#### IAL intensive courses

Features of this course:

- Notes, textbooks and past papers will be provided
- Unlike traditional tutorial centers, this course will be fast and precise targeting students who want to get high grades for their IAL exams
- Video recording will be provided after lesson for students who cannot attend or students who want to view the lesson again
- Finish IAL biology, chemistry and maths within 20 hours or at your own pace!
- Every lesson, there is 30 minutes allocated to practicing relevant past paper questions. Answering techniques will be taught and common questions will be noted.

#### About the tutor:

- Awarded 4A\* in IAL Biology, Chemistry, Maths and Further Maths
- Currently studying at HKU MBBS
- **95th percentile** in UKCAT, offers from University of Bristol medicine and more
- Taught over 40 IGCSE and IAL students with all students scoring A or A\*
- Worked for Britannia and tutor 30 students there during the summer

#### Follow my Instagram:

https://instagram.com/gce\_ial\_igcse\_hk.tutor?igshid=YmMyMTA2M2Y=
Follow my Facebook page:

https://www.facebook.com/IAL.IGCSE.tutor?mibextid=LQQJ4d

Follow my YouTube channel:

https://youtube.com/@IALandIGCSEintensivecourse

Join this group for free (for more information on university offers from HK/UK, can dm privately for others esp AU/US)

https://chat.whatsapp.com/K6CqAKIz8NKCQpm6K3flJl

#### **IAL Maths:**

required to complete 6 modules, with 4 compulsory modules - P1, P2, P3, P4 and 2 modules that can be chosen freely from S1, M1, S2, M2, S3, M3, D1 Link to specification:

https://qualifications.pearson.com/content/dam/pdf/International%20Advanced%20Level/Mathematics/2018/Specification-and-Sample-Assessment/International-A-Level-Maths-Spec-Issue3.pdf

#### IAS maths

P1 module (video, 2 hours per lesson)

Lesson	Topics covered	Topics (of the student book as reference)
Lesson 1 (Conducted)	Algebra expressions, Quadratics, Equations and Inequalities	Correspond to Ch.1, Ch.2, Ch.3 of P1 student book and specification
Lesson 2 (Conducted)	Graphs and transformations, Straight line graphs, Trigonometric ratios	Correspond to Ch.4, Ch.5, Ch.6 of P1 student book and specification
Lesson 3 (Conducted)	Radians, Differentiation, Integration	Correspond to Ch.7, Ch.8, Ch.9 of P1 student book and specification

### P2 module (zoom, 2 hours per lesson)

Lesson	Topics covered	Topics (of the student book as reference)
Lesson 1 (Conducted)	Proof, Algebra and functions, Coordinate geometry in x, y plane	Correspond to Ch.1, Ch.2, Ch.3, Ch.4 of P2 student book and specification
Lesson 2 (Conducted)	Sequence and series, Exponential and logarithms	Correspond to Ch.4, Ch.5 of P2 student

		book and specification
Lesson 3 (Conducted)	Trigonometry, Differentiation and Integration	Correspond to Ch.6-Ch.8 of P2 student book and specification

## S1 module (**zoom**, 2 hours per lesson)

Lesson	Topics covered	Topics (of the student book as reference)
Lesson 1	Mathematics models in probability and statistics, representation and summary of data	Correspond to Ch.1, Ch.2, Ch.3 of S1 student book
Lesson 2	Probability, correlation and regression, discrete random variable, normal distribution	Correspond to Ch.4, Ch.5, Ch.6, Ch.7 of S1 student book

## IA2 maths

M1 module (**zoom**, 2 hours per lesson)

Lesson	Topics covered	Topics (of the student book as reference)
Lesson 1	Mathematics model in mechanics, Vectors in mechanics, Kinematics (straight line),	Correspond to Ch.1, Ch.2, Ch.3 of M1 student book and specification
Lesson 2	Dynamics, Statics, Moments	Correspond to Ch.4, Ch.5, Ch.6 of M1 student book and specification

P3 module: (**zoom**, **2 hour** per lesson)

Lesson	Topics covered	Topics (of the

		student book as reference)
Lesson 1	Algebra, Function and graphs, Trigonometry	Correspond to Ch.1, Ch.2, Ch.3, Ch.4 of P3 student book
Lesson 2	Exponential and logarithms, Differentiation	Correspond to Ch.4, Ch.5, Ch.6 of P3 student book
Lesson 3	Integration, Numerical methods	Correspond to Ch.7, Ch.8 of P3 student book

P4 module: (**zoom**, 2 hour per session)

Lesson	Topics covered	Topics (of the student book as reference)
Lesson 1	Proof, Partial fractions, Coordinate geometry, Binomial expansion	Correspond to Ch.1, Ch.2, Ch.3, Ch.4 of P4 student book
Lesson 2	Differentiation, Integration, Vectors	Correspond to Ch.5, Ch.6. Ch.7 of P4 student book

### IAL further maths

To qualify for further math, you have to do 6 additional modules (excluding your modules in maths). You must do FP1, FP2 and you can choose 4 from S2, M2, M3, S3, D1

