

Oxbridge and Early Entry Introduction Pack

Sixth Form Virtual Open Evening



Qualities required to be a good...

Historian: Sceptical, don't take anything for granted or simply accept "received wisdom" or "accepted interpretations" without questioning them. Curious, want to know why and how things happened. Objective, open-minded. An avid reader, patient, persistent, have an eye for detail (as you need when doing research). Have an empathy for the culture, climate and context in which things happened, things were written etc. Be articulate, a good analyst and debater – as some history teachers have said, they want every parent's nightmare – people who are awkward, argumentative and bolshie. Preferably can write well too.

Mathematician: Very logical and rational, enjoys the challenge of problem-solving, doesn't like to be beaten by things and certainly not by the same type of problem twice. Very determined and patient, prefers an elegant solution not just something that's right. Intrigued by patterns in the world around them and want to understand them.

English specialist: A good analyst, who is keen on language, its structure and uses. A keen communicator and avid reader, keen to explore and understand the context in which things are written. Empathetic, open-minded – sceptical to a certain extent, not blindly accepting traditional interpretations but an independent thinker, coming to independent conclusions. Objective. Articulate and can write clearly and concisely.

Chemist: A keen scientist, i.e. wanting to understand how and why things happen, a good analyst, taking nothing for granted, keen to test things out and do research and patient, determined, even painstaking when doing it. Having good practical skills, an eye for detail. Good at working in a team.

Physicist: A keen scientist, i.e. wanting to understand the world and how it came about, a good analyst, taking nothing for granted, keen to test things out, very logical, a good mathematician. Open-minded enough to embrace new theories and evidence. Patient and with an eye for detail when conducting experiments and research.

Medic: The capacity to get top academic results, a keen scientist and problem solver, keen to take on life-long learning and with a capacity for hard work and coping with stress. Empathetic, optimistic, dedicated, able to inspire other peoples' trust and confidence, a good communicator and team worker, able to shoulder responsibility, caring and having a strong sense of moral integrity.

Dentist: A lot of the above along with good practical and business skills. Even more important to inspire other peoples' trust and confidence, especially children's, as so many are scared of dentists.

Lawyer: Logical mind, analytical, with a capacity for hard work, eye for detail and ability to cut through to essential points in arguments. Articulate, well-read, empathetic, ideally having a strong moral sense, well organised and self-confident.

Economist: Analytical, logical and intuitive. An avid reader but with good mathematical ability and keen on statistics. Having good debating and communication skills, sceptical and questioning, can write well and with a strong sense of wanting to get to the bottom of why things happen as they do.

Philosopher: A keen sense of language and meaning matched with a strong desire to understand things. Capacity for logical thought, well read, open-minded, with good communication skills and with a natural empathy for historical and social context.

Engineer: A keen problem solver, with strong mathematical ability, analytical powers and the capacity to see the full picture and finished products. Fine eye for detail, meticulous, patient, determined, a good communicator and team worker and able to work under pressure.

Interview questions: Archaeology and Anthropology

1. Why do you want to read Arch. and Anth.?
2. Archaeology helps us to discover the past but what's the point of Anthropology?
3. What do you think are the qualities a good anthropologist/ archaeologist should have?
4. What evidence have you got that you have them?
5. What wider reading have you done and what has impressed you?
6. Why are rubbish tips so important to archaeologists?
7. What experience of archaeology do you have?
8. Is cannibalism necessarily wrong?
9. If there is a health centre within reasonable distance of a tribal village, is there any point visiting a witch doctor?
10. Should we take concepts of witchcraft and magic seriously?
11. Can there ever be a justification for a son-in-law always insulting his mother-in-law?
12. How would you approach a study of your Sixth Form as (a) a social anthropologist (b) a biological anthropologist?
13. What might have made Man become bipedal and what consequences did it have?
14. What might you be able to tell from a fossil skull?
15. Is there any value in studying the social behaviour of the great apes?
16. If you could go and do fieldwork anywhere in the world, where would you choose and why?
17. Is tourism a curse or a blessing to native tribes in third worlds countries?
18. How do you see yourself using a degree in Arch and Anth?
19. How do you think anthropologists could contribute to resolving problems in modern Britain?

Interview questions: Architecture

1. What has led you to want to study Architecture?
2. What qualities do you think a good architect needs to have?
3. What evidence is there that you have them?
4. Which buildings most interest you architecturally?
5. Whose work as architects most impress you?
6. Should we restore old buildings or update them?
7. What is the importance of light in architecture?
8. Should architecture reflect the views of society or challenge them?
9. What have you learnt from any professional experience you've had?
10. What architectural project would you most like to take on?
11. What did you think of this year's Stirling Prize nominees?
12. Name me 4 constructions in the world you think I should visit and tell me why.
13. "Practicality first, aesthetics second". Should that be the rule of thumb for architects?
14. How would you set about the task of designing a new accommodation block that was going to stand alone in a south facing quad of this college?
15. How would you improve the design of schools?
16. What is the ugliest building you know?

