

# HEAD OF PHYSICS

FULL-TIME SEPTEMBER 2024

APPLICANT PACK



Acting Head: Mrs Diana Harrison MA (Cantab), PGCE (Bristol), CPP (Roehampton)

A recognised leader in the field of girls' independent boarding education, St Mary's Calne has approximately 360 girls aged 11-18, including 120+ girls in the Sixth Form. Results in public examinations are consistently excellent, with almost all of the girls going on to university, several each year to Oxbridge, to read a wide variety of subjects. As well as innovative teaching, learning and scholarship, St Mary's offers outstanding pastoral care and a vibrant, warm community.

This is an exciting opportunity for a highly committed, passionate science leader to further develop and deliver our unique and enriching knowledge-led academic programme. Science is central to the success of the school and we are looking for a talented individual who has belief in the ability of all the students to succeed in Science. We emphasise teaching the subject first and resist the demands to teach to the test. We need a subject leader who will strive for excellence in all aspects of teaching and learning, and who can continue to inspire the department to take the pupils on a journey from basic scientific ability to flourishing young scientists, forging new and interesting pathways and networks.

This post qualifies for an additional recruitment allowance (up to 10%) in addition to the usual St Mary's remuneration package.

St Mary's is committed to safeguarding and promoting the welfare of pupils. Due to the nature of the work involved, the successful applicant will be required to undertake an Enhanced DBS check.

We are an equal opportunities employer and committed to ensuring all applicants will be treated in a fair and equal manner and in accordance with the law regardless of gender, marital status, race, religion, colour, age, disability or sexual orientation.



# THE SCHOOL: ITS ETHOS AND AIMS

St Mary's Calne believes in excellence in all respects. As a school community, we thrive amidst a culture of strong expectations and the education which we provide nurtures and develops the concept of high performance. The principal aim is to develop well-rounded pupils who are equipped to excel as adults.

Whilst the achievement of top quality examination results is a central tenet, since these will be a key passport for the girls in the path to their future careers in the modern world, we seek to encourage everyone (girls and colleagues) to strive for excellence in a wide range of spheres. We aim to inculcate habits for life, enabling the girls to relish the prospect of hard work; to develop and deploy the necessary qualities of perseverance and determination; to learn how to do well; to acquire the belief and self-confidence that they are capable of high performance and success – both in the short term and in the future; to instil a sense of desire and an appreciation that the future, indeed their future, lies within the grasp of their own efforts.

Co-curricular opportunities beyond the classroom are a vital and integral part of life for girls at St Mary's Calne. They are woven into the timetable during the day, in the evenings and at weekends. We believe that both boarders and day girls benefit from all aspects of the strong boarding ethos of the school.

Our latest Co-Curricular
Booklet & Weekend
Programme





# THE SCHOOL VALUES

#### AMBITION

Deliver a tailored and specialised curriculum to inspire a love of learning and enable our students to achieve top class academic results

Guide and support every student to challenge themselves and reach their full potential

Prepare our students for higher education, careers, leadership and the challenges of a fast-changing global world



Spearhead research and practice in adolescent development

Foster creativity in the arts and sciences, encouraging freedom of thought and self-expression

Embrace new developments in technology to prepare our students for the future



#### COMMUNITY

Be a vibrant, warm, open and inclusive community, where boarders and day students live with empathy and respect.

Encourage our students to become proactive, engaged citizens who make a positive difference to the world

Connect, collaborate and communicate with our dynamic, supportive and extensive alumnae network



Deliver a breadth of academic and co-curricular opportunities to meet each student's ability needs and interests

Create opportunities for adventure, exploration and discovery for all members of our community

Provide opportunities for girls from diverse backgrounds who would benefit from a St Mary's Calne education

# BENEFITS OF WORKING AT ST MARY'S CALNE

St Mary's Calne offers an enriching working environment within the beautiful Wiltshire countryside, with easy transport links to Bristol, Bath and London. The school is set in its own attractive 24 acre grounds, shared with St Margaret's Prep School.