#### FP1 module:

Lesson	Topics covered	Topics (of the student book as reference)
Lesson 1	Complex numbers, roots of quadratic equations,	Correspond to Ch.1,

	numerical solutions of equations	Ch.2, Ch.3 of FP1 student book
Lesson 2	Coordinate system, matrices, transformations using matrices	Correspond to Ch.4, Ch.5, Ch.6 of FP1 student book
Lesson 3	Series, Proof	Correspond to Ch.7, Ch.8 of FP1 student book

### S2 module (zoom, 2 hours per lesson)

Lesson	Topics covered	Topics (of the student book as reference)
Lesson 1	Binomial and Poisson distribution, approximations	Correspond to Ch.1, Ch.2, Ch.3 of S2 student book
Lesson 2	Continuous random variable, continuous uniform distribution, Sampling and sampling distributions,	Correspond to Ch.4, Ch.5, Ch.6 of S2 student book
Lesson 3	Hypothesis testing	Correspond to Ch.7 of S2 student book

# IAL biology:

IAL biology is divided into 2 components: IAS (consists of unit 1, unit 2, unit 3), IA2 (consists of unit 4, unit 5, unit 6)

## IAS biology

Unit 1 consists of 1A, 1B, 1C, 2A, 2B, 2C

Unit 2 consists of 3A, 3B, 3C, 4A, 4B, 4C

# Unit 1: (**zoom**, 2 hours per lesson)

Lesson	Topics covered
Lesson 1 (Conducted)	1A: Chemistry for biologist
Lesson 2 (Conducted)	1B: Mammalian transport system
Lesson 3 (Conducted)	1C: Cardiovascular Health and risk and 2A: Membranes and transport
Lesson 4 (Conducted)	2B: Protein and DNA and 2C: Gene expression and genetics

# Unit 2: (**zoom**, 2 hours per lesson)

Lesson	Topics covered
Lesson 1 (Conducted)	3A: Cell structure
Lesson 2 (Conducted)	3B: Mitosis, Meiosis and reproduction
Lesson 3 (Conducted)	3C: Development of organisms and 4A: Plant structure and function
Lesson 4 (Conducted)	4B: Classification and 4C: Biodiversity and Conservation

# Unit 3: (<u>video</u> lesson)

Lesson	Topics covered
Lesson 1	Core practical walkthrough + past papers (covered in unit 2 lesson 3)

## IA2 biology

Unit 4 consists of 5A, 5B, 5C, 6A, 6B, 6C (note: video lessons will be provided for unit 4)

Unit 5 consists of 7A, 7B, 7C, 8A, 8B, 8C

### Unit 4 (video lesson): (2 hours per lesson)

Lesson	Topics covered
Lesson 1	5A: Photosynthesis
Lesson 2	5B: Ecology
Lesson 3	5C: Environment and climate change
Lesson 4	6A: Microbiology
Lesson 5	6B: Immunity
Lesson 6	6C: Decomposition and forensics

#### Unit 5 (video lesson): (2 hours per lesson)

Lesson	Topics covered
Lesson 1	7A: Respiration
Lesson 2	7B: Muscles, Movement and the Heart and 7C: Control of the internal environment
Lesson 3	8A: Nervous system and neurons
Lesson 4	8B: Coordinating in animal and plants and 8C: Gene technology

#### Unit 6

Lesson	Topics covered
Lesson 1 (Video lesson: 1.5 hours)	Statistics + tips on how to tackle unit 6

# IAL chemistry:

IAL chemistry is divided into 2 components: IAS (paper 1,2,3) and IA2 (paper 4,5,6)

# IAS Chemistry

## Unit 1 (2 hours per lesson):

Lesson	Topics covered
Lesson 1 (Conducted)	Topic 1: Formulae, Equations and amounts of substances
Lesson 2 (Conducted)	Topic 2: Atomic structure and Periodic table
Lesson 3 (Conducted)	Topic 3: Bonding and structure
Lesson 4 (Conducted)	Topic 4: Introduction of organic chemistry, Alkanes Topic 5: Alkenes

### Unit 2 zoom mode (2 hours per lesson):

Lesson	Topics covered
Lesson 1 (Conducted)	Topic 6: Energetics Topic 7: Intermolecular force
Lesson 2 (Conducted)	Topic 8: Redox chemistry, Group 1,2,7
Lesson 3 (Conducted)	Topic 9: Introduction to kinetics and equilibria
Lesson 4 (Conducted)	Topics 10: Organic Chemistry: Halogenoalkanes, Alcohols and Spectra

# IA2 Chemistry

## Unit 4 **zoom** mode (2 hours per lesson)

Lesson	Topics covered
Lesson 1	Topic 11: Kinetics
Lesson 2	Topic 12: Entropy, lattice energy

Lesson 3	Topic 13: Chemical equilibria
Lesson 4	Topic 14: Acid base equilibria
Lesson 5	Topic 15: Chirality, Carbonyl compounds, Spectroscopy and chromatography
Lesson 6	Topic 15: Carboxylic acid and acid derivatives

# Unit 5 video mode (2 hours per lesson)

Lesson	Topics covered
Lesson 1	Topic 16: Redox reactions and titrations (video)
Lesson 2	Topic 16: Redox reactions and titrations Topic 17: Transition metals and their chemistry
Lesson 3	Topic 18: Arenes - Benzenes Topic 19: Organic nitrogen compounds Topic 20: Organic synthesis