational Modelling in Physics

20 CATS

100% - Assignments (5)

12.5%, 25%, 25% 1st semester

12.5%, 25% 2nd semester

PHY1004 – Scientific Skills

20 CATS

50% - Laboratory Performance based on write-up of 8 experiments (must be passed)

10% - Extended Laboratory report

20% - Computational problems (solved with Matlab)

10% - Oral presentation (5min each)

10% - Scientific Essay (written on a popular topic for a general audience)

Level 2

1st Semester

PHY2001 - Quantum & Statistical Physics

20 CATS

60% - 3h exam (April/May)
20% - Laboratory (2 subject specific experiments)
20% - Assignments (6)

PHY2003 – Astrophysics I

20 CATS

40% - 2h exam (Jan)
40% - Assignments (4)
20% - Laboratory (2 subject specific experiments)

PHY2006 – Mathematical Physics

20 CATS

60% - 3h exam (Jan)
20% - Assignments (8)
20% - Group Projects (2)

2nd Semester

PHY2002 – Physics of the Solid State

20 CATS

60% - 3h exam (April/May)
20% - Laboratory (2 subject specific experiments)
20% - Assignments (2)

PHY2004 – Electricity, Magnetism and Optics

20 CATS

60% - 3h exam (April/May)
20% - Laboratory (2 subject specific experiments)
20% - Assignments (3)

PHY2005 – Atomic and Nuclear Physics

20 CATS

60% - 3h exam (April/May)
20% - Laboratory (2 subject specific experiments)
20% - Assignments (4)

PHY2010 – Employability for Physics

0 CATS

Compulsory attendance at training and workshops

Placement / International Year

PHY3099 – Placement Year

120 CATS

Students must be accepted onto a year long placement scheme at a UK employer.
Course contents is as defined by the School-approved student contract and job description

Assessment on based on a portfolio or reflective account of the student's employment experiences

PHY3999 – International Placement Year

120 CATS

Students must be accepted onto a year long placement at an overseas employer or study
Physics at an overseas university (can be sponsored by, e.g. IAESTE, Erasmus)

Assessment on based on a portfolio or reflective account of the student's employment experiences or a certificate of completion of Physics courses

1st Semester

Level 3 - BSc

2nd Semester

PHY3001 - Quantum Mechanics & Relativity

20 CATS

80% - 3h exam (April/May)
20% - Assignments (3)

PHY3002 - Advanced Solid State Physics

20 CATS

80% - 3h exam (April/May)
20% - Assignments (2)

PHY3004 - Advanced Electromagnetism & Optics

20 CATS

80% - 3h exam (April/May)
20% - Assignments (4)

PHY3005 - Nuclear & Particle Physics

20 CATS

80% - 3h exam (April/May)
20% - Assignments (3)

PHY3006 - Physics in Medicine

50% - 2h exam (April/May) **20 CATS**
20% - Group Project
30% - Assignments (4)

PHY3003 – Astrophysics II

20 CATS

80% - 3h exam (April/May)
20% - Assignments (3)

PHY3008 - Professional Skills

20 CATS

50% - Oral/poster presentations 35% - Log Book
10% - Abstract 5% - Peer Review

PHY3008 - Professional Skills

20 CATS

50% - Oral/poster presentations 35% - Log Book
10% - Abstract 5% - Peer Review

PHY3010 - Physics Projects

40 CATS

5% - Risk Ass. 10% - Oral presentation, 10% - Poster presentation, 25% - Lab performance, 50% - Written report

PHY3009 – Computational Projects

20 CATS

100% - Individual Computational Projects

PHY3007 – Physics Single Project

20 CATS

Same as PHY3010 but only one project undertaken

Level 3 - MSci

1st Semester

PHY3001 - Quantum Mechanics & Relativity

20 CATS

80% - 3h exam (April/May)
20% - Assignments (3)

PHY3004 - Advanced Electromagnetism & Optics

20 CATS

80% - 3h exam (April/May)
20% - Assignments (4)

PHY3006 - Physics in Medicine

20 CATS

50% - 2h exam (April/May)
20% - Group Project
30% - Assignments (4)

PHY3008 - Professional Skills

20 CATS

50% - Oral/poster presentations 35% - Log Book
10% - Abstract 5% - Peer Review

PHY3009 – Computational Projects

20 CATS

100% - Individual Computational Projects

2nd Semester

PHY3002 - Advanced Solid State Physics

20 CATS

80% - 3h exam (April/May)
20% - Assignments (4)

PHY3005 - Nuclear & Particle Physics

20 CATS

80% - 3h exam (April/May)
20% - Assignments (3)

PHY3003 – Astrophysics II

20 CATS

80% - 3h exam (April/May)
20% - Assignments (3)

