

CURRICULUM SUMMARY – September to October 2010

SUBJECT: IGCSE Physics

YEAR GROUP: Year 10/11

TEACHER: : Stan Kwiecinski

Week	Learning objectives	Activities (in brief)
1	General Physics: Basic Quantities and Units, Measurements, Scientific prefixes	Cambridge Student's book pp.8-10 Homework #1 Demonstrations and estimations of sizes, mass and volumes of simple models
2	Mechanics: Kinematics – uniform motion	Cambridge Student's book pp.11-12 Homework #2 motion of a simple analysis toys
3	Mechanics: Kinematics – uniformly accelerated motion	Cambridge Student's book pp.13 -16 Homework #3 Lab #1 Motion of an air bubble in a tube Topic test # 1 (45 minutes)
4	Mechanics: Mass and Weight	Cambridge Student's book pp.17 -19 Homework #4 European Researchers Night – university trip
5	Mechanics: Density	Cambridge Student's book pp.20 -23, Homework #5 Lab #2 Density of irregular objects
6	Mechanics: Forces - Newton's Law Of Motion	Cambridge Student's book pp.24 -26 Homework #6 Topic test # 2 (45 minutes)
7	Mechanics: Forces – Centripetal Force Hooke's law	Cambridge Student's book pp.27 -30 Homework #7 Lab #3 Investigation of strings

SUBJECT: IB Physics SL/HL

YEAR GROUP: IB1

TEACHER: : Stan Kwiecinski

Week	Learning objectives	Activities (in brief)
1	Topic 1: Physics and physical measurement: Basic Quantities and Units, Measurement and Uncertainties	Students' book pp 1-9 Homework #1 Demonstrations, Estimations of sizes, masses, volumes of simple models,
2	Topic 1: Physics and physical measurement Introduction to basic lab techniques Vectors and Scalars	Students' book pp 10 – 14 Homework #2 using Vernier caliper and data logging instruments
3	Topic 2: Mechanics: Kinematics – uniform motion	Students' book pp 15 – 16 Homework #3 Lab #1
4	Topic 2: Mechanics Kinematics – uniformly accelerated motion	Students' book pp 17 – 24 Homework #4 Topic test # 1 (45 minutes) European Researchers Night – university trip
5	Topic 2: Mechanics: Forces and Dynamics (Newton's Law of Motion)	Students' book pp 25 – 28 Homework #5 Lab #2
6	Topic 2: Mechanics: Forces and Dynamics (Momentum)	Students' book pp 29 – 32 Homework #6 Topic test # 2 (45 minutes)
7	Topic 2: Mechanics Work, Energy, Power	Students' book pp 33 – 39 Homework #7 Lab #3 Topic test # 2 (45 minutes)

SUBJECT: IB Physics SL/HL

YEAR GROUP: IB2

TEACHER: : Stan Kwiecinski

Week	Learning objectives	Activities (in brief)
1	Topic 5: Electric currents Electric current and resistance (part 1)	Student's book pp 103-109 Identifying basic electric components
2	Topic 5: Electric current and resistance (part 2)	Lab #10 Ohm's Law
3	Topic 5: Electric potential difference	Student's book pp 110-118
4	Topic 5: Electric circuits	Student's book pp 119-126 Lab #11 Internal Resistance of a Battery Test 1 on Electricity (Topic 5)

		European Researchers Night – university trip
5	Topic 6 Field and forces Gravitational force and Field	Student's book pp 127 – 131 Exploring the space – film
6	Topic 6 Field and forces Electric force and field	Student's book pp 132 - 136 Designing ionic motor
7	Topic 6 Field and forces Magnetic Force and field	Student's book pp 137 - 143 Lab #12 Investigating Electric and magnetic field properties Test 2 on Field and Forces (Topic 6)