The benefits of working at St Mary's include:

- Competitive salary, based on the school's own pay scale.
- Generous Pension Scheme (APTIS).
- Excellent and tailored continuing professional development within the department and across the school.
- Highly motivated pupils taught in small groups.
- Discounted membership of the on-site <u>St Mary's Calne Sports Club</u> which offers a variety of fitness classes including yoga, pilates, zumba and spinning, as well as use of the gym and pool.
- School Fee remission for daughters educated at St Mary's Calne (day or boarding for ages 11-18), and for sons or daughters educated at <a href="St Margaret's Prep School">St Margaret's Prep School</a> (day school and nursery for ages 2 to 11).
- Complimentary meals in the Dining Hall during term time.
- Free on-site parking.
- Employee Assistance Programme offering free services and access to experts to aid professional and personal life, such as legal and finance advice, and health, well-being and medical support.
- Access to the School Library and the School Shop.

St Mary's Calne is an HMC member School. HMC schools are world-leading independent schools. To find out more about what it's like to teach at an HMC school, visit: www.hmcteachingcareers.org.uk



# EXPECTATIONS OF ACADEMIC TEACHING STAFF

Most importantly, we are looking for an enthusiastic, energetic and well-qualified teacher who will inspire their pupils and who can engage sympathetically with young people. They will: make an active contribution to the department; stretch pupils of all abilities to achieve their potential; encourage pupils to learn by making the subject taught both interesting and accessible; be innovative and dynamic in order to ensure the effective delivery of the curriculum. Our pupils' success in acquiring new abilities, skills and understanding depends crucially upon the quality of teaching which we are able to offer.

St Mary's School has an innovative approach, incorporating Connected Teaching and Learning. This is based around four pillars.

Connected across subjects: developing interdisciplinary thinkers with the ability to transfer skills

and knowledge.

Connected digitally: using IT to enhance learning.

Connected with teachers: to foster a love of learning.

**Connected with the wider community**: collaborating with universities, other institutions and professionals to create opportunities for real world learning.

These four pillars are connected to our broader academic philosophy of 'Academic Buoyancy', the capacity to overcome setbacks, challenges, and difficulties that are part of everyday academic life. By fostering academic buoyancy pupils will leave St Mary's with five key strengths that will prepare them for the academic and wider challenges beyond school: Confidence, Coordination, Control, Composure, Commitment.

All members of staff are expected to commit to the boarding ethos of the school which includes supporting the extra-curricular life, as well as taking on the role of a House tutor within a boarding House on one evening a week. This provides a key interface between the specific academic work of the classroom and the broader life of the boarding community.

In particular at St Mary's, we pride ourselves on our focus on the needs of individual girls. This is underpinned by the tutorial system in which all members of the academic staff play a full part, looking after a number of Tutees in different year groups; these tend to be drawn from the particular House in which each member of staff tutors.



### TEACHING STAFF ROUTINE DUTIES AND COMMITMENTS

St Mary's School holds all teaching staff to the highest standards in accordance with DfE guidance on teacher standards:

'Teachers make the education of their pupils their first concern, and are accountable for achieving the highest possible standards in work and conduct. Teachers act with honesty and integrity; have strong subject knowledge, keep their knowledge and skills as teachers up to date and are self-critical; forge positive professional relationships; and work with parents in the best interests of their pupils.'

In addition, a full-time member of teaching staff can expect:

To teach 20 lessons per week; staff are expected to be in school for 28 out of a total 33 lessons so
they are available for cover and other duties) this allows staff to have a morning and afternoon
off). Part-time staff members are expected to be in school for the same proportion of noncontact time as teaching time.

To be on the premises to check pigeonholes and daily information boards before the start
of school.

- To check email at several points during the day.
- To set and mark work in accordance with Departmental guidance.
- To invigilate, set and mark internal exam papers.
- To prepare girls for public examinations as appropriate.
- To write reports and grade sheets in accordance with the guidance issued by the Deputy Head Academic.
- To be a Tutor to a number of girls up to a maximum of eight (though this does not apply to a HsM).
- To take a share in cover and other duties.
- The equivalent of one day off per week, made up of either one full day or two half days (e.g. one Saturday morning and an afternoon). However, staff should be in school on the first and last day of term, even if this falls on their allocated day off.
- To be a House Tutor with an evening duty once a week (though this does not apply to a HsM).
- Evening, weekend and other duties allocated by the Senior Deputy Head or Deputy Head Pastoral.
- To be in school for the part weeks at the beginnings and ends of terms as CPD frequently takes place at this time.
- To be a member of a Company and attend Company events.
- Cover for absent colleagues as required.
- A salary will be paid at the appropriate point on the St Mary's Pay Scale. For all new members of staff, the first six months of employment is a trial period for both parties. The normal one term's notice to terminate the contract is not applicable until after that period.

All members of staff are expected to have proper regard for the school's safeguarding policy and procedures, including update training.

