TEACHER OF COMPUTER SCIENCE

JOB DESCRIPTION

ABOUT JOHN LYON

John Lyon is an academically selective independent day school, based in Harrow-on-the-Hill in North West London. Having educated boys from Harrow and surrounding areas since 1876, John Lyon will welcome its first girls as pupils from September 2021. The School is also moving from being a senior school to an all through 2-18 school with nursery, thanks to a 2020 coming together with Quainton Hall School in central Harrow.

Academic excellence is at the very heart of what pupils who study here seek to achieve. Pupils’ academic standards and personal development were both rated the highest possible ‘excellent’ in our recent school inspection.

*‘Pupils recognise and appreciate that staff have high expectations and allow them sufficient independence to develop self-control and self-motivation.’*

*‘The school community transcends cultural difference and exudes and ethos of inclusivity through natural acceptance.’*

*‘Pupils show a strong aptitude for reading and write effectively for a wide range of purposes.’*

*‘A culture where mathematical prowess is celebrated and revered.’*

*‘Pupils achieve superb results in Sports, Performing and Creative Arts’*

ISI Inspection Report, January 2020

With the opportunity to explore this broad curriculum and gain a solid grounding in all the major academic subjects, pupils work alongside dedicated teachers to develop learning skills, creativity and the ability to fully apply themselves in all areas of life. They perform well from the point they join and go on to achieve excellent results in public examinations at GCSE and A-Level. Most students are rewarded for their hard work by gaining places at leading UK universities, before moving on into the workplace in a huge and varied range of valued professions.

John Lyon pupils also gain from their time outside the classroom. The School has a strong reputation for opportunities and success in Music, Art, Drama and Sport. Add to this an exciting Co-Curricular Programme focusing on a sense of community, achievement and wellbeing, a range of more than 100 extra-curricular activities, and pastoral care that is second to none, a John Lyon education is designed to nurture high-achieving and happy children.

The School campus is spread across six buildings in Harrow-on-the-Hill and is part of John Lyon’s Foundation. We have a clear set of values that are vital to our community. These values shape who we are, what we do and how we do it.



THE DEPARTMENT

Years 7, 8 and 9 are taught our Digital Learning curriculum by Computer Science teachers. Pupils have the option to take Computer Science in Years 10 and 11 as an examined GCSE subject. Pupils start developing their programming skills in year 7 with Blockly, and later Python using BBC Micro:bits as well as general computing skills such as manipulating graphics, recording and editing audio, games design, accessing online information safely and making positive changes to their digital lives. Skills that pupils learn in Computer Science such as logical thinking and problem-solving are transferred across other subjects as part of the school’s Learning Skills programme.

At GCSE the Edexcel specification for Computer Science has proven popular at John Lyon with between two and three sets taking the course each year; uptake at this level continues to increase year after year. In Year 10 students are asked to apply the taught Python programming skills in a form of short projects. Modelling different approaches to solutions and encouraging pupils to consider alternative problem-solving methods prepares them for their GCSE controlled assessment task.

Computer Science is offered at A-Level using the OCR specification. Students create a program in iterative steps, developing, testing and troubleshooting code in repeated cycles with the focus on reusability and efficiency, progressively gaining more complexity. The high-level language and programming paradigm used in the project is of their own choice. We have a good record of Computer Science admissions to top universities following A-Level study.

The department provides opportunities for students to learn other programming languages and develop apps for different platforms as a part of the Extra-Curricular and Co-Curricular Programmes. This year we are offering app development and cyber security courses. We enter our students into the annual Bebras Computational Thinking Competition, with several pupils making it into the top 10% bracket of the country enabling them to work towards the TCS Oxford challenge.

*‘Pupils have outstanding levels of competency in information and communication technology (ICT) and its application to other areas of learning.’* ISI Inspection Report (Nov 2019)

PRINCIPAL RESPONSIBILITIES

A Teacher reports to their Head of Department and is specifically responsible for the learning and teaching in their subject, ensuring that each pupil is positively challenged and encouraged to develop their potential to the full.

SPECIFIC RESPONSIBILITIES

* Planning and teaching lessons to the curriculum;
* Ensuring that assessment is both regular and thorough and that full records of pupils are kept;
* Undertaking development and training in the department and the school;
* Attending regular departmental meetings, and other meetings as appropriate with the Head of Department and Senior Teacher (Staff);
* Attending NQT meetings if appropriate;
* Cooperating with other Departments in the School;
* Cooperating with Department members;
* Liaising with Heads of Year and the Head of Department in matters concerned with pupil discipline and behaviour;
* Ensuring Health and Safety and Child Protection guidelines are followed;
* Creating and maintaining a stimulating environment in departmental rooms;
* Implementing all School policies, and all Departmental policies;
* Contributing to the spiritual, moral, social and cultural development of pupils;
* Completing any other duties that may be reasonably asked by the Head of Department.

ADDITIONAL SPECIFIC RESPONSIBILITIES

• Participating in and assisting with the organisation of trips and activities to enhance the learning of pupils within the School;

• To be available as a tutor to an assigned tutor group and to carry out related duties in accordance with the general job description of Form Tutor;

• To stimulate and sustain extra-curricular interest in their subject through clubs and competitions.

GENERAL DUTIES

* To embrace the School’s Values and encourage pupils to develop them;
* To carry out a share of supervisory duties and detentions in accordance with published schedules;
* To participate in appropriate meetings with colleagues and parents relative to the above duties;
* To contribute to the PSCHE programme when required;
* To attend whole School events e.g. Open Days, Speech Day etc;
* To provide cover and examination assistance as required;
* All staff are required to contribute to the School’s Extra-Curricular and Co-Curricular programmes.

It should be noted that a job description is not an exhaustive list of activities, and employees may be asked to carry out other duties commensurate with the grade of the post. The job description may also be amended to take account of changed circumstances, and employees will be consulted if this is necessary.

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PERSON SPECIFICATION FOR ALL TEACHING APPOINTMENTS

In making an appointment at the John Lyon School we look for the person who, at interview and by virtue of their qualifications, best demonstrates that he/she:

* is suitably qualified for the responsibilities of the post;
* has good interpersonal and communication skills with pupils and colleagues;
* has good listening skills and respect for all pupils;
* has the ability to form relationships and to motivate pupils;
* has the ability to generate enthusiasm for the work of the department;
* can demonstrate high standards in the necessary professional competencies required of teachers:
  + *subject knowledge and application;*
  + *classroom management;*
  + *assessment, recording and reporting students’ progress;*
  + *teaching effectively throughout age and ability range;*
* has confidence to contribute their own ideas and initiatives to the philosophy of the School;
* is willing to be involved in the wider activities of the School;
* has a practical understanding of administrative demands;
* has a commitment to personal and professional development.

The post holder’s responsibility for promoting and safeguarding the welfare of children and young persons for whom s/he is responsible, or with whom s/he comes into contact will be to adhere to and ensure compliance with the School’s Child Protection Policy Statement at all times. If, in the course of carrying out the duties of the post the post holder becomes aware of any actual or potential risks to the safety or welfare of children in the school s/he must report any concerns to the School’s Designated Safeguarding Lead.