

## Physics Mentor Information Sheet

Summer 2022

### Why does Wales need the Physics Mentoring Project?

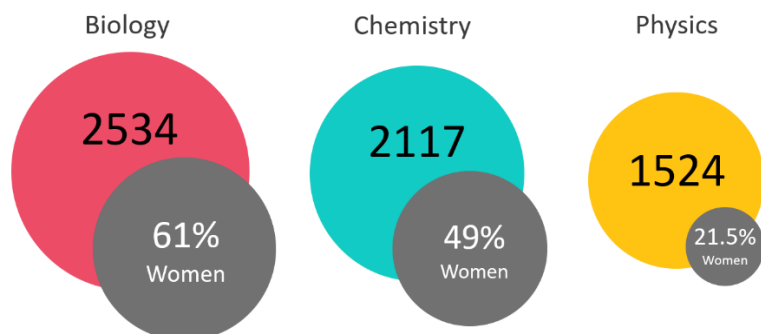


Figure 1: Science A level entries in 2018 (<https://www.jcq.org.uk/examination-results/a-levels/2018/main-results-tables/a-level-and-as-results-summer-2018>)

Each year, there is a large difference between the number of girls studying physics A levels, compared to those studying biology or chemistry. When looking at undergraduate physics courses in Welsh universities, women accounted for 20.1% of full-time, undergraduate, enrolments in 2017/18.

### What is the Physics

### Mentoring Project?

The Physics Mentoring Project is a collaboration between Aberystwyth University, Bangor University, Cardiff University, Swansea University and University of South Wales, which aims to:

- Increase the number of school students, particularly girls, intending to study physics post-16,
- Highlight the importance of transferrable skills and promote STEM careers to school students,
- Increase the confidence and resilience of school students studying Physics,
- Promote the teaching career to undergraduate and postgraduate university students,
- Increase confidence, develop employability skills, and provide experience for CVs of student mentors,
- Increase the confidence of physics teachers, particularly non-specialists, in Wales,
- Encourage culture change in participating schools to promote gender equality across the curriculum, and
- Engage with Welsh secondary schools, both locally and nationally.

Two cycles of mentoring take place each academic year in Nov – Dec and Feb - Mar. In a mentoring cycle, a pair of trained Physics Mentors is matched to a local school, where they will conduct six weekly mentoring sessions with groups of four to six students from school years 9 – 11. These sessions will be a minimum of 45 minutes in length and follow set weekly themes.

In its pilot year (Jan 2019 – May 2020), the project was highly successful in meeting its aims, with mentored school students showing statistically significant increases in intentions to study Physics A levels. You can read more about the project's evaluation results so far on [the website](#).

### Who can become a Physics Mentor?

The opportunity to become a Physics Mentor is open to anyone who:

- is a current student at Aberystwyth University, Bangor University, Cardiff University, Swansea University, the University of South Wales, or Wrexham Glyndŵr University,
- has a post-16 qualification in Physics (e.g. A level, International Baccalaureate, Scottish Highers, etc.),



- is committed to engaging fully with the project and communicating with the National Coordinator, and
- is enthusiastic about Physics, inclusivity in STEM and inspiring the next generation of scientists!

**All mentors are fully trained, and so anyone who meets the above criteria is encouraged to apply, regardless of experience.**

### Why should I become a Physics Mentor?

Physics Mentors who are engaged with the project and communicative with the National Coordinator can benefit hugely from being involved in the project, including benefits such as:

- A cash bursary of up to £200 per mentoring group led,
- The opportunity to attend an in-depth and enriching training, (which you can read more about in [the blog by Hanna](#), a current Physics Mentor),
- The opportunity to complete a [Level 4 unit in Increasing Engagement with Physics through Mentoring](#), accredited by Agored Cymru, for free,
- Valuable experience for their CV,
- Development of employability skills, such as communication, teamwork, and organisation,
- An increase in confidence,
- personal satisfaction of inspiring a generation of young scientists, and

The opportunity is particularly useful to students who are considering the teaching career, as you can read about in [this blog by Lille](#), a previous Physics Mentor.

### What will I do as a Physics Mentor?

If you are successful in your application, **you will be required to complete asynchronous training online and in-person training on 12<sup>th</sup> and 13<sup>th</sup> September 2022**. You will then become a member of our mentor community, who deliver Physics Mentoring in schools across Wales. Mentoring runs in cycles and at the beginning of each cycle we match mentors with schools.

Once matched with a school, you will have an initial meeting with your school contact. From there, you will work with your co-mentor to design and deliver six face-to-face or online mentoring sessions to a small group of year 9-11 school students in a Welsh secondary school. At the end of a mentoring cycle, mentors are also asked to attend an Awards and Recognition ceremony to celebrate the commitment and successes of the mentees. As a mentor, you should remain communicative with the National Coordinator and your teacher contact throughout the cycle and ensure that any problems or issues are communicated promptly.

You may also have the opportunity to take part in other events that the Physics Mentoring Project is a part of, for example featuring in videos or representing mentoring at a conference.

### How do I apply?

If you are interested in applying to become a Physics Mentor, please fill out and submit [this online application](#) form **before 23:59 on Sunday 7<sup>th</sup> August 2022**.

### I have questions, who can I contact?

If you have any questions about being a mentor or would feel you would benefit from a general chat about the opportunity, contact our project team: [physicsmentoring@cardiff.ac.uk](mailto:physicsmentoring@cardiff.ac.uk).