



WHTC University application subject guides

WEMBLEY HIGH

TECHNOLOGY COLLEGE

# Psychology

This guide has been written to help support you in your application to university. It contains the following information relevant to your subject to help you decide where to apply and put together the best application that you possibly can:

- 1. Links to the top courses for this subject in the UK
- 2. Entrance requirements
- 3. Recommended A-levels
- 4. Admissions tests
- 5. Recommended reading
- 6. Interesting MOOCs
- 7. Useful additional resources
- 8. Related courses
- 9. Oxbridge example interview questions

# 1. Course links

Below are links to the top courses for this subject in the UK (according to <u>The</u> <u>Complete University Guide</u>). Click on the links to find information about what the course is like, what you'll learn, and loads of information about things such as fees and accommodation. However, remember that there are loads of other great universities out there, so check out The Complete University Guide or just google studying your subject at university.

- 1. <u>University of Oxford</u> Experimental Psychology, Psychology and Linguistics, or Psychology and Philosophy
- 2. University of Cambridge Psychological and Behavioural Sciences
- 3. University of St Andrews four year course





- 4. University of Bath
- 5. <u>Kings College London</u> a four year course with a professional placement is also offered
- Queen Mary psychology (three year course), psychology with professional experience (four year course) or psychology with year abroad (four year course)
- 7. <u>Brunel University</u> psychology (three year course) or psychology with placement (four year placement)

# **2. Entrance requirements**

Here are the grades that the university suggests you need to get in to that course, and the likely offer that they will give you.

- 1. Oxford: A\*AA
- 2. Cambridge: A\*AA
- 3. St Andrews: AAB
- 4. Bath: A\*AA
- 5. Kings College London: A\*AA
- 6. Queen Mary: AAB
- 7. Brunel University- BBB

# **3. Recommended A-levels**

Different universities may differ as to what A-levels they ask you for. Some might list one subject as 'essential', while another might list the same subject as just 'helpful', so make sure to check out the course page (under Section 1 of this document, or on the university website) to be sure what your chosen university expects!

1. Oxford: One or more sciences or maths





- 2. Cambridge: some colleges require A-Level/IB Higher Level in one or two science/mathematics\* subjects
- 3. Queen Mary: include at least one A-Level science subject of Biology, Chemistry, Maths, Further Maths, Physics or Psychology
- 4. No essential A-Levels required at the other Universities

# 4. Admissions tests

What admissions tests are you typically required to sit in addition to submitting your application? This also differs from university to university, so if your chosen university isn't on this list; make sure you check out the course page so you know exactly what you need to apply.

- 1. Oxford: All candidates must take the Thinking Skills Assessment (TSA)
- 2. Cambridge: Applicants to some Colleges are required to submit one or two School/college essays as examples of written work prior to interview
- 3. Bath: None
- 4. St Andrews: None
- 5. Kings College London: None
- 6. Queen Mary: None
- 7. Brunel University: None

## 5. Recommended reading

Reading some relevant books or articles is a really great way to demonstrate your passion for your chosen subject in your personal statement, and show how you've gone beyond the curriculum. Plus, if you really want to spend three years or more studying this subject at university, it should be enjoyable! Try taking



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notes and jotting down your thoughts as you're reading so that you can share some of this in your personal statement

**The Private Life of the Brain by Susan Greenfield:** This one is on the University of Oxford's psychology course reading list. The Private Life of the Brain explores the effects of neurological disorders and injuries, the actions of drugs, the character of thought in dreams, in schizophrenia, in reverie, and in childhood. The book offers a fascinating glimpse into the human mind and explains how physiology and experience intertwine to define an individual.

**The Little Book of Psychology by Emily Ralls and Caroline Riggs:** This is a good book to read if you want a basic overview of psychology and to learn about the key theories. The book gives an overview on the famous psychologists, theories, psychological studies and themes you need to know for your course

*The Lucifer Effect: Understanding How Good People Turn Evil by Philip Zimbardo:* Written by renowned social psychologist Philip Zimbardo, and the basis of the award-winning film The Stanford Prison Experiment, The Lucifer Effect explores why good people can be convinced to act evil and where the line is really drawn between good and bad

*Mistakes Were Made (But Not by Me) by Carol Tavris and Elliot Aronson:* Written by two social psychologists, the book deals with cognitive dissonance, confirmation bias and other cognitive biases, explaining why it is that when people make mistakes, they convince themselves they are right to spare themselves the embarrassment of being wrong.