Interview questions: ASNAC (Anglo-Saxon, Norse and Celtic)

1. What has attracted you to read this?
2. What qualities do you think are called upon to study it?
3. What evidence is there that you have these qualities?
4. What have you most enjoyed reading?
5. How far can we trust the sources we have for this period?
6. How can we date a source when we don't know when and by whom it was written?
7. What is the difference between literature and history?
8. How easy is it to translate texts from that time into modern English?
9. If we were able to get into the mind of someone from the 10th century, what would we find most noticeably different from our own?
10. What does the literature of the period tell us apart from the history of political power?
11. When and how do you think an English identity emerged?
12. "Alfred the Great", "Canute the Great", "Ethelred the Unready" are any of these reputations deserved/ convincing?
13. Has the impact of the Vikings generally been under-estimated?
14. How do you see yourself using such a degree?

Interview questions: Asian and Middle East Studies

1. The Cambridge prospectus says of Asian and Middle Eastern Studies that you don't need prior experience but you do need imagination, perseverance and a sense of adventure. What is the evidence that you have these?
2. Why do you want to read Asian and M.E. Studies?
3. Is there any point studying anything other than Mandarin for Chinese Studies?
4. Does language reflect culture or the other way round?
5. What aspects of A and M.E. culture particularly interest you?
6. What have you read and what has inspired you?
7. Napoleon called China "a sleeping giant" and that the world should beware when it woke. Do you think that is fair?
8. Can growth in the Chinese economy be maintained?
9. Is it necessary to know a nation's history to appreciate its language?
10. Can we talk of "Arab" culture?
11. Can Asia or the Middle East be understood without a detailed knowledge of their religions?
12. Could there ever be such a thing as "feminism" or "gay rights" in either China or the Middle East?
13. How do you see yourself using this degree?

Interview questions: Biology/ Biomedical Science

1. If cystic fibrosis occurs in one in 1600 babies, how many partnerships have the cystic fibrosis gene?
2. What is the chance then that you are a carrier?
3. How has this gene managed to survive? What possible benefit could there be in having cystic fibrosis?
4. Why was cancer so less frequent back then and so much more common now?
5. How could you test if a disease such as schizophrenia is genetic?
6. What is the difference between a genus and a species?
7. What is the difference between a monkey and an ape?
8. What qualities do you think a good biologist needs to have?
9. What evidence is there that you have them?
10. What effect do you think global warming will have on the evolution of species?
11. What is the mutation rate? What is "genetic drift"?
12. Write an equation for pH.
13. If $\text{pH} = 3$ what type of solution is it and what is the concentration of H^+ ions. Explain your answer as clearly as you can.
14. What are probiotic drinks and how do they work?
15. Is testing drugs on animals worthwhile?
16. What have you read that has interested you lately?
17. Snake, frog, grasshopper. Which is the odd one out?
18. Apple, potato, onion. Which is the odd one out?
19. A man and a woman have two children. One is affected by a disease caused by a recessive allele. What is the probability that the other child carries the disease?
20. What are the arguments for preserving biodiversity?
21. Why is carbon so important in living systems?
22. Are human beings still evolving?

Interview questions: Chemistry

1. What qualities does a good chemist need to have?
2. What is the evidence you have them?
3. Define pH
4. How does a pH meter work?
5. Sketch the graph of what happens when a strong acid is titrated with a weak base. Explain the shape of the graph.
6. How would you distinguish between calcium oxide and calcium carbonate?
7. How would you distinguish between H_2SO_4 and H_3PO_4 ?
8. What is the shape of ammonia?
9. How would you test for the lone pair in ammonia?
10. What would you expect to be the shape of Xenon tetrafluoride? and Xenon trioxide?
11. What can you say about the Haber process? What is its formula? What conditions would be needed for such a reaction? What is the relevance of Le Chatelier's principle?
12. Explain the bonding of water molecules in the structure of ice.
13. Explain the mechanism of the reaction between methylbenzene and bromine?
14. Why does the boiling point of water rise as salt is dissolved in it.
15. What makes drugs physiologically active?
16. Explain the bonding in benzene.
17. Why does iron rust and how can you stop it rusting?
18. How would you calculate the inter-atomic spacing of particles in a room?
19. How do amino-acids behave in both acidic and basic conditions?
20. What are the differences between a human enzyme and the enzymes of bacteria that live in a hot spring?
21. What makes some chemicals explosive?

Interview questions: Classics

1. What are the qualities needed by a good classicist?
2. What is the evidence that you have them?
3. Why do you think Ancient History is important?
4. Has it anything to teach us?
5. How civilised were the Romans?
6. Does a study of the Greek myths tell us anything more than that the Greeks were superstitious?
7. Which period of Roman/Greek history interests you most? What figures from these times most interest you?
8. Tacitus and Suetonius were biased so is there any value in these historians?
9. Is it an oversimplification to say that the difference between Ancient Greece and Rome is that the Greeks have given us famous scientists and philosophers and the Romans only famous military figures?
10. Is the Roman Empire proof that “power corrupts and absolute power corrupts absolutely”?
11. What playwrights/ poets have you read and what have you most enjoyed?
12. It is said that the Greeks “invented tragedy”. If so, what are its features?
13. How do you see yourself a degree in Classics?