The above applies to part-time teaching staff on a pro-rata basis.



# THE SCIENCE DEPARTMENT

The Science department at St Mary's has a reputation for excellence and sector leading practice. Our 2025 vision is ambitious: the department aims to be a leader in Science education with such breadth and depth that every student at St Mary's has access to the knowledge, skills and experiences that could set them on a path to become a global leader in the STEM sector.

Our teaching team currently consists of five Biologists, three Chemists and three Physicists. We are well supported by our technician team. We put a high value on our excellent relationships with the girls. Our teaching of the curriculum is designed to be both engaging and challenging and aims to foster curiosity, a deep understanding of the connections between the different disciplines and a desire to continue with scientific studies both at A Level and beyond.

In Years 7 and 8 the girls follow a bespoke curriculum which is specifically designed to ensure that a keen interest in scientific inquiry is engendered from day one. With themes such as Engineering or Light and Colour running across the disciplines, the girls are encouraged to make connections in their learning and tackle some interesting and complex concepts.

From Year 9 upwards the department teaches the Edexcel IGCSE specifications in all three sciences. Typically, over 50% of the girls go on to take Sciences in the Sixth Form, with typically two groups running at A Level for Biology (AQA), Chemistry (OCR) and Psychology (Edexcel), and one for Physics (Edexcel).

We offer bespoke support for entrance into university and have an extremely high success rate for students getting into their first choice, including Oxford and Cambridge. A number of students all go on to study medicine, veterinary science and engineering each year.



### **Beyond the Classroom**

The department places a strong emphasis on opportunities that are beyond the scope of the curriculum. Over the course of the year all staff in the science department, and all the students at the school, will either lead or take part in activities such as Engineering Club, Dissection Club and British Science Week which is a mainstay of the Easter term. We like to push the boundaries of school science; launching a teddy into near space for example and using the data collected in our lessons.

We have termly enrichment weeks, take the students on a wide variety of trips and an extensive outreach programme. We run an academic journal club and have a dedicated speaker programme, with lectures and talks from high-profile scientists such as Professor Alice Roberts, Dr Ben Goldacre, Dr Helen Czerski, Professor Sophie Scott and Dr Anna Ploszajski. In Biology we run an annual Biology field trip as well and regular overseas trips to countries such as Costa Rica, Montserrat and, in October 2023, Madagascar. For Psychology students trips include 'Psychology in Action' at a range of universities, and Exeter University's Psychology Day. Whether it is a day led by Dr Guy Sutton on the development of the brain, or helping our physicists to set up their own Physics Society, our aim is always to develop curious thinkers who have the attributes that will be needed to lead in tomorrow's world.

#### **Facilities**

The school currently has five well-equipped laboratories, which are housed in a separate science block and a two dedicated science and psychology teaching rooms. We also have a wonderful outdoor 'classroom' in the orchard, which is the focus for our ongoing work on biodiversity.



### THE HEAD OF PHYSICS

The Head of Physics has an overall responsibility to the Head of Science for the day to day management of the Department. They will have a key role in organising events to promote the development of the subject and enrichment of student experiences.

Specific aspects of the Head of Physics Role will include the following.

#### Curriculum

- Reviewing and developing our bespoke programmes for Year 7 and 8.
- Reviewing and developing the Physics curriculum for Years 9, 10 and 11, working together with the Head of Science and the Heads of Biology and Chemistry to ensure that all disciplines share common goals and deliver innovative and challenging programmes.
- Delivering a Fourth Form Physics curriculum that is embedded with opportunities to stretch, challenge and connect with other disciplines, both within and beyond Science.

### Leadership

- Leading the Physics team in the review and development of both curriculum and assessment, in conjunction with the Head of Science, putting outstanding pupil progress at the heart of all decision making.
- Developing relationships with universities, academic institutions, professional bodies and industry to enhance the student experience of Physics.
- Advising students on relevant university courses and ensuring that candidates for Oxbridge, Physics and Engineering are appropriately supported.
- Lead the strategy and planning for Physics related and other enrichment opportunities throughout the year.
- Standing in for the Head of Science as necessary at events such as Open Day.



### Management

 Organising end-of-year examinations, mock examinations and, where appropriate, setting and marking of 16+ entrance and scholarship papers for Physics.

• Organising appropriate assessments to ensure that pupil progress can be monitored effectively and adjustments can be made when necessary.

