POST: Teacher of Mathematics

RESPONSIBLE TO:

- To be responsible directly to the Head of Mathematics and the Head
- All the responsibilities below are subject to the general duties and responsibilities contained in the Contract of Service and Articles of Employment.
- The job description and allocation of particular responsibilities may be amended by agreement from time to time.

POST OBJECTIVE:

- To fulfill the teaching requirements as directed by the head of department, according to the overall aims of the school
- To offer support to the learning and pastoral needs of individual students through the school's pastoral policy and the school's aims and values.

DETAILS

BACKGROUND:

The Mathematics department at Loughborough High School is a lively and vibrant department. Each member of staff in the department has well defined responsibilities, is heavily involved in school life and supported and overseen by the Head of Department. The teaching of the Sixth Form is shared within the department. All staff teach across years 7 to 11. In year 7 girls are taught in sets according to the entrance exam scores, in year 8 they are split into 4 or 5 divisions with some measure of setting. From years 9 to 11 girls are set more rigorously according to mathematical ability into four or five divisions depending on cohort size. The girls have taken the higher level Edexcel IGCSE course since 2006. The results have been very impressive and last year 87% of students gained an A* or A grade. The Essential Maths series by David Rayner forms the basis of the year 7 to 9 work. We are using the Pearson Edexcel IGCSE (9-1) Mathematics A books, Student books 1 and 2 for the new IGCSE specification.

We currently follow the new Edexcel Maths and Further Maths courses. Mathematics is a popular subject at this level with usually about half of year 11 choosing to study Maths in the sixth form. Again the results are very good and last year 85% obtained grades A* and A & B at A2 level of which 74% were an A or A*. There is normally one class who study

Further Mathematics up to A2 as a separate group and additional lessons are provided for girls preparing for Oxbridge and/or wish to do STEP/AEA/MAT papers.

The department has its own designated area in the Chesterton building of four teaching rooms all of which have their own networked computer and printer. There are Promethean interactive whiteboards and data projectors in all four rooms. The mathematics department is a forward thinking and technological department. ICT is very much integrated into the classroom, some homework is set using MyMaths mainly for years 7 to 11 but increasingly years 12 and 13 also. Teachers and students all have ipads and they are used in day to day teaching. Teachers also have access to software such as Autograph 3 and MEI Integral. The department also has its own Firefly VLE, members of the department are expected to maintain and contribute to this to encourage independent learning.

The department is also responsible for, and hosts, two 'Maths Masterclasses' on Saturday mornings for year 6 children from local primary schools.

Last year we welcomed Colin Wright into school to talk about the Mathematics of Juggling and this year we are planning to welcome James Grime and his enigma machine and also Kjartan Posskitt of Murderous Maths.

Students of all ages enter the national mathematics challenges: Junior, Intermediate and Senior with consistent success. Teams of more able years 8/9 and years 12/13 also take part in the UK Team Challenges. A group of about 50 sixth formers (and some year 11) attend a mathematics conference in Birmingham annually.

DUTIES:

- To be able to teach maths to all ages within the school according to their educational needs and levels of ability
- The fostering of and support for the school's rules and guidelines, aims, values and ethos.
- To monitor, assess and report on pupils in accordance with departmental and school policies
- The safety of pupils and staff in accordance with the school's Health and Safety Policy when being taught and making students themselves aware of safety.
- The ensuring of consistent marking, assessment, monitoring recording in line with the school's and department's policy on marking and recording for all term work and for all internal examinations. (Pupils' marks, records etc. should be kept for a minimum of 5 years).
- The liaison with the Head of Department to ensure that the progress of each student in Maths is monitored.
- To keep up to date with teaching methods via publications e.g. from Maths Association

- Attending weekly departmental meetings, and share in the taking of minutes
- Setting and marking of internal Maths examinations and tests.
- Taking part in the department's contribution to the Open Morning.
- To be willing to organise activities and events associated with the subject e.g. lectures, exhibitions, visits, clubs, societies etc. and organise pupil participation in internal and external events and competitions, as appropriate.
- To be willing to organise appropriate trips and other extra-curricular visits in accordance with the school's policy on trips.
- Contribute to a lively and stimulating environment within the Maths building and within the departmental rooms.
- The development of suitable materials, including making provision of appropriate use of IT within the department to help with teaching and learning.
- Contribute to and upload resources onto the school VLE.
- To contribute to the marking within the department of the entrance tests in Maths of all pupils applying for admission to the school
- Participation in the department's contribution to the extracurricular activities in the school.
- The attendance at all Parents' Evenings relevant to students taught.
- The preparation and writing of UCAS subject references for Y12 students as relevant.
- The undertaking of other tasks relevant to the work of the department or the needs of the school, as these may arise (e.g. to serve as a form staff, or cover an absent colleague's lesson when asked to do so).
- Participating in the Maths Masterclass provision by LHS for year 6 Loughborough and Barrow schools.
- To mark and record all marks of taught groups from term work, tests and internal examinations.
- To assist in the formulation of the aims, objectives and policies of the department within the overall aims and policies of the school
- To contribute to the development of syllabuses, materials and schemes of work within the department and from time to time to review, with other departmental members,

methods of teaching etc. to ensure implementation of any new requirements, maintenance of standards and new technologies.

- To contribute to the development of a stimulating learning environment including wall displays and to supervise the use and care of teaching rooms
- To participate in and contribute to the general management of the school by promoting the ethos of the school, as detailed in the school's aims and values, and the rules and guidelines, and to contribute, when appropriate, to discussions on aspects of school policy, curriculum and organisation
- To set work, as far as possible, when absent
- To take part in the development and consolidation of cross-curricular developments (e.g. IT. PSE) and partnerships
- To take part in, and lead trips and visits as necessary.
- To carry out a number of supervisory duties in accordance with rotas
- To undertake, where appropriate, other roles, which may arise either in the department or in the wider school environment

Person Specification

- Experience of teaching age 11 18 years. Experience or the capability to teach the A Level Further Maths range would be ideal and we welcome applications from PGCE/NQT.
- Must have a passion for mathematics and be able to demonstrate excellent teaching practice.
- Must be well organised and efficient in their administration.
- Competent in the use of ICT for teaching and learning purposes.
- Competent in the use of ICT for recording and monitoring use.
- Good team worker.
- Must have effective communication skills so they can converse with all members of the school community.