

# Jesus College, Oxford



## Subject Notes: EXPERIMENTAL PSYCHOLOGY

### *Academic Staff*

**Dr Nir Shalev** is a Lecturer in Experimental Psychology at Jesus College. His research interests are in Attention and Time Perception. He uses behavioral experiments and electrophysiology in human participants. His research involves working with neurotypical (children and adults), neurodivergent (e.g., children with genetic syndromes), and individuals with neurological damage (e.g., stroke survivors and Parkinson's)

### *About the Course*

Psychology at Oxford is a scientific discipline involving the rigorous formulation and testing of ideas. It has been defined as the science of human behaviour and it seeks to understand the mind and behaviour through experimentation, observation and measurement. Insight and intuition are certainly important, but they are not sufficient. The scope of the subject is very wide. It addresses questions such as: how do we perceive colours? How do children acquire language? What predisposes two people to get on with each other? What causes schizophrenia? What is unique about the human brain? What causes prejudice? Popular conceptions of Psychology based on accounts of Freud or the belief that Psychology is basically about mental illness or self-development are very misleading guides to contemporary Psychology.

Undergraduates' activities in Oxford are divided between University and college. In this respect Psychology is like other subjects. Lectures and practical classes are arranged on a University basis and students from all the colleges attend them. Similarly, examinations are set by the University. Tutorial teaching is organized by the college. For each tutorial, undergraduates are expected to write critical essays on a set of recommended readings. These essays are discussed, either singly or in pairs, with the tutor. Because Oxford terms are short, undergraduates are expected to do a good deal of vacation reading.

You can read Psychology at Jesus College in two ways: either in a Joint Honour School with Philosophy and/or Linguistics, or else as a subject on its own in the Honour School of Experimental Psychology. In either case, you choose from the same list of topics and attend the same lectures and tutorials.

### *Prelims*

You will spend the first two terms doing three introductory courses, on which you will be examined at the end of your second term in Oxford (an Examination called "Prelims"). You will, of course, have to pass this examination before commencing work for finals (called "Schools"). If you intend to read Experimental Psychology, you will offer three Prelims papers. The Psychology paper in the Prelims course attempts to introduce people who have had little opportunity to study the biological bases of the subject to some of the larger questions about perception, cognition, human development, individual differences, and social interaction, which have preoccupied experimental psychologists.

It will also be advisable for you to take the Statistics paper during the Prelims course. Some knowledge of elementary probability theory and of statistics is needed if the arguments and models used in Psychology are to be understood. A basic understanding of mathematics, e.g. GCSE level, is assumed for the statistics course, but we take into account the fact that you may not have carried out formal work in mathematics for some time. If you do not take the Statistics at Prelims you will, in any case, have to take a similar exam (the qualifying exam in Statistics) before you can take Schools (your final examination).

It is usually advisable to take Neurophysiology as the third option. The Neurophysiology paper is an introductory one, intended for students without Biology A-level.

### *The Final Honour School*

During terms 3-5, you will study a number of “core” topics in Psychology. Each core topic consists of 16 lectures, 2 tutorials and 2 classes. These will be followed by a second year examination, which counts towards your final degree class.

#### Core Topics:

##### Biological Foundations

- Brain and Behaviour
- Biology of Learning and Memory
- Psychological Disorders

##### Human Experimental

- Perception
- Memory, Attention and Information Processing
- Language and Cognition

##### Social, Developmental and Individual Differences

- Social Psychology
- Developmental Psychology
- Individual Differences

A course in Statistics and Experimental Design is taken alongside these core topics.

#### *Advanced Topics:*

During the final part of the course you will be able to select from a number of advanced topics, covering the range of psychology, e.g. Aphasia and Language Disorder; Brain Mechanisms in Voluntary Action; Development of the Imagination; Neural Networks and Brain Function. The specific topics on offer vary each year, to take into account recent developments in psychology. At this stage, you will also carry out your own research project and write a library dissertation (if you choose to).

#### *Practical Work:*

As this is a department of experimental psychology, you will not learn all your psychology through tutorials and lectures. You will be required to perform experiments in psychology throughout your course.

These practical classes prepare you to perform your own piece of research in your final year (compulsory for Experimental Psychology students).

Students work on a wide range of topics, for example: reading problems in children; the personality of heavy smokers; improving one's sporting skills; and so on. Your final year research project could well form the basis for original research which you may pursue after graduating.

While previous experience of computers is not necessary, computer-based material plays an important part in many of the practicals. There is also the opportunity to learn about the role of computers in psychology

in more depth by taking optional courses, and the University offers a full range of short general computing and Information Technology courses. The Department has a well-equipped computing room providing general computer facilities for word processing, data analysis, etc.

### *Joint Schools*

- **Psychology**, Philosophy and Linguistics (PPL)

### *Admissions*

In a total College entry of about 100 undergraduates, 4 are offered places in a typical year to read Experimental Psychology or the Joint School of PPL. Candidates are selected on the