

We build yourfuture!

Course Name	Physics
Standard	Edexcel O-level
Semester:	2021

INSTRUCTOR INFORMA	TION
1. Instructor Name:	Adnan Ali
2. Course description	Core requisite for many disciplines
3. Class Timing:	
4. Instructor Phone:	
5. Email Address:	adnan_s_ali@outlook.com
6. Department:	Physics

LEARNING RESOURCES AND TEXTBOOK(S)

Text Book(s)

Author	Title	Edition & Year	Publisher	ISBN
Arnold,	Edexcel IGCSE (9-1)		Pearson	9780435185275
Johnson,	Physics Student Book			
Woolley				

REFERENCE BOOK

7. Links:

Stephen Popple	Complete Physics	Oxford	978-0199147342

CLASS ROOM RULES OF CONDUCT

- 1. Cellular phones should be "turned off'/"Silent mode" during the class.
- 2. Student should be **punctual** in attending classes.

EXAMS, QUIZ, & MAKE UP POLICY

There will be several quizzes on the core text materials which are worth 15%. Quiz may not be made up for any reason. There will be three exams. Each exam carries 10-15% weight of the course works. All exams will be given over the designated class period. Exams will be a combination of true/false, multiple choice, and short answer questions related to assigned reading material. The exams must be taken at the scheduled times. Exams may not be made up unless arrangements are made prior to the class period for which they are scheduled. Additional guidelines are available from the Instructor's website and student compliance to these guidelines is mandatory.

Cell phones are prohibited in exam sessions.

Attendance Policy

Attendance in the class is compulsory for the students and is strongly recommended. No make-up/retake examination/ assignment will be allowed. Any missed presentations/ examinations /assignments will be considered as zero.

NOTE 1: The course plan is tentative and subject to change as the semester progresses; any change(s) will be communicated accordingly.

NOTE 2: Additional information will be posted on Google Classroom page.

Course Contents & Schedule

CLASS SCHEDULE FOR O-Level Physics (Edexcel)

The following is a **TENTATIVE** schedule based on the semester's last published academic calendar, which may change as the semester progresses. Please read the material prior to attending the class where it will be discussed

Note: The instructor reserves the right to make changes to the syllabus if necessary.

Class#	Topic	Subtopic	Resources
1	1. Force and	a. Units	
	Motion		
2		b. Movement and Position	Text Book: Unit 1 Pg. 3
3		c. Forces, Movement, Shape and	Text Book: Unit 1 Pg. 18
		Momentum	
4		Question Papers	
5		Class Test	
6	2. Electricity	a. Units	
7		b. Mains Electricity	Text Book: Unit 2 Pg. 59
8		c. Energy and Voltage	Text Book: Unit 2 Pg. 59
9		d. Electric Charge	Text Book: Unit 2 Pg. 59
10		Question Papers	
11		Class Test	
12	3. Waves	a. Units	

13		b. Properties of Waves	Text Book: Unit 3 Pg. 97
14		c. Electromagnetic Spectrum	Text Book: Unit 3 Pg. 97
15		d. Light and Sound	
16		Question Papers	
17		Class Test	
18	4. Energy	a. Units	
19		b. Energy Transfer	Text Book: Unit 4 Pg. 133
20		c. Work and Power	Text Book: Unit 4 Pg. 133
21		d. Energy sources and Electricity Generation	Text Book: Unit 4 Pg. 133
22		Question Papers	
23		Mid-Term	
24	5. Solids, Liquids and Gases	a. Units	Text Book: Unit 5 Pg. 133
25		b. Density and Pressure	Text Book: Unit 5 Pg. 133
26		c. Change of State	Text Book: Unit 5 Pg. 133
27		d. Ideal Gas Molecules	
28		Question Papers	
29		Class Test	
30	6. Magnetism and Electromagnetism	a. Units	Text Book: Unit 6 Pg. 197
31		b. Magnetism	Text Book: Unit 6 Pg. 197
32		c. Electromagnetism	Text Book: Unit 6 Pg. 197
33		d. Electromagnetic Induction	Text Book: Unit 6 Pg. 197
34		Question Papers	
35		Class Test	
36	7. Radioactivity and Particles	a. Units	Text Book: Unit 7 Pg. 221
37		b. Radioactivity	Text Book: Unit 7 Pg. 221
38		c. Fission and Fusion	Text Book: Unit 7 Pg. 221
39		Question Papers	
40		Class Test	
41	8. Astrophysics	a. Units	Text Book: Unit 8 Pg. 259
42		b. Motion in the Universe	Text Book: Unit 8 Pg. 259
43		c. Stellar Evolution	Text Book: Unit 8 Pg. 259
44		d. Cosmology	Text Book: Unit 8 Pg. 259
45		Question Papers	
46		Class Test	
47		Revision	
48		Final Exam	

Additional Time (Optional):

1 month for Question Papers

1 month for Revision and Mock Exams



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Course Name	Physics	
Standard	Cambridge O-level	
Semester:	2021	

INSTRUCTOR INFORMATION

1. Instructor Name:	Adnan Ali	
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Course Contents & Schedule

CLASS SCHEDULE FOR O-Level Physics (Cambridge)

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11		9. Heat Transfer	Text Book: Topic 5 Pg.98
12		10. Temperature	Text Book: Topic 5 Pg.98
13		11. Thermal Properties	Text Book: Topic 5 Pg.98
14		12. Kinetic Theory of Matter	Text Book: Topic 5 Pg.98
15		Question Paper	
16		Class Test	
17	Section 4: Waves	13. Waves	Text Book: Topic 7 Pg.139
18		14. Light	Text Book: Topic 7 Pg.139
19		15. Electromagnetic Spectrum	Text Book: Topic 7 Pg.139
20		16. Sound	Text Book: Topic 6 Pg.123
21		Question Paper	
22		Mid-Trem	
23	Section 5: Electricity and Magnetism	17. Static Electricity	Text Book: Topic 8 Pg.169
24		18. Current Electricity	Text Book: Topic 8 Pg.169
25		19. D.C. Circuits	Text Book: Topic 8 Pg.169
26		20. Practical Electricity	Text Book: Topic 8 Pg.169
27		21. Magnetism	Text Book: Topic 9 Pg.202
28		22. Electromagnetism	Text Book: Topic 9 Pg.202
29		23. Electromagnetic Induction	Text Book: Topic 9 Pg.202
30		24. Electronics	Text Book: Topic 10 Pg.230
31		25. Electronic Systems	Text Book: Topic 10 Pg.230
32		Question Paper	
33		Class Test	
34	Section 6: Atomic Physics	26. Radioactivity	Text Book: Topic 11 Pg.250
35		27. The Nuclear Atom	Text Book: Topic 11 Pg.250
36		Question Paper	
37		Class Test	
38	6.2 Alternative to Practical	Measurement	Text Book: Topic 13 Pg.283
39		Significant Figures. Uncertainty.	Text Book: Topic 13 Pg.283
40		Lab 1: Mechanics	Text Book: Topic 13 Pg.283
41		Lab 2: Materials	Text Book: Topic 13 Pg.283
42		Lab 3: Electricity	Text Book: Topic 13 Pg.283
43		Lab 4: Heat	Text Book: Topic 13 Pg.283
44		Lab 5: Optics	Text Book: Topic 13 Pg.283
45		Lab: Question Papers	
46		Lab: Question Papers	
47		Lab: Question Papers	
48		Final Exam	

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