Interview questions: Computer Science

1. What qualities do you think a good computer scientist needs to have?
2. What evidence is there that you have them?
3. What research and development in computing particularly interests you?
4. If the symbol of the 80s was the PC and of the 90s was the web, what now and what next?
5. “Computers of the world unite, you have nothing to lose but your comparatively brainless operators”. Is there any risk of this becoming true?
6. Are there potential dangers in developing artificial intelligence?
7. Are the suggested benefits of quantum computers overrated?
8. “Computer modelling only tells us what we should be able to work out for ourselves as it can’t generate new data for itself”. How far do you agree?
9. What is the next generation of personal technology likely to comprise?
10. Over the last few years advances in personal technology have consisted of refinements of what we already have. What do you see as the next likely leap in that technology?
11. What is the structure of URLs?
12. Which is the better for data storage, a spreadsheet or a database?
13. Will computers ever be able to replace university lecturers?
14. Are there dangers in developing artificial intelligence?
15. How do you see yourself using a degree in Computer Science?

Interview questions: Chemical Engineering

1. Why choose Chemical Engineering as opposed to straight Chemistry?
2. What extra skills/ qualities are required?
3. What is the evidence you have them?
4. What current/ future projects interest you?
5. What engineering problems are there in setting up a fracking project?
6. What, if any, work experience have you had and what did you learn from it?
7. How do you see yourself using a degree in Chemical Engineering?

Interview questions: Dentistry

1. What has attracted you to Dentistry?
2. What skills do you think a good dentist requires?
3. What evidence is there that you have them?
4. What do you think are the biggest health issues for dentists these days?
5. Is the need for dentists mainly the result of poor life-style choices?
6. What work experience have you had and what do you feel you have learnt from it?
7. We've heard recently about people taking their own teeth out with pliers rather than visit a dentist. How can we correct that?
8. What is NHS and Private provision like in your home area?
9. A dental practice is a business – what shows you have business skills?
10. With the introduction of dental implants, are dentists going to be out of a job in the next 20 years?

Problems:

- How would you distinguish between calcium oxide and calcium carbonate?
 - Sketch and label the structure of the typical adult molar tooth.
 - What do you know about titanium?
11. What shows that you have good “people” skills/good practical skills?
 12. Is it right that we pay a lot to train people from public funds and they then go into private practice?
 13. If you didn't get any offers for Dentistry this year, what would you do?

Interview questions: Earth Sciences

1. What are the qualities a good earth scientist needs to have?
2. What is the evidence that you have them?
3. Suggest a list of conditions necessary to sustain life on Earth.
4. What would be the major differences on Earth if (a) no atmosphere had ever evolved (b) there was no water (c) plate tectonics did not exist?
5. What would you expect to see at a compressional/ extensional/ passive margin?
6. List a number of different methods for dating a rock specimen.
7. How do mountains originate?
8. What does a study of volcanoes tell us?
9. What have you read that you've found interesting?
10. Are Earth Scientists more intent on exploiting the Earth's resources or preserving them?
11. What are the arguments for and against fracking?
12. How do you see yourself using a degree in Earth Sciences?

Interview questions: Economics

1. What are the qualities a good economist needs to have?
2. What is the evidence that you have them?
3. Is it justified to call Economics “the dismal science”?
4. “Economists simply fail to understand what is going on in more technical language”. Is that fair?
5. Is “green economics” a contradiction in terms?
6. What are the consequences of charging interest rates?
7. What is the point of privatisation?
8. Are the ideas of Keynes relevant to a dot.com world?
9. Discuss the interaction between fiscal and monetary policy.
10. Would it be feasible to have an economy based on the service sector?
11. How can you avoid welfare turning into dependence?
12. Has the euro anything more than junk status?
13. “Full employment is a pipe-dream”. Is it?
14. Is a pay freeze ever a good idea?
15. Is a reduction in China's growth rate good or bad news for the West?
16. We've traditionally talked about “Western capitalism”. Should we now talk about “Eastern capitalism”?

17. Is globalisation proving Marx right?
18. "The only problem with iron chancellors is that they rust the economy". Is that fair comment?
19. What advice would you give the Governor of the Bank of England?
20. Amartya Sen claims that foreign aid does more harm than good. Do you agree? How would you test that hypothesis?
21. What economics books have you found inspiring and why?
22. Are there any economists whose ideas you particularly share or admire?
23. "A minimum wage makes moral sense but not economic sense" Discuss.
24. Can you ever spend your way out of a recession?
25. Economically is a degree worth it these days?