*The Psychopath Test: A Journey Through the Madness Industry by Jon Ronson:* Bestselling journalist Jon Ronson learns how to spot a psychopath from an influential psychologist, who is convinced that many important CEOs are psychopaths.





# 6. Interesting MOOCs

Another great way of learning more about your chosen subject and demonstrating your interest is to take a MOOC, or Massive Open Online Course. These are free courses delivered by universities that you can take online. If the ones below don't take your fancy, try looking at <u>Class Central</u> - they have a huge list of different courses for every subject imaginable, and they're all free!

Introduction to Psychology (University of Toronto): This course will highlight the most interesting experiments within the field of psychology, discussing the implications of those studies for our understanding of the human mind and human behaviour. They explore the brain and some of the cognitive abilities it supports like memory, learning, attention, perception and consciousness. They will examine human development - both in terms of growing up and growing old - and will discuss the manner in which the behaviour of others affects our own thoughts and behaviour. Finally they will discuss various forms of mental illness and the treatments that are used to help those who suffer from them.

Introduction to Psychology: Developmental Psychology (Monash University): As humans, we experience three phases of development over our lifespan: physical, cognitive and social development. On this course, you'll investigate the key transitions associated with these phases of development, examining the psychological changes and exploring how and why these changes happen. You'll also consider whether development is continuous or discontinuous and to what extent development is influenced by nature or the environment, all before you explore designs and considerations for carrying out research in the discipline of psychology

<u>Forensic Psychology</u>: Witness Investigation (The Open University): Using videos of real witnesses, from behind the scenes of a police investigation, this course explores the forensic psychology behind eyewitness testimony. You'll get the chance to test your own cognitive skills and see if your investigative powers are as good as police officers', as you try to solve a crime using nothing but eyewitness evidence.

<u>Understanding Memory</u>: Explaining the Psychology of Memory through Movies (Wesleyan University): This course looks at understanding Memory. This course will show you how memory works, why it sometimes fails, and what we can do to enhance it.



# 7. Useful additional resources

There are loads of other great things out there that you might want to look at to develop your interest and strengthen your application, from videos to podcasts, to websites. Here are a few suggestions:

#### Magazines:

<u>The Psychologist</u>: Published by The British Psychological Society, the magazine aims to untangle human behaviour and understand what makes us tick. Consisting of scientific, professional, and personal articles, The Psychologist is designed to appeal to both those who are searching for academic debate on various psychological topics and those who are looking for an easier read that still packs a lot of information

<u>Psychology Today</u>: Psychology Today is not only a popular read among therapists and psychologists, but rather it attracts anyone who is interested more generally in matters involving the human psyche. Psychology Today features writers from a variety of backgrounds (psychologist, psychiatrists, medical doctors, anthropologists, sociologists, and science journalists) giving it its unique spectrum of writing that is easy to read even if you're not trained in the field.

#### Podcast:

<u>All in The Mind</u>: BBC Radio's "All in the Mind" examines various psychology topics each week, like tolerance in the brain and exercise to prevent depression. Claudia Hammond, a radio personality with college degrees in applied and health psychology, hosts a wide-variety of guests who work within the psychology field. In recent episodes, Hammond and her guests have broken down the results of the Loneliness Experiment, an experiment designed to better understand how loneliness impacts people. Topics included why young people feel the loneliest and how people can feel less lonely.

<u>Speaking of Psychology</u>: The American Psychological Association takes a deep dive into psychological research of contemporary issues. Each week, the rotating cast of hosts interviews scientists and medical professionals about a specific topic. During the episodes, the host and guest will offer advice to users





to help them overcome issues related to psychology, like using critical cognitive thinking to avoid clicking phishing e-mails.