PHY3008 - Professional Skills

20 CATS

50% - Oral/poster presentations 35% - Log Book
10% - Abstract 5% - Peer Review

Level 4

1st Semester

2nd Semester

PHY4003 Ionising Radiation in Medicine – 10 CATS

30% - Online test
20% - Assignment
50% - Written Report

PHY4004 Medical Radiation Simulation– 10 CATS

40% - Assignment
60% - Written Report

PHY4001 – Physics Research Project

PHY4006 High Energy Astrophysics – 10 CATS

40% - Assignment
60% - Written Report

PHY4005 Planetary Systems – 10 CATS

40% - Assignment
60% - Written Report

60 CATS

0% - Safety/Risk-mandatory
10% - Literature review
15% - Oral Presentation
30% - Lab Performance
45% - Written report

PHY4007 Laser Physics – 10 CATS

40% - Assignment 1
60% - Assignment 2

PHY4008 Plasma Physics – 10 CATS

40% - Assignment
60% - Written Report

PHY4009 Physics of Materials Characterisation

40% - Assignment
60% - Written Report

PHY4016 Cosmology – 10 CATS

50% - Group Project Report
50% - Online test

PHY4011 Ultrafast Science – 10 CATS

30% - Assignment
70% - 2h exam (Jan)

Weeks 1-6

Weeks 7-12

L1 Assessment Timetable 20/21

		Module	Wk 1 21-Sep	Wk2 28-Sep	Wk 3 05-Oct	Wk 4 12-Oct	Wk 5 19-Oct	Wk 6 26-Oct	Wk 7 02-Nov	Wk 8 09-Nov	Wk 9 16-Nov	Wk 10 23-Nov	Wk 11 30-Nov	Wk 12 07-Dec	Wk13 14-Dec
Fitzsimmons, Jess, White, Yeung, Smartt, McQuaid	Foundational Physics	PHY1001	Induction		H(1)	H(1)	H(1)	H(1)	H(1)	H(1)	H(1)	H(1)	H(1)	H(1)	CT(10)
Keys, Mathioudakis, Field, Watson	Maths for Scientists and Engineers	PHY1002		H(1)	H(1)	H(1)	H(1)	H(1)	H(1)	H(1)	H(1)	H(1)	H(1)		CT(10)
Field, Palmer, Fitzsimmons	Computational Physics	PHY1003						A(12.5)					A(25)		
Sarri et al.	Scientific Skills	PHY1004						LR (6.25)	LR (6.25)		M(3.3)	M(3.3)	M(3.3)	M(10)	

Module	Wk14 11-Jan	Wk15 18-Jan	Wk16 25-Jan	Wk17 01-Feb	Wk18 08-Feb	Wk19 15-Feb	Wk20 22-Feb	Wk21 01-Mar	Wk22 08-Mar	Wk23 15-Mar	Wk24 22-Mar	Easter	Wk25 19-Apr	Wk26 26-Apr	Wk27 03-May	Wk28 10-May	Wk29 17-May		
PHY1001	Development Week		H(1)	H(1)	H(1)	H(1)	G(10)	H(1)	H(1)	H(1)	H(1)		H(1)		Exam (60)				
PHY1002			H(1)	H(1)	H(1)	H(1)	H(1)	H(1)	H(1)	H(1)	H(1)			CT(10)	Exam (60)				
PHY1003						A(12.5)			A(25)										
PHY1004 Group A		P (10)			LR (6.25)		LR (6.25)		LR (6.25)		LR (6.25)				FLR(10)				
Group B					LR (6.25)		LR (6.25)		LR (6.25)	Essay (10)			LR (6.25)		FLR(10)				

- H** Tutorial homework
- A** Assignment
- M** Matlab test
- LR** Lab Report
- FLR** Full Lab Report
- P** Oral Presentation
- G** Group Project
- CT** Class Test
- (10)** % of module assessment

No classes: Rag Day Wed 17 Feb

No classes: St. Patrick's day Wed 17 March

May Day Holiday Mon 3 May

WEEKLY DEADLINES

- PHY1001 Assignments Mon 10am
- PHY1002 Assignments Fri 12noon
- PHY1004 Lab Reports Thurs 10pm

Resit Exam Period 9-20 Aug

L2 Assessment Timetable 20/21

		Module	Wk 1 21-Sep	Wk 2 28-Sep	Wk 3 05-Oct	Wk 4 12-Oct	Wk 5 19-Oct	Wk 6 26-Oct	Wk 7 02-Nov	Wk 8 09-Nov	Wk 9 16-Nov	Wk 10 23-Nov	Wk 11 30-Nov	Wk 12 07-Dec	Wk 13 14-Dec
White, Kar, Sim	Quantum and Statistical Physics	PHY2001		A(3.3)		A(3.3)		A(3.3)		A(3.3)		A(3.3)		A(3.3)	
McQuaid, Gregg, Arredondo	Physics of the Solid State	PHY2002													
Schwamb, de Mooij, Keys	Astrophysics I	PHY2003			A(10)			A(10)			A(10)			A(10)	
Sarri, Huang	Electricity, Magnetism and Optics	PHY2004													
Riley, Sim	Atomic and Nuclear Physics	PHY2005													
Field, Greenwood	Mathematical Physics	PHY2006		A(2.5)	A(2.5)	A(2.5)	A(2.5)		G(10)	A(2.5)	A(2.5)	A(2.5)	A(2.5)		G(10)
Various	Laboratories - Group A		Lab Induction	LE	LS(10)	LE	LS(10)	LE	LS(10)	LE	LS(10)				
	Laboratories - Group B				LE	LS(10)	LE	LS(10)	LE	LS(10)	LE	LS(10)			