• Analysing data, identifying strengths and weaknesses within Physics cohorts and addressing emergent needs.

• Overseeing the Physics area on Microsoft Teams.

• Managing the day-to-day administration of the Physics team working with technicians to ensure excellent provision.

- Reviewing entries for external examinations (working with the Head of Science).
- Ensuring displays in the teaching rooms are of very high quality and regularly updated.
- Communicating with the Head of Science regarding the budgetary requirements for Physics.

### Safeguarding

- To adhere to school policy on safeguarding and update training as required.
- To ensure the safeguarding and wellbeing of children and young people at the school in accordance with school policies.



### PERSON SPECIFICATION

### Qualifications, knowledge, skills and experience

- A strong academic background and a good honours degree in Physics.
- Qualified Teacher Status (desirable).
- A minimum of three years' Physics teaching experience.
- Experience of public examination marking (desirable).
- Ability to teach a second academic subject (desirable).
- Ability to employ a variety of effective teaching strategies to effectively implement the curriculum.
- An active contributor to a culture of teaching and learning where teachers learn with, and from, each other and actively inquire into effective pedagogical practice.
- The ability to develop learning relationship with pupils that assist in developing the confidence and learning of St Mary's Calne pupils.
- An empathetic, enthusiastic and well-presented person, capable of inspiring confidence in pupils, parents and staff.
- Ability to: work flexibly to fulfil the requirements of the post; prioritise; work calmly under pressure and respond positively to changing demands.
- Excellent interpersonal and communication skills with very good written and spoken English.
- Excellent organisational and time management skills; competency in the use of ICT for administration and teaching purposes.
- An understanding of the expectations, ethos and aims of a full boarding school.
- Committed to the safeguarding and wellbeing of children and young people.



FURTHER DETAILS AND HOW TO APPLY

Research tells us that applicants (especially those from under-represented groups) can be put off from applying for a role if they do not meet all the criteria. If you think you would be a good match for this role and can demonstrate some transferable experience please apply, regardless of whether you tick every box.

Further information about the school may be viewed on the website: www.stmaryscalne.org

In order to ensure that all applicants are assessed equally and fairly, and to ensure compliance with our safer recruitment procedures, applications will only be accepted on a school application form which can be downloaded from the Vacancies page of the school website or can be sent on request from:

**Mrs Karen Turner** 

Email: teacher.recruitment@stmaryscalne.org

St Mary's School, Calne, SN11 ODF

Tel: 01249 857 200

A fully completed application form, together with a covering letter explaining your suitability and/or vision for the role, should be sent to the above email address.

Receipt of an application will be acknowledged as soon as possible.

Closing date for applications: Midday, Friday 10th May 2024

Proposed interview date: Friday 17th May 2024

All members of staff are expected to have proper regard for the school's safeguarding policy and procedures which includes undertaking necessary training. An enhanced DBS check is required for every member of school staff, this will be carried out by the school on appointment of a new staff member. For information, extracts from the school's Child Protection policy are appended on the final page of this document.



EXTRACT FROM ST MARY'S CALNE CHILD PROTECTION POLICY

St Mary's Calne fully recognises its responsibilities for Child Protection.

We are dedicated to safeguarding and promoting the welfare of our boarders and day girls, regardless of age, ability, race, culture, religion, sexuality or background. We follow the child protection procedures set out by the Wiltshire's Safeguarding Vulnerable People Partnership and have regard to statutory guidance issued by the Department for Education Keeping Children Safe in Education, 2023 and are aware of our obligations under the Human Rights Act 1998 and Equality Act 2010. Our child protection policy takes full regard to Working Together to Safeguard Children 2018 (WT), What to do if you are Worried a Child is Being Abused (2015) and the National Minimum Boarding Standards (2022).

At St Mary's Calne we have a 'Nominated Governor' to take leadership responsibility for the school's safeguarding arrangements.

#### What is safeguarding?

Safeguarding can be defined as promoting the physical and mental health, safety and welfare of all pupils.

Safeguarding is the responsibility of all adults, especially those working or volunteering with children. The school aims to help protect the children in its care by working consistently and appropriately with all relevant agencies to reduce risk and promote the welfare of children.

#### Staff:

 are advised to maintain an attitude of 'it could happen here' as far as safeguarding is concerned

should always act in the best interest of the child.

#### What is child protection?

Child protection is a part of safeguarding and promoting welfare. This refers to the activity which is undertaken to protect specific children who are suffering, or at risk of suffering, significant harm.

