



### INTRODUCTION

The Mathematics Department at Westcliff High School for Boys (WHSB) has been a strong Department for many years. It has had consistently good results in GCSE and Advanced Level Mathematics, and the introduction of the GCSE in Further Mathematics to the top half of Year 10 and 11 has produced encouraging results. The Department has a high uptake of mathematics at A Level, approximately 80% of Year 12, with about 40% of the same cohort opting to study Further Mathematics.

The Department offers a variety of additional clubs which pupils can attend, aimed at helping those in need of additional support, or extending the more able. This includes a particularly effective mentoring scheme, in which Sixth form students mentor those lower down the School. Pupils in Years 8, 11, and 13 will also sit the respective Junior, Intermediate, and Senior Mathematics Challenges organised by the UKMT, and students often progress to the follow-on rounds at all levels. The Department also offers a range of activities for Enrichment Days, including Problems and Puzzles for Year 11, and Mathematics in real life at the Nuclear Races.

### **ACCOMMODATION AND FACILITIES**

The Mathematics Department is well-equipped and all students have textbooks for their various courses. The Mathematics Department subscribes to a variety of teaching and education resources to aid learning. The Mathematics and Music Building houses seven Mathematics classrooms, all of which are equipped with projectors and standard whiteboards.

The classrooms are spacious, light, and air conditioned. The Mathematics Building is adjacent to the Year 7 playground and staff occasionally make use of the outdoor space when conducting investigations with their classes.

#### CURRICULUM

A new Year 7-9 syllabus has been designed by the Mathematics staff at WHSB to encourage independent learning, alongside improving examination technique. The Department uses a range of assessment and investigations to introduce, consolidate and extend pupils' understanding of Mathematics. It does not attempt to accelerate pupil's learning, but instead it encourages them to develop a more in-depth understanding of the principles they are currently learning.

The Edexcel GCSE 9-1 Curriculum dovetails neatly with the course studied by pupils in Years 7-9, both consolidating parts of it that have previously been covered to GCSE Level but also extending other parts so pupils can access the level 9 grade.

The AQA Further Mathematics curriculum is studied by the highest attaining four (out of seven) classes after they have completed the GCSE 9-1 syllabus. The pupils start this course in January of Year 10 and finish it by March of Year 11, allowing time for revision of both GCSE Mathematics and Further Mathematics material.



In the Sixth Form, students can choose to study Edexcel A Level Mathematics if they attained a Level 7, 8, or 9 in GCSE Mathematics. Sixth Form students study a mix of the Year 1 and Year 2 material from both Pure Mathematics and Applied Mathematics.

Students can also choose to study Edexcel A Level Further Mathematics if they have attained a Level 8 or 9 in GCSE Mathematics. To date, students study the traditional Core Mathematics 1 and Core Mathematics 2 alongside the optional units of Further Pure Mathematics 1, Further Mechanics, Further Statistics, or Further Decision, depending on other subject choices.

### **EXAMINATION RESULTS**

Results in all public examinations are strong and those who choose to continue their Mathematics studies at University generally do so at established Universities, including the Universities of Oxford and Cambridge.

In Summer 2023, pupils at Westcliff attained 87.7% 7, 8, and 9 grade in Edexcel GCSE Mathematics, of which 99.4% was 9 to 5. In AQA Level 2 Further Mathematics, 86.6% attained 7, 8, or 9 grades.

In Advanced Level Mathematics, 68.5% of students at Westcliff attained A\*, A or B, and in A Level Further Mathematics 72.7% of students at Westcliff attained A\*, A or B.

Year 12 do not take a public examination in Mathematics or Further Mathematics but instead take internal examinations.



### **JOB DESCRIPTION**

#### TEACHER OF MATHEMATICS

#### **Job Purpose:**

The teacher is required to carry out the general professional duties of a school teacher under the reasonable direction of the Head of Department and Headmaster and to perform such particular duties that from time to time which may reasonably be assigned him/her by the Headmaster. Teachers on the Upper Pay Scale (UPS) will be expected to make broader contribution to the School as a normal part of their work.

#### **Duties and Responsibilities:**

The following responsibilities are included in the professional duties which the teacher is required to perform:

#### **General Duties:**

- to support and promote the School's general purposes, ethos and Learner Profile;
- to be familiar with and respect and follow the School's Policies and Procedures;
- to maintain a good understanding of whole School Evaluation and Development Planning;
- to act as a role model to pupils through always being punctual and well prepared and to maintain appropriate professional relationships and an atmosphere conducive to learning;
- to attend School and Year Assemblies and to carry out a share of supervision duties in accordance with published rotas;
- to contribute actively to the maintenance of the School as an orderly community by upholding the provisions of the School's Rules and the Pupils' Code of Conduct;
- to maintain good order and discipline among the pupils, safeguarding their welfare both on School premises and when engaged in authorized activities elsewhere;
- to participate in staff and other meetings relating to the School's curricular, pastoral or administrative arrangements;
- to assist with covering or taking other classes as and when required (e.g. staff illness) and being available for examination invigilation;
- to communicate and co-operate on educational issues with persons or bodies outside the School as appropriate;
- to contribute to the extra-curricular life of the School as appropriate and attend and support School and House events wherever possible.