Interview questions: English

1. What works of literature inspire you and why?
2. Which poets do you most enjoy and why?
3. What are the qualities a good English student needs?
4. What is the evidence that you have them?
5. Who among contemporary writers interest you and why?
6. If you were choosing the ideal list of A-level texts, what would be on it?
7. What do like/ dislike about your own A-level texts?
8. Can something obscene ever have literary merit?
9. Is there any point studying Chaucer in the original English when we have translations?
10. Do we accord Shakespeare too much respect?
11. Do women serve any purpose in Shakespeare except to expose the foibles of men?
12. "Take away ambition and there's nothing left in Shakespeare plays". True?
13. "Shylock, Malvolio, Caliban..." Do some characters get a raw deal?
14. What do we mean by "tragedy"?
15. Has TV reduced authors like Austen and Dickens to mere costume drama?
16. Why do you think an English student might be interested in the fact that Coronation Street has been running for 50 years?
17. If you were offered the chance to direct a play or adapt a text for the stage, what would you choose and what would you bring to it?
18. Is literature useful when studying a specific time in history?
19. JK Rowling has recently published a book for adults after the hugely successful Harry Potter series. In what ways do you think that writing for children is different to writing for adults?
20. How do you see yourself using a degree in English?

Interview questions: Fine Art

1. What are the qualities needed to be a “Fine Artist”?
2. What is the evidence you have them?
3. If you could go back in time and study in the studio of any artist, which would you choose and why?
4. What makes “fine art”?
5. Can computer generated images be described as “art”?
6. Of current artists whose work do you most admire and why?
7. Talk about an exhibition you’ve seen recently.
8. In what ways do your other subjects feed into/ relate to Fine Art?
9. What media do you prefer to work in and what media do you look forward to developing?
10. Is writing graffiti on a Rothko painting any different from Banksy spraying on a wall?
11. You can have any three works of art you like – which would you choose and why?
12. Do you have any favourite artists/ periods of art and why?
13. Can any piece of art be truly original?
14. Where do you see a degree in Fine Art taking you?

Interview questions: French

1. Linguistically what do you think are the most notable differences between French and English?
2. Do you think that in any way they reflect character differences between the French and the English?
3. What has drawn you to enjoy French so much?
4. How would you sum up the outlook/ general philosophy of the French?
5. What literature have you read and what did you think of it?
6. Which for you is the most interesting period of French history?
7. Do you think that the French way of life has anything to teach us?
8. How does news and the reporting of it differ in France from the UK?
9. What about the Arts in France interest you?
10. Politically is it true that since the founding of the EU France has never really found a role? In the world picture does France matter?
11. Why do some languages have genders when some don’t?
12. What gets lost in translation?
13. Do you think that a second language should be taught/ learnt in the same way as a first one?
14. How do you see yourself using a degree in French?

Interview questions: Geography/ Geology

1. What skills and qualities should a good geographer have?
2. What is the evidence that you have them?
3. It has been claimed that geographers are in a better position than anyone to understand why we are killing ourselves off but in no practical ways able to prevent it. Is that true?
4. Is there anything of particular geographical value still to be discovered?
5. Name any 2 theories whose validity you’d like to question and say how you’d go about testing them.
6. What aspects of Human/ Physical Geography particularly interest you?
7. What wider reading have you found particularly interesting?
8. What is of particular geographical interest in your home area?
9. What is the optimum population of your home area and how can you gauge such a thing?
10. What evidence is there that global warming is no more than seasonal variation writ large?
11. Can we realistically do anything about it?
12. Can geographers offer any practical help to peoples in such as Bangladesh?
13. “All talk of conservation is pointless unless or until we tackle population control”. Do you agree?

14. What have you learnt most from fieldwork?
15. "If we could control the creation of cyclones and hurricanes from space and harness the energy they produce, we could make wind power the most effective energy resource on the planet". Is this feasible or just mad?
16. Why are tectonics relevant?
17. Do you approve of aid programmes or do they just produce dependence?
18. "Upland environments are too fragile for intensive leisure use". Is that true?
19. Is conflict between settlement and environmental well-being inevitable?
20. Where in the world would you take a non-geographer to prove that Geography is important?
21. How do you think we can improve the predictability of natural disasters?
22. What other research have you come across that interests you?
23. From a Geographer's point of view what are the arguments for and against building another runway at Heathrow and increasing capacity there?
24. How do you see yourself using a degree in Geography?

.... Geology :

25. What is the definition of life?
26. Why is a crystal not alive but a giraffe is?
27. How would you work out the mass of the Earth/ mass of the atmosphere?
28. How do convection currents work?
29. If CO₂ and H₂O put out fires, why does a candle not go out when it burns?
30. What qualities does a good Geologist need to have?
31. How do you know you have them?

Interview questions: History

1. What are the qualities of a good historian?
2. What evidence do you have that you have them?
3. What is it about History that makes you want to take it to degree level?
4. What topics do you most enjoy from your A-levels and why?
5. What extra reading have you done and what do you feel you've got from it?
6. Which historians do you feel are "good" historians?
7. Recommend some good history books and say why we should read them.
8. Ultimately which is the more important – political history or the history of technology?
9. "We can learn nothing from history because no two sets of events are ever the same". Do you agree?
10. Is there inevitable distortion when we write history?
11. Whose reputation in history would you most like to change?
12. Is national character a useful concept in history?
13. How can we define a "revolution"?
14. How do you see yourself using a degree in History?