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#### Online courses:

<u>Alison</u>: This is a website that has over 20 psychology related courses you can complete ranging from developing your emotional intelligence to applied psychology: introduction to consumer behaviour.

### 8. Related courses

At university, there are loads of different combinations of subjects that you can do. Maybe you might find one of these alternatives more interesting? A few ideas are listed below with a sample link, but in most cases there are lots of universities that offer these different combinations so make sure to have a good look around!

'Dual honours' courses are very common with psychology where you can combine psychology with another subject, e.g. a language, or philosophy etc.

In addition, there are also many more specialised psychology courses available. These might have lower entry requirements, even at the same university:

Educational psychology: e.g. University of Manchester

Neuroscience and psychology: e.g. Kings College

Forensic psychology: e.g. Kingston University

Animal behaviour: e.g. University of St. Andrews

Sport & exercise psychology: e.g. Loughborough

Social psychology: e.g. <u>University of York</u>



# 9. Oxbridge example interview questions

As you will know, applicants to Oxford and Cambridge have to take an interview in order to get a place. It is normal to get open-ended questions, as well as being given charts or pieces of writing to analyse. Here is a sample of the kind of questions you might get asked. Remember, you're supposed to not know the answer! They often deliberately choose topics that they think no one will have studied in order to make the questions fair. What they're looking for is to see how you think under pressure, and how you can present your ideas and your logic.

#### Some sample Oxford University questions:

#### **Questions with discussion:**

Interviewer: Kate Watkins, St Anne's College

Q: A large study appears to show that older siblings consistently score higher than younger siblings on IQ tests. Why would this be?

Kate: This is a question that really asks students to think about lots of different aspects of psychology, and we guide students when discussing it to think about both scientific factors such as maternal age (mothers are older when younger siblings are born - could that play a role?) and observational analysis about how birth order might affect behaviour and therefore performance on IQ tests. It's a great question because students begin from the point they are most comfortable with, and we gradually add more information to see how they respond: for example, noting that for example the pattern holds true even taking into account things like maternal age. This can lead them to think about what the dynamics of being an older sibling might be that produce such an effect - they might suggest that having more undivided parental attention in the years before a sibling comes along makes a difference, for example. Then we introduce the further proviso that the effect isn't observable in only children - there is something particular to being an older sibling that produces it. Eventually most



students arrive at the conclusion that being an older sibling and having to teach a younger sibling certain skills and types of knowledge benefits their own cognitive skills (learning things twice, in effect). But there isn't really a 'right' answer and we are always interested to hear new explanations that we haven't heard before. What we are interested in is the kinds of reasoning students use and the questions they ask about the study - what it takes into account, what it might not – that tells us about their suitability for the course. And of course it doesn't matter if you have a sibling or not - though depending on family dynamics, that can add an interesting twist to the conversation!

#### Interviewer: Nick Yeung, University College

Q: Imagine that 100 people each put £1 into a pot for a prize that will go to the winner of a simple game. Each person has to choose a number between 0 and 100. The prize goes to the person whose number is closest to 2/3 of the average of all of the numbers chosen. What number will you choose, and why?

Nick: I like this as a question for Experimental Psychology because answering it brings in a range of skills relevant to the subject. Partly it involves numerical and analytical skills: the question implies that the answer will be 2/3 of some other number, but which one? Some people's first guess is 2/3 of 100, i.e., 66 or 67, in which case I'd ask them what numbers everyone else would have to pick for them to win. In this case, everyone else would have to choose 100, which is unlikely. More often people first guess 2/3 of 50 (= 33), which seems intuitively more likely. At this point, and usually without prompting, the recursive nature of the solution becomes clear: If there is good reason for me to choose 33, then maybe everyone else will choose 33 too, in which case I should choose 2/3 of 33... but then everyone will think this and choose 2/3 of 33 too, so I should choose 2/3 of that number. and so on. Assuming everyone thinks like this, then everyone will eventually settle on 0 as their choice - this is the formal 'game theory' solution. At this point, I'd ask guestions that bring out the candidate's broader reasoning skills in terms of thinking how we could define what it is rational to do in this game. Game theory gives one definition of rationality, but does it give a plausible winning answer - that is, is it likely that everyone, all 100 of them, will go through exactly the thought process we've just described? If not, is 0 really a rational answer? The question also has a psychological angle in thinking about reasons for people's behaviour and choices: Will everyone put in the same effort? Will everyone be motivated to win? When I've used this question in live audiences, sometimes people say they'd pick the number 100 just because it'd throw a spanner in the works for everyone playing the game rationally. How should this affect your choice of answer? What if the stakes were increased so that everyone put £1000 into the pot at the start?