#### **Teaching:**

 to ensure that lessons are planned in appropriate detail (considering pupils' prior attainment) and are prepared and delivered in accordance with the Learner Profile, departmental Schemes of Work and regulatory standards, reinforcing the need for high expectations which inspire, motivate and challenge pupils;



- to take account of pupils' educational needs (differentiating where appropriate), to teach in a
  manner appropriate to a Grammar School (as outlined in the School's *Guide to Outstanding Teaching)*, including the setting and marking of work, to be carried out by the pupils in School
  and elsewhere (homework), according to agreed schedules;
- to assess, record and report on the development, progress and attainment of pupils in accordance with the School's policy, in order to ensure pupils fulfil their potential. This record of assessment should be available to the Head of Department or Directors of Studies on request;
- to regularly mark pupils' work, giving appropriate feedback and keeping records of marks;
- to provide mark lists, grading lists, written reports, internal comments or references relating to individual pupils as the School may require;
- to communicate with Head of Department and Form Tutor regarding the progress of individual pupils, as necessary;
- to attend Parent Evenings to discuss the progress of pupils and use such occasions to offer constructive advice on what pupils need to do to improve their progress;
- to participate, within the guidelines laid down by the Head of Department, in the evaluation and development of appropriate methods of teaching, syllabuses and materials, writing Schemes of Work as reasonably requested and contributing to the development of departmental policy;
- to assist with displays and publishing of pupils' work;
- to utilise ICT as an effective tool to aid teaching and other classroom resources as appropriate;
- to assist with departmental voluntary activities, societies, trips and initiatives.

#### **Pastoral Care:**

Teachers will act as Form Tutors under the direction of a Progress Leader and Head of School/Director of Sixth Form and they will:

- be 'in loco parentis', responsible for the welfare of pupils in the Form and the first point of contact for those seeking help or guidance or wishing to express concern;
- take an interest in the personal circumstances and development of each pupil in the designated Form Group, in his/her happiness and security, and to be available for advice or consultation with parents as well as provide comments on Reports, and to handle correspondence;
- promote the academic progress and well-being of individual pupils and any Form Group, class or group, ensuring consistent feedback is given, which guides pupils. Discussing Reports and supporting self-evaluation activities with the designated Form Group;
- providing tutees with guidance and advice on educational, careers and social matters, monitoring their welfare and making relevant records and reports (including reference and personal profiles) in accordance with the School's policies. If necessary, directing pupils to sources of more expert advice on specific questions;
- ensure that the Form Group's Pupil Planners are kept up to date and to ensure they are used effectively by pupils including as a means of parent(s)/School communication;
- promote the Learner Profile and high standards of behaviour, attendance, punctuality and attitudes to work.
- ensure that pupils' dress and appearance conform to the requirements set out in the Code of Conduct;
- encourage pupils to develop their interests and talents through participation in extra-curricular activities and the broader life of the School;
- discharge effectively a range of Form administrative duties.



#### Personnel and Continuing Professional Development:

- to attend and participate in Staff INSET and training courses and events, as requested;
- to contribute, as requested, to the selection, appointment and professional development of staff, including the induction of new teachers;
- teachers on the Upper Pay Scale will be expected to make a greater contribution to the School's Appraisal and CPD arrangements as part of their normal working arrangements.

### CONDITIONS OF EMPLOYMENT

- The above responsibilities are subject to the general duties and responsibilities contained in the written Statement of Conditions of Employment (the Contract of Employment).
- The postholder is required to support and encourage the School's ethos and its objectives, policies and procedures as agreed by the Governing Body.
- To uphold the School's policy in respect of child protection and safeguarding matters.
- The postholder shall be subject to all relevant statutory requirements as detailed in the most recent School Teachers' Pay and Conditions Document.
- The postholder may be required to perform any other reasonable tasks after consultation.
- This job description allocates duties and responsibilities but does not direct the particular amount
  of time to be spent on carrying them out and no part of it may be so constructed.
- This job description is not necessarily a comprehensive definition of the post. It will be reviewed
  at regular intervals and it may be subject to modification at any time after consultation with the
  postholder.
- All staff members are required to participate in the School's Appraisal Scheme.



Headmaster: Mr MA Skelly M.A.

Kenilworth Gardens | Westcliff-on-Sea | Essex | SSO 0BP | 01702 475443

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