

Shahid Lakha (contact details removed)

EXPERIENCE

Private Tutor

London, UK
09/11 – Present

- **Total experience to date:** I estimate I have delivered around 7000 hours of 1:1 tutorials to students since 2011. I have been a full time tutor between 2012-2017, and part time after this. I have taught Mathematics and Physics extensively, in addition to select topics within Chemistry and Engineering. This has been done at all levels from Secondary school through to postgraduate level.
- **Schools Experience:** I have worked in Independent schools on two occasions, the first was in 2016 for a month at a Performing Arts school covering for a Physics teacher who had taken leave. Between 10/19-06-20, I taught at a British International in Spain, working completely online, being responsible for the sole teaching of the A Level Physics course for years 12 and 13, which involved 10 hours of teaching per week. I covered the entire syllabus, practical/experimental work, exam preparation and providing predicted grades. I took the extra step of assigning mock papers, marking them, and then storing them on the cloud for use in assigning predicted grades.
- **Current work:** The majority of my students have been obtained through independent sources, however I work with tuition agencies based in London and internationally. I have been conducting all of my lessons online since 2017, but I still travel for residential work. I am well equipped for online tuition, I have a high speed internet connection, and other hardware/software to make the experience equal to if not better than tuition in person.
- **What I teach:** I have taught students taking GCSE/IGCSE, A Level, AP, Pre-U and IB exams. I have also taught some from unconventional courses, such as BTECs, foundation year and degree level students. During my time as a tutor, I have covered all of the major exam boards for A Levels including AQA and OCR A & B, Edexcel and WJEC/EDUQAS. I can tutor for any exam board and any syllabus. I also assist with UCAS applications, personal statements, entrance exams and any other challenges that a student might enter for e.g. PAT, ENGAA or Mathematics challenges.
- My teaching history includes tutoring students who have moved between education systems. I am aware of the differences between the various standards and I plan to help students adapt by filling in missing knowledge. I have worked with international students both in University and in school, providing lessons and guidance to them, in addition to helping them catch up to their peers.
- Many of my previous students have been those with serious problems, such as poor Maths skills, often having left school without qualifications. Others have been re-sitting multiple examinations. I have provided last minute help to students who are weeks away from their exam.
- **Case Study:** A student who was sitting for her IB Physics exams came to me two weeks before her exams. I provided intensive tuition to her, totaling 22 hours in 13 days. The time was spent making up for serious deficiencies in her lack of knowledge and working through exam papers to perfect her technique. She achieved a 5 and was accepted to LSE for Business Management.
- **Case Study:** A student sitting for her AS Maths and Physics exams began her lessons at the start of the Easter break. Her latest mock examinations showed a C in Maths and a D in Physics. After tutoring, she achieved an A in Maths and a B in Physics. She has gone on to read Mechanical Engineering at Newcastle.
- **Case Study:** An Engineering student in their foundation year was struggling with their course, having achieved a C in GCSE Maths and left Secondary school with no further GCSEs in Science. After working with them over the course of the year, they went to finish with a 90% average, move to a better University, and ended up graduating with a 1st in their BEng, and a Merit for their MSc.
- Previous successes: Past students have gone on to a variety of Universities including Oxford, Cambridge, Imperial, UCL, Kings, City, Bristol, Bath, Durham, Leicester, Leeds, Newcastle, Surrey and Manchester. International students have gone on to Boston, Colombia, New York, Michigan and others.

EDUCATION

Univeristy of Manchester

Manchester, UK

MSc Photon Science

2012

- Masters level courses include Lasers and Photonics (theoretical), Laser Technology (applied), Holography and Imaging, Semiconductor Lasers and Quantum Structures, Laser Photomedicine (Biophotonics) and Optoelectronics Laboratory. Dissertation entitled Advances in Bio-Analytical Laser Ionisation Mass Spectrometry (experimental).
- The goal of the project was the detection of biological molecules in samples using Laser Post-Ionisation Sputtered Neutral Mass Spectrometry. I established the optimal experimental conditions concerning the irradiation of the elemental samples and the ionic signal. I went on to detect two drugs, Paracetamol on a silicon wafer and Boron Phenylalanine present in a human brain tissue sample. I also investigated the role of different ionisation mechanisms in the detection of metals, looking at Multi-Photon Ionisation, Resonant Enhanced Multi-Photon Ionisation and Tunnelling Ionisation.
- Course representative - Represented MSc students to the faculty, arbitrated disputes, organised meetings and negotiated extensions to coursework deadlines.

University of Bath

Bath, UK

BSc (Hons) Physics

2011

- Honours level courses include Laser Physics, Advanced Electromagnetism, Advanced Condensed Matter Theory, Magnetism and Superconductivity, Quantum Mechanics and Fluid Dynamics. Dissertation entitled Investigation of a Helium-Neon laser operated at 1152 nm (experimental).
- The goal of the project was to investigate whether a Helium-Neon laser could lase at 1152 nm with sufficient gain in a 3mm tube when pumped by a capacitive discharge system. I went on to establish what the ideal Helium to Neon ratio and gas pressure in the tube to maximise the output power. Additionally, I showed that pumping more energy into the tube resulted in a decrease in output power and that this was due to the small energy difference between 2^1S_0 and 2^3S_1 states.

Personal

- Martial Arts – I have been practicing Martial Arts since I was 12 as a way of keeping fit. Most of my training has been in Kickboxing, Kung-Fu and Ju-Jitsu, however I have practiced or tried many others. In my time, I have been to competitions and I trained regularly with competitive teams, both in Kickboxing and in Karate.
- Weight lifting and Nutrition – This is one of my favorite hobbies and I spend a lot of time going to the gym and eating healthy. I have trained in two of the main styles, bodybuilding and strength training, but I will be learning weight lifting in the coming year. The other part of this is healthy nutrition and I enjoy reading about sports nutrition and trying different recipes to drive my workouts.
-