

# Second Year Physics 21/22

## Modules & Assessment

### Trimester 1 (20 credit short fat modules)

#### **Electromagnetism**

Assignment: 50% - due T1 week 10, Wed 01 Dec 2021

Exam, 2 hours: 50% - Jan Exams Period

#### **Thermal Physics**

Assignment: 50% - due T1 week 10, Fri 03 Dec 2021

Exam, 2 hours: 50% - Jan Exams Period

#### **Physics Laboratory 2**

Experimental Journal: 50% - due T1 week 12, Wed 15 Dec 2021

Computing Journal: 50% - due T1 week 12, Fri 17 Dec 2021

### Trimester 2 (20 credit short fat modules)

#### **Group Project †**

CAD and interfacing design exercises: 30% - due T2 week 07, Fri 18 March 2022

Group Project Report and Presentation: 70% - due T2 week 11, Fri 06 May 2022

#### **Waves & Optics**

Assignment: 50%- due T2 week 10, Wed 27 Apr 2022

Exam, 2 hours: 50% - May Exams Period

#### **Quantum Physics**

Assignment: 50% - due T2 week 10, Fri 29 Apr 2022

Exam, 2 hours: 50% - May Exams Period

#### **† Option modules**

#### **Principles of Acoustics**

Matlab-based Assignment: 50% - due T2 week 13, Wed 18 May 2022

Exam, 2 hours: 50% - May Exams Period

#### **Educational Principles and Practice in STEM**

Observation of Taught Activity: 50%- due T2 week 06, Fri 11 Mar 2022

Self-reflective Assessment, 2500 words: 50% - due T2 week 12, Fri 13 May 2022

#### **Language Option**

Physical constants		
Avogadro constant	$N_A$	$6.023 \times 10^{23} \text{ mol}^{-1}$
Boltzmann constant	$k = \frac{R}{N_A}$	$1.38 \times 10^{-23} \text{ J K}^{-1}$
Permeability of free space	$\mu_0$	$4\pi \times 10^{-7} \text{ N A}^{-2} \text{ (or H m}^{-1}\text{)}$
Electric force constant	$k = \frac{1}{4\pi\epsilon_0}$	$8.98 \times 10^9 \text{ N m}^2 \text{ C}^{-2}$ $(= 9 \times 10^9 \text{ N m}^2 \text{ C}^{-2})$
Mass of electron	$m_e$	$9.11 \times 10^{-31} \text{ kg} = 0.00055 \text{ u}$
Mass of alpha particle	$m_\alpha$	$6.646 \times 10^{-27} \text{ kg} = 4.0015 \text{ u}$
Gas constant	$R$	$8.3 \text{ J mol}^{-1} \text{ K}^{-1}$
Gravitational constant	$G$	$6.67 \times 10^{-11} \text{ N m}^2 \text{ kg}^{-2}$
Planck constant	$h$	$6.63 \times 10^{-34} \text{ J s}$
Speed of light	$c$	$3.00 \times 10^8 \text{ m s}^{-1}$

## Academic Year by Week 2021/2022

week begins  
(Monday)

trimesters

timetable  
wk no

pool rooms bookable  
for teaching and revision

Note that other assessment deadlines  
may appear in non-exam weeks

13 September 2021	<i>International/Early Arrivals Welcome 2021/22</i>					
20 September 2021	<i>Welcome/Induction</i>				0	
27 September 2021	<b>Trimester 1</b>	1	1	✓		
4 October 2021	<b>Trimester 1</b>	2	2	✓		
11 October 2021	<b>Trimester 1</b>	3	3	✓		
18 October 2021	<b>Trimester 1</b>	4	4	✓		
25 October 2021	<b>Trimester 1</b>	5	5	✓		
1 November 2021	<b>Trimester 1</b>	6	6	✓		
8 November 2021	<b>Trimester 1</b>	7	7	✓		
15 November 2021	<b>Trimester 1</b>	8	8	✓		<b>MAIN ASSESSMENTS</b>
22 November 2021	<b>Trimester 1</b>	9	9	✓		
29 November 2021	<b>Trimester 1</b>	10	10	✓		Electromagnetism + Thermal
6 December 2021	<b>Trimester 1</b>	11	11	✓		
13 December 2021	<b>Trimester 1</b>	12	12	✓		Laboratory (both journals)
20 December 2021	<i>Christmas Vacation</i>				13	
27 December 2021	<i>Christmas Vacation</i>				14	
3 January 2022	<i>Christmas Vacation</i>				15	
10 January 2022	<b>Trimester 1</b>	13	16	✓	EXAMS	EM + Thermal Exams
17 January 2022	<b>Trimester 1</b>	14	17	✓	EXAMS	
24 January 2022	<i>Inter-trimester break</i>				18	
31 January 2022	<b>Trimester 2</b>	1	19	✓		
7 February 2022	<b>Trimester 2</b>	2	20	✓		
14 February 2022	<b>Trimester 2</b>	3	21	✓		
21 February 2022	<b>Trimester 2</b>	4	22	✓		
28 February 2022	<b>Trimester 2</b>	5	23	✓		
7 March 2022	<b>Trimester 2</b>	6	24	✓		
14 March 2022	<b>Trimester 2</b>	7	25	✓		Group Project (CAD/Interfacing)
21 March 2022	<b>Trimester 2</b>	8	26	✓		
28 March 2022	<b>Trimester 2</b>	9	27	✓		
4 April 2022	<i>Easter Vacation</i>				28	
11 April 2022	<i>Easter Vacation</i>				29	(Bank Holiday Friday)
18 April 2022	<i>Easter Vacation</i>				30	(Bank Holiday Monday)
25 April 2022	<b>Trimester 2</b>	10	31	✓		Waves&Optics + Quantum Phys
2 May 2022	<b>Trimester 2</b>	11	32	✓	(Bank Holiday Monday)	Group Project (Report, Pres.)
9 May 2022	<b>Trimester 2</b>	12	33	✓		
16 May 2022	<b>Trimester 2</b>	13	34	✓	EXAMS	W&O + Quantum Exams
23 May 2022	<b>Trimester 2</b>	14	35	✓	EXAMS	
30 May 2022	<i>inter-trimester break</i>				36	(Bank Holiday Monday)
6 June 2022	<b>Trimester 3</b>	1	37	✓		
13 June 2022	<b>Trimester 3</b>	2	38	✓		
20 June 2022	<b>Trimester 3</b>	3	39	✓		
27 June 2022	<b>Trimester 3</b>	4	40	✓		
4 July 2022	<b>Trimester 3</b>	5	41	✓		
11 July 2022	<b>Trimester 3</b>	6	42	✓		
18 July 2022	<b>Trimester 3</b>	7	43	✓		Graduation Celebrations
25 July 2022	<b>Trimester 3</b>	8	44	✓		
1 August 2022	<b>Trimester 3</b>	9	45	✓		
8 August 2022	<b>Trimester 3</b>	10	46	✓		
15 August 2022	<b>Trimester 3</b>	11	47	✓		
22 August 2022	<b>Trimester 3</b>	12	48	✓		
29 August 2022	<b>Trimester 3</b>	13	49	✓	(Bank Holiday Monday)	
5 September 2022	<b>Trimester 3</b>	14	50			
12 September 2022	<i>International/Early Arrivals Welcome 2022/23</i>					
19 September 2022	<i>Welcome/Induction</i>					

All events are subject to change

\*While resit exams may be scheduled during any week in a designated examination period, exams other than resits should not be scheduled during week 48

All teaching, revision and assessment shall take place within modules during the designated trimester periods. (Academic Regulations for Taught Programmes)