What's clear from all of this is that we're not looking for a single answer. Rather, we're interested in seeing how people think through a problem, figure out what are the relevant factors, respond when new information is provided, and so on.

Interviewer: Nick Yeung, University College

Q: An experiment appears to suggest Welsh speakers are worse at remembering phone numbers than English speakers. Why?

Nick: This would never be given as a one-line question out of context – it is one of a set of questions I ask students after showing them a psychology experiment case study with data about short-term memory in English and Welsh speakers. The key point is that numbers are spelled differently and are longer in Welsh than in English, and it turns out that memory (and arithmetic) depend on how easily pronounced the words are. I would hope the student would pick out this connection between memory and how easy to spell or pronounce a word is, and how that relates to spelling and pronunciation in Welsh versus in English. The interview is structured so that further hints and guidance are provided if the student doesn't immediately see this problem with the design of the experiment described in the problem sheet. This basic question can then lead to interesting discussion about the role of language in other cognitive abilities, such as memory or maths. This question is meant to be deliberately provocative, in that I hope that it engages candidates' intuitions that Welsh people aren't simply less clever than English people!

Interviewer: Dave Leal, Brasenose College

Q: What is 'normal' for humans?

Dave: We're keen to point out to potential psychology applicants that primarily psychology is the study of normal human beings and behaviour; in part this is because of a suspicion that potential undergraduates are attracted to psychology to help them study forms of human life they find strange (neuroses, psychoses, parents). There are various ways that this question might be approached, but some approach that distinguishes the normal from the statistical average is a good start. Issues such as whether normality is to be judged by 'biological' factors that might be held to be common to humans, or whether it's normal within a particular culture or at a particular period of history, might also be worth addressing. We are mainly looking for a line of thinking which could be developed and challenged. Once candidates show a defensible



position regarding what might serve as the basis of normality, we extend the discussion to (for example) the relation between abnormality and eccentricity.

Interviewer: David Popplewell, Brasenose College

Q: Why do human beings have two eyes?

David: This question may result from a more general discussion about the human senses. It can develop in a number of different directions, partly depending upon the knowledge and expertise of the interviewee. For example, two eyes are important for three-dimensional (3D) vision. Why is it that we can still see in 3D when only looking through one eye? What determines the optimum position and distance between the two eyes? Why is it that we see a stable view of the world even though we are constantly moving our head? How can an understanding of mathematics, physics and biology help us explain 3D vision? The discussion may develop into a consideration of the different senses and the role they play in us interacting in our environment, including interacting with other people, and the nature of perceptual experience.

Interviewer: Miles Hewstone, New College

Q: Should interviews be used for selection?

Miles: This question could come out of a discussion of errors and biases in human judgement – that we sometimes overlook some information, while attaching too much weight to other information; and we are often over-confident about the decisions we make. What sources of information might be used to select, for example, Oxford students? Why? How do we know that information is valid? What does validity even mean? Once we have chosen what information we will consider, how can we combine it? And what are we trying to predict? (What is the criterion?). How would you design a research study to see how well different sources of information do, in fact, predict how well we can select Oxford students? What would your study need to measure? Would there be a control group? If so, what kind of control group? What would you need to control for?

#### Short questions:

• Can addiction be rational?





- How would you design a scientific experiment to show that a certain substance is addictive / that animals only see in black and white etc.?
- Are humans the most intelligent species on the planet?