Module	Wk14 11-Jan	Wk15 18-Jan	Wk16 25-Jan	Wk17 01-Feb	Wk18 08-Feb	Wk19 15-Feb	Wk20 22-Feb	Wk21 01-Mar	Wk22 08-Mar	Wk23 15-Mar	Wk24 22-Mar	Easter	Wk25 19-Apr	Wk26 26-Apr	Wk27 03-May	Wk28 10-May	Wk29 17-May	
PHY2001												Easter				Exam (60)		
PHY2002						A(10)							A(10)			Exam (60)		
PHY2003	E(40)																	
PHY2004					A(6.7)				A(6.7)						A(6.7)		Exam (60)	
PHY2005				A(5)			A(5)		A(5)					A(5)		Exam (60)		
PHY2006	E(60)																	
Laboratories - Group A		LE	LS(10)	LS(10)	LE	LS(10)	LS(10)	LE	LS(10)	LS(10)								
Laboratories - Group B			LE	LS(10)	LS(10)	LE	LS(10)	LS(10)	LE	LS(10)	LS(10)							
Laboratories - Group C				LE	LS(10)	LS(10)	LE	LS(10)	LS(10)	LE	LS(10)		LS(10)					

- A** Assignment
- LE** Lab Experiment
- LS** Lab submission - Report/Pres.
- G** Group Project
- E** 1st semester exam
- (10)** % of module assessment
- Lab Submission Deadlines (LS)**
- Lab Reports 4pm Fri
- Lab Presentation 4pm Thurs

No classes: Rag Day Wed 17 Feb

No classes: St. Patrick's day Wed 17 March

May Day Holiday Mon 3 May

No classes: Reading day ?? March

Resit Exam Period 9-20 Aug

L3 Assessment Timetable 20/21

- A** Assignment
- CP** Computer Project
- G** Group Project
- P** Presentation
- L** Logbook
- (10)** % of module assessment

		Module	Wk 1 21-Sep	Wk 2 28-Sep	Wk 3 05-Oct	Wk 4 12-Oct	Wk 5 19-Oct	Wk 6 26-Oct	Wk 7 02-Nov	Wk 8 09-Nov	Wk 9 16-Nov	Wk 10 23-Nov	Wk 11 30-Nov	Wk 12 07-Dec	Wk 13 14-Dec
Williams, Sarri	Quantum Mechanics and Relativity	PHY3001				A(6.7)				A(6.7)					A(6.7)
Bowman, Felton, Gregg	Advanced Solid State Physics	PHY3002													
Fitzsimmons, Mathioudakis, Keys	Astrophysics II	PHY3003													
Greenwood, Yeung	Advanced Electromagnetism and	PHY3004			A(5)			A(5)			A(5)			A(5)	
Riley, Sim	Nuclear and Particle Physics	PHY3005													
Kar, Borghesi	Physics in Medicine	PHY3006			A(7.5)		A(7.5)			A(7.5)		A(7.5)			G(20)
Jess, Dromey	Professional Skills	PHY3008				L(7)	P(15)	L(7)	L(7)	L(7)	L(7)		P(50)		
Field, de Mooij	Computational Projects	PHY3009			A(4)	A(3)					CP(60)				
Felton et al.	Physics Projects	PHY3007 PHY3010		Safety (5)					Talk (10)					Poster (10)	

Module	Wk14 11-Jan	Wk15 18-Jan	Wk16 25-Jan	Wk17 01-Feb	Wk18 08-Feb	Wk19 15-Feb	Wk20 22-Feb	Wk21 01-Mar	Wk22 08-Mar	Wk23 15-Mar	Wk24 22-Mar	Easter	Wk25 19-Apr	Wk26 26-Apr	Wk27 03-May	Wk28 10-May	Wk29 17-May
PHY3001																Exam (80)	
PHY3002							A(10)						A(10)			Exam (80)	
PHY3003				A(6.7)				A(6.7)						A(6.7)		Exam (80)	
PHY3004	Dev															Exam (80)	
PHY3005	Week				A(6.7)				A(6.7)					A(6.7)		Exam (80)	
PHY3006																Exam (50)	
PHY3008					L(7)	P(15)	L(7)	L(7)	L(7)	L(7)	P(50)						
PHY3009	CP(33)																
PHY3007 PHY3010		Report (50)	Safety (5)				Talk (10)				Poster (10)		Report (50)				

No classes: Rag Day Wed 17 Feb

No classes: St. Patrick's day Wed 17 March

May Day Holiday Mon 3 May

No classes: Reading day ?? March

Graduation 1-7 July

Resit Exam Period 9-20 Aug