Interview questions: History of Art

1. What are the qualities needed to study History of Art?
2. What makes you think you have them?
3. If you have your own room at home with 4 walls, which 4 works of art would you most want to have, one on each?
4. Are restoration and conservation good or bad?
5. How does art reflect its society?
6. What is your opinion of the Turner Prize/ BritArt/ Tate Modern?
7. Why do artists go in and out of fashion?
8. If you could choose just 1 artist per century as having the most impact, who would be on your list?
9. How would you define "modern art"? Is there merit in it?
10. Is "art for art's sake" just self-indulgence?
11. How do you see yourself using a degree in History of Art?

Interview questions: Human Sciences

1. What do you understand by the term “Human Sciences”?
2. What qualities do you think a good human scientist needs?
3. What makes you think you have them?
4. Biologically what defines us as “human”?
5. What do you know of other primates?
6. What is the point of studying the social behaviour of other primates?
7. What do you know of such studies?
8. Should gorillas have human rights?
9. Are human beings still evolving?
10. If cystic fibrosis occurs in 1 in 1600 babies, how many partnerships have the cystic fibrosis gene?
11. What is the chance that you are a carrier?
12. How has this gene managed to survive? What possible benefit could there be in having cystic fibrosis?
13. Why does cancer appear to have been so infrequent in early times and so much more frequent now?
14. How could you test if a disease such as schizophrenia is genetic?
15. A local car park is dug up and human remains are found. How would you go about extracting information from this?
16. What can we learn from a fossil skull?
17. What is the difference between a human skeleton of today and one of say half a million years ago?
18. What is the difference between a “genus” and a “species”?
19. In what ways is the current Ebola crisis of interest to a human scientist?
20. What has inspired you to read Human Sciences?
21. What have you read and what has particularly interested you?
22. If you could go on an expedition anywhere in the world to study some aspect of the human sciences, what would it be and where?

Interview questions: Law

1. What qualities does a good lawyer need to have?
2. What evidence is there that you have them?
3. What is law for?
4. What current legal issues interest you?
5. Is it ever justifiable to break the law?
6. “Law and justice are not always synonymous”. Why not?
7. What have you learnt from any work experience/ experience of the courts?
8. What are the advantages and disadvantages of trial by jury?
9. Most criminal cases are dealt with by magistrates. Is that a good idea?
10. “Good law reflects the will of the majority” Is that true?
11. (if taking AL History) Who in history would you most like to have defended?
12. What is the difference between “intention” and “foresight”?
13. What laws, if any, would you abolish?
14. How do you see yourself using your law degree?

Interview questions: Material Science

1. What qualities does a good material scientist need?
2. What is the evidence you have them?
3. What can materials science contribute?
4. What can you say about composite materials?
5. What can you say about the tiles on the outside of the space shuttle and space rockets?
6. What is PVC and what are its advantages?
7. What is forensic engineering?
8. Tribology is the study of the wear of materials due to friction. In what areas might that be relevant?
9. What can you say about graphene?
10. How do you see yourself using a degree in materials science?

Interview questions: Maths

1. Draw the graph of $\sin x$
2. Draw the graph of $1/\sin x$ ($/ = \text{over}$)
3. Draw the graph of $y = \sin x/x$
4. $y = x$ Find dy/dx
5. From first principles find d/dx times $(2x^3 + x^2 - 4)$
6. Prove that the square root of 2 is irrational
7. Explain differentiation from first principles to someone who doesn't know Maths
8. Draw $y = \sin x - \pi$ which is less than x which is in turn less than π
9. What is commutativity? What is associativity?
10. How many digits are needed to represent 1000 in binary?
11. How many digits are needed to represent 1 million in binary?
12. Given an unlimited supply of £1, £2 and 50p coins, explain as clearly as you can how you would work out how many different ways there are to make £100.
13. In terms of complex numbers what does the 2 mean in $2 + 3i$ and how would you work out $2 + 3i$?
14. What of $2+3i/2-2i$?
15. $V = 160t - 0.1t^3$
What would you get if you differentiate and integrate v ?
Draw a graph of v against t
What is the time when $v = 0$ again?
16. If x is odd, prove that $x^2 - 1$ is always a multiple of 8.
17. Is Maths a language?
18. Is Maths discovered or invented?
19. Some people talk about the beauty of Maths. Do you agree?
20. What would you say to the government to convince them not to cut the funding for university Maths?
21. How do you see yourself using a maths degree?

Interview questions: Medicine

1. Why do you want to study Medicine?
2. What are the qualities a good doctor needs to have?
3. What evidence is there that you have them?
4. What have you learnt from any medically related experiences you've had (a) about medicine (b) about yourself?
5. What do you think are the most important issues facing the health service at the moment?
6. What do you think are going to be the biggest issues over the next 20-30 years?
7. What is medical provision like in your own home area?
8. Are there any particular health issues in your home area?
9. What current medical research interests you?
10. How do you cope with stress?...with making mistakes?

