

# Twyford Church Of England Academies Trust



"I have come that you might have life and have it to the full" John 10 v10

### **Job Description**

Job Title: TWY KS5 Science Curriculum Devt. & Delivery Lead

Grade: Main Professional Grade

TLR 1a (6 periods per fortnight)

Line Manager: Head of Science

Supervisory Responsibility: NA

### Main purpose of Post

To support progression and engagement in science with focus on top end students

- Ensuring curriculum delivery using the CaLM principles, supports the most able students at KS5 to achieve grades which ensure they progress onto the relevant pathways.
- Supporting progression for potential applications for medicine, veterinary medicine, dentistry and related courses and those seeking to pursue futures in engineering

#### **Outcomes**

### **Quality of Education**

### **Curriculum & Assessment**

- KS5 delivery achieves appropriate levels of top-end stretch by making maximum use of CaLM framework and coaching principles
- Programme of wider learning enrichment activities designed and delivered for KS 5 students to ensure top end stretch (including Medsoc and Eng Soc at KS 5)
- Copia pages maintained with Extension programme overviews, wider learning opportunities, further links and wider reading

### **Behaviour and Attitudes**

#### **Pastoral**

 Top Science students identified from Year 12, progress monitored and targeted extension programmes agreed

#### Wider Learning

 Trust TAP coordinator supported to ensure all Science Early entry & Medical/Dentistry applicants are well prepared for admissions tests

#### **Leadership and Management**

### Resources and Staffing

- Staff delivering at KS5 are appropriately trained in and make effective use of effective pedagogy to achieve maximum impact with the most able
- Promotion of and recruitment to all Science stretch programmes well led and managed
- UCAS process (including organising and running mock interviews) for relevant cohorts clear

### **Specific Responsibilities and Tasks**

### **Quality of Education**

**Curriculum & Assessment** 

### KS5 delivery achieves appropriate levels of top-end stretch by making maximum use of CaLM framework and coaching principles

- Review and refine guidance / training for staff on effective KS5 delivery
- Support Subject leads in the routine review of unit planners and lesson resources
- Prep practice and pedagogy reviewed to ensure delivery challenges students to achieve A/A\* grades
- Ensure wider learning programmes align with / support curriculum delivery including oversight of the development of the long-term vision for Science Top end stretch Programmes (curricular and extracurricular)
- Liaise with Science subject leads/HoD & Trust lead to ensure KS5 Assessment practices are well focussed and well used by staff.
- Liaise with 16-19 Administrator to oversee maintenance of destination database for all Science stretch pathways
- Number of students progressing on to appropriate post-18 pathways monitored
- Where required, deliver training to KS5 teachers in making links between curricula and CIAG

### Programme of wider learning enrichment activities created for KS 5 students to ensure top end stretch (including Medsoc and Eng Soc)

- Coordinate Gold CREST awards in conjunction with Imperial college & school-based researcher programme
- Coordinate a timetable of Wider Learning Science opportunities for Year 12/13
  - Set up and support external competitions / tests (e.g. Science Olympiads, Chemistry challenge, competitions etc.)
  - Ensure KS 5 outreach activities from London universities /institutes (e.g. Nuffield Science Research placements) are communicated to staff, students & parents
  - o Provide items for all three sciences for each Wider Reading Newsletter
  - Make links with and organise external speakers to run small group sessions for Medsoc
     &Engineering Society Programmes
  - Organise and lead relevant trips and visits to take place at least half-termly & develop links with industry to support students in gaining relevant work experience
  - Source and organise participation in Medsoc & Engineering Society Programme competitions run by national organisations and /or universities
  - o Design and deliver 'applying for post-18 Engineering workshops & Med/Vet/Dent workshops
  - o Ensure outreach is continued with current links e.g. the UCL Robotics Programme
  - Analyse relevant data to evaluate success of Science Programmes
- Support students in science leadership roles by ensuring KS5 Science students are identified & trained as coaches for KS3 Science; Science club; and CREST bronze clubs

### Copia pages maintained with Extension programme overviews, wider learning opportunities, further links and wider reading

- Ensure high quality resources regarding the Stretch programmes are available to students on Copia, including programme overview, wider learning opportunities, further links and wider reading
- Share information on lectures /extension opportunities including those within the TAP programme
- Work with Oxbridge Programme Coordinator to set up a 'prepare for Oxbridge interview questions'
  on COPIA to support students applying to top universities to study Sciences (including use of past
  questions from previous Oxbridge applicants)

### **Behaviour and Attitudes**

#### **Pastoral**

### Top Science students identified from year 12, progress monitored and targeted extension programmes agreed

- Agree selection criteria for all Science stretch programmes
- Identify cohorts at the start of each academic year

#### Wider Learning

### Trust TAP coordinator supported to ensure all Science Early entry & Medical/Dentistry applicants are well prepared for admissions tests

- Medicine in Action is promoted with KS4/5 students.
- Synthesise an additional scheme of work teaching the knowledge and skills required for the UCAT exam
- Mock UCAT exams are organised and students receive feedback
- Co-ordinate mock MMI style interviews, group interviews and panel interviews with Year 13 students in preparation for upcoming university interviews.
- Coordinate work experience with Imperial College and support students in work experience applications
- Run interview preparation sessions for Y13
- Supporting with checking and sending UCAS applications.

### **Leadership and Management**

### **Resources and Staffing**

## Staff delivering at KS5 are appropriately trained in and make effective use of effective pedagogy to achieve maximum impact with the most able

- Liaise with the Asst Head Coaching /Training & Head of 6<sup>th</sup> form over core approaches to post-16 pedaogy.
- Run training sessions as part of the Friday training prog
- Lead within the coaching programme, focussing on KS5
- Ensure KS5 staff team make maximum use of unit planners, Afl and lesson Prep to maximise outcomes.
- Liaise with subject leads on the analysis of top-end science students at KS5

### Promotion of and recruitment to all Science stretch programmes well led and managed

- Promote the KS 5 stretch programmes at sixth form open evening and ensure prospectus information is up to date
- Promote the KS 5 stretch programme to internal students e.g. through Y10/11 assemblies, science wider learning
- Support SLT to promote the Science stretch Programme in 1:1 meetings for internal and external applicants to the sixth form
- Students identified as part of Year 12 induction who are interested in a pathway related to the purpose of MedSoc
- Oversee the application and selection process for students onto each of the programmes annually
- Communicate with pastoral leads so tutors are confident with advice in CIAG meetings regarding medicine, veterinary medicine, dentistry i.e. chemistry is required at A-Level for medical courses.

### UCAS process (including organising and running mock interviews) for relevant cohorts clear

- Support stretch cohort with UCAS application process i.e. evaluating courses and providers, writing personal statements, interview preparation
- Organise and run mock interviews for stretch cohort