11. You are appointed the lead student in a group of 5 students learning to work, discuss and diagnose together. 2 of the students were in a relationship and have broken up. The other 2 have complained to you saying that there's now tension within the group, having a negative impact on learning. What would you do?
12. You live in Sunny Town and need to get to Windy Town by 10 a.m. You have 3 options and a budget of £130 travel expenses. Option 1 gets you there on time but over budget, Option 2 gets you there on time and on budget but sea-sick from a boat journey, Option 3 gets you there late but on budget. Which is the best option and why?
13. What can both patient and doctor do to reduce the amount of money used in the NHS?
14. You have 5 organs available for transplant and 20 candidates for them. How do you decide who gets them?
15. If we were to give you £1 million for a local health initiative, what would you spend it on and why?
16. Give an example of where you've been in a team and your contribution has had a decisive effect.
17. Give an example of where you've coped in a stressful situation.
18. What is Ebola? Are we being melodramatic about it?
19. Is IVF treatment an unaffordable luxury?
20. Should we automatically harvest undamaged organs from the dead?
21. There is a virulent flu epidemic in prospect and you have only limited supplies of vaccine. How would you decide who was given it?
22. Why, when you are sitting down for a long time, is there a danger of blood clots?
23. What health advice would you think it most valuable to give to your own age group – those of Sixth Form age?
24. Why should we offer you a place to read Medicine?
25. If you're not offered a place to read medicine this year, what would you do?

Interview questions: Modern Languages

1. Linguistically what do you think are the most notable differences between your language(s) and English?
2. Do you think that in any way they reflect character differences between these native speakers and the English?
3. What has drawn you to be so interested in this language/ these languages?
4. How would you sum up the outlook/ philosophy of these nationalities?
5. What literature have you read?
6. Which for you is the most interesting period in this nation's/ these nations' history?
7. Has/ have their way of life anything to teach us?
8. How does news and the reporting of it differ there from over here?
9. How do you see yourself using a degree in languages?

Interview questions: Music

1. Is it valid to talk of "good" music?
2. Why do composers go in and out of fashion?
3. "Church music inspires, the rest simply entertains". Comment and illustrate.
4. Which contemporary composers do you find interesting and why?
5. Which contemporary musicians would you most like to write for/ work with and why?
6. Can jazz be properly explained?
7. To what extent should film music reflect the story of the film?
8. Is it wrong for conductors to look for new ways of presenting and expressing well known pieces of classical music?
9. Is there any musical merit in rap?
10. What musical forms most interest you?
11. Is "electronic music" a contradiction in terms?
12. Can "musical appreciation" be taught?
13. How can music education be improved?

Interview questions: Optometry

1. What are the qualities required to be a good optometrist?
2. What is the evidence that you have them?
3. What experience have you had and what have you learnt from it?
4. What issues are there these days when considering and advising people about eye health?
5. What would you recommend people of your own age to do to help preserve good eyesight?
6. What eye conditions are you aware of and what are the appropriate treatments?
7. Sketch and label the structure and main components of the eye.

Interview questions: Philosophy

1. What qualities do you think a good philosopher needs to have?
2. What evidence is there that you have them?
3. What is the point of philosophy?
4. Do you agree that, once philosophy becomes of any use, it ceases to be true philosophy?
5. "Philosophy talks round things but never gets to the point". Is that a fair criticism in your view?
6. What works of philosophy have interested you?
7. Can it ever be right to kill?
8. "He did it of his own free will". What does this mean?
9. "Philosophy seeks pure objectivity, which is unattainable, which renders it ultimately futile". Can you disprove this?
10. Is philosophy ageless or a reflection of its own time?
11. If A is a mammal and warm blooded, does it follow that B, also being a mammal, must necessarily be warm blooded?
12. Are words, concepts and emotions unique?

Interview questions: Physics / Engineering

1. Explain Archimedes' principle.
2. Explain Bernoulli's principle and using that explain in layman's terms how a wing works?
3. What qualities does a good physicist/engineer need to have?
4. What evidence is there that you have them?
5. What is light? Why is it that when light goes through a stained glass window it is always a particular colour?
6. Explain with diagrams and in layman's terms how a bicycle works.
7. How can we make bikes and cyclists more aerodynamically sound?
8. With the national electricity grid why do they use a high potential, which surely leads to a larger loss?
9. Why do they use ceramic supports rather than plastic ones?
10. In practical terms have we learnt as much as we can from Physics?
11. What advances are yet to be made in electrical and electronic engineering?
12. How do the following work - a digital watch, a fridge, a microwave, a jet engine?
13. What is the difference between a petrol and a diesel engine?
14. Prove to a layman that we only ever see one side of the moon.
15. Explain to a layman what quarks, neutrinos and bosons are.
16. Why does a boomerang come back?
17. Compare the avionics of a Jumbo jet to a microlight.
18. What is the "quantum" in quantum physics?
19. What is "string theory"? How many dimensions do you think there are?
20. Why does dark matter matter?
21. What is diffraction? What happens when 2 diffracted waves overlap? What could alter the magnitude of this?
22. If nuclear fusion is to become viable as a source of energy, what problems need to be overcome?

23. Show the forces working on a ladder. How do they change if I climb half way up it?
24. Why do wind turbines have three blades?
25. At what altitude (h) above the North Pole is the weight of an object reduced to half its value on the Earth's surface? Assume that the Earth is a sphere of radius R and express h as a fraction of R.
26. Explain how we know that centripetal force exists and how we can prove its presence?
27. Why does metal expand when it's heated?
28. Name 3 physicists whose work fascinates you and explain why.
29. Name 3 engineers whose work you admire and explain why.
30. What are the practical issues involved in (a) widening a motorway (b) adding another runway to an airport (c) building a wind farm?
31. How do you see yourself using a degree in Physics/ Engineering?

Interview questions: PPE

1. "Behind every form of government there lurks an oligarchy" Is that true? = the sort of issue you may get asked to think about for 15 minutes before the interview and then discuss it as part of the interview.
2. Consider the view that consensus politics leads to weakness and complacency.
3. What is the advantage of studying these three subjects together?
4. There seems to be an indifference to politics among the majority of young people. Why do you think that is?
5. How would you try to change it?
6. Should we hold more referenda?
7. What are the arguments for and against having fixed term parliaments?
8. Do you think that raising the age for leaving education to 18 is a good or bad thing?
9. Do you agree that, once philosophy becomes of any use, it ceases to be true philosophy?
10. Is "green economics" a contradiction in terms?
11. Is an ethical foreign policy a contradiction in terms?
12. What are the consequences of charging interest rates?
13. What is the point of privatisation?
14. Are Keynes' ideas relevant to the dot.com world?
15. Discuss the interaction between fiscal and monetary policy.
16. Would it be feasible to have an economy based on the service sector?
17. How can you avoid welfare becoming dependence?
18. Should we have an English Parliament?
19. Which politicians do you admire and why?
20. Enoch Powell said that all political careers end in failure. Is that right?
21. What do you see yourself doing with a degree in PPE?
22. Should it be compulsory to spend at least three years working in a career other than politics before standing for any sort of political office?

Interview questions: Philosophy/ Theology

1. What qualities do you think a good philosopher needs to have?
2. What evidence is there that you have them?
3. What is the point of philosophy?
4. Do you agree that, once philosophy becomes of any use, it ceases to be true philosophy?
5. "Philosophy talks round things but never gets to a point". Is that a fair criticism in your view?
6. What works of philosophy have interested you?
7. Can it ever be right to kill?
8. "He did it of his own free will". What does this mean?
9. "Philosophy seeks pure objectivity, which is unattainable, which renders it ultimately futile". Can you disprove this?

10. Is philosophy ageless or a reflection of its own time?
11. If A is mammal and warm-blooded, does it follow that B, also being a mammal, must necessarily be warm-blooded?
12. Are words, concepts and emotions unique?
13. Can theology and science work together or are they fundamentally at odds?
14. The new Archbishop of Canterbury is described as being “an evangelical”. What does that mean and is it a good thing?
15. Can theology ever have a practical value?
16. How do you see yourself using a degree in Philosophy or Phil. and Theology?

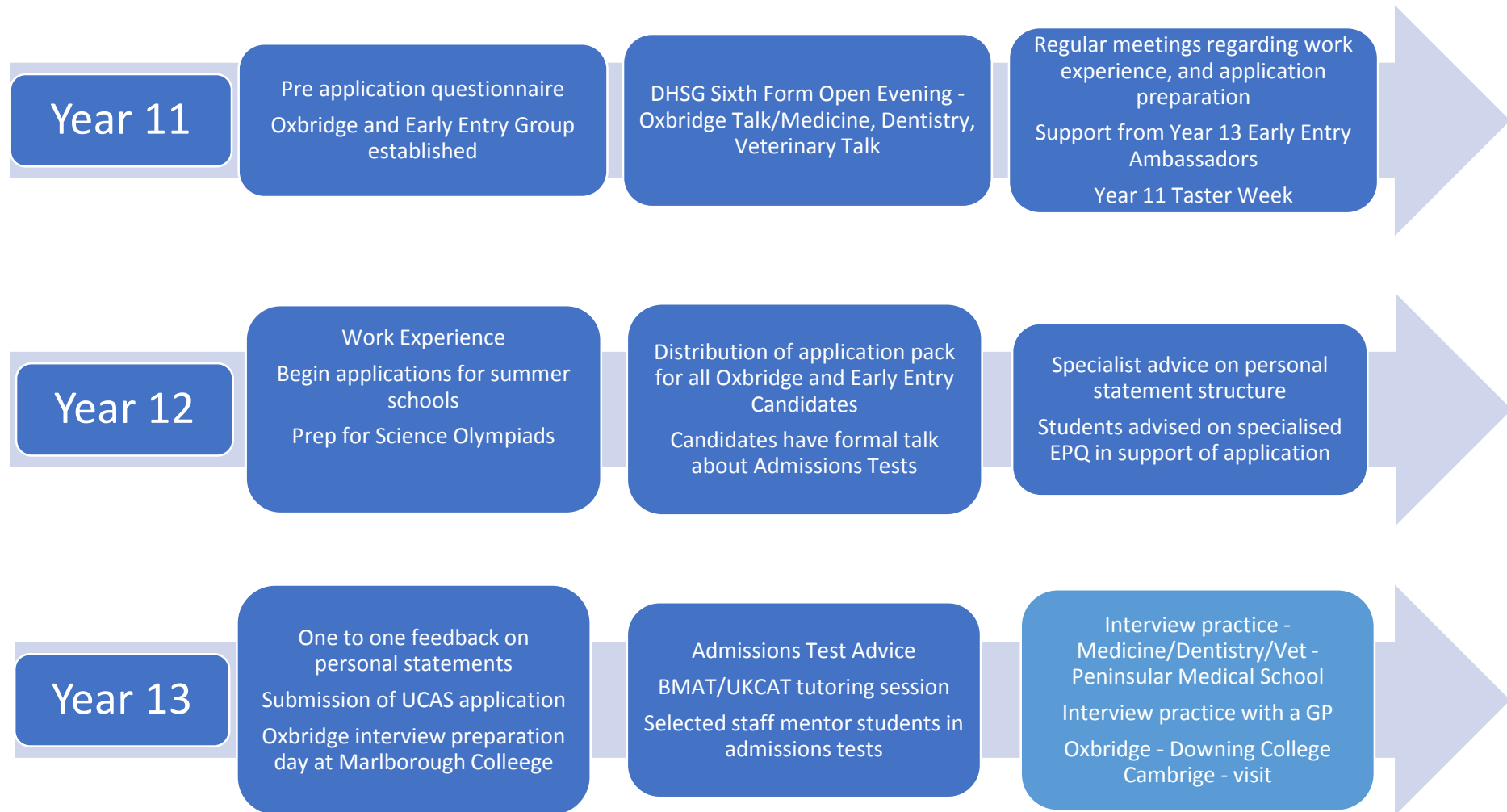
Interview questions: Psychology

1. What qualities are needed to be a good psychologist?
2. What evidence is there that you have them?
3. How would you design an experiment to show that a certain substance was addictive?
4. How do phobias arise? Are they genetically predisposed or learned behaviour?
5. Why do you think girls outperform boys at GCSE?
6. What do you think of IQ tests?
7. Most students take up Psychology thinking it’s going to be sticking electrodes in rats and torturing Yr. 9s. Actually there’s hardly any experimental work at all. How could A Level Psych be made more interesting?
8. What experiment what you most like to repeat?
9. Is there such a thing as “a criminal mind”?
10. Why are people cruel”?
11. Which historical or contemporary figures do you find the most interesting psychologically?
12. Some men kill and are called sociopaths, others as military leaders kill hundreds and have statues built to honour their memory. Does that make sense?
13. Can a clinical psychologist accept a notion of “evil”?
14. Would you expect the majority of Oxbridge undergraduates to be psychologically “normal”?
15. How do you see yourself using a degree in Psychology?

Interview questions: Veterinary Science

1. Why do you want to read Vet. Sci?
2. What qualities do you think a good Vet needs to have?
3. What evidence is there that you have them?
4. What practical experience have you had and what have you learnt from it?
5. Are organ transplants for pets justifiable?
6. What do you think of badger culling?
7. Should vets encourage or discourage the keeping of “exotic” pets?
8. What current research interests you?
9. Should vets play a role in educating the public/ children in matters of animal welfare?
10. Do conservation projects upset the natural balance?
11. Are there any conservation projects that you would like to take part in?
12. Should we recreate extinct species if we can?
13. Is it fair to refer to any animals as “vermin”?
14. Do zoos and their conservation projects result in our not taking seriously enough conservation projects in the wild?
15. Is selective breeding just genetic modification?
16. Why do animals have two of most things?

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UCAS



The Personal Statement

- Don't lie
- 4000 characters with spaces
- Takes around 5-6 drafts
- Myths – open with a quote, or don't open with a quote. (If you do get it right)
- “It was the best of times, it was the worst of times” This is my favourite quote from any book written by Thomas Hardy...

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Rough Structure

- Paragraph 1 – Why do you want to do your chosen course?
- Paragraph 2 – What subject specific skills do you have? (Reference A Levels)
- Paragraph 3 – What cross curricular skills do you have to offer? (Reference A Levels)
- Paragraph 4 – Personal achievements, hobbies and interests.
- Paragraph 5 – Conclusion

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For specialist advice on writing your Oxbridge personal statement, please contact Mr Lamb at elamb@dhsg.co.uk or Dr Morris at fmorris@dhsg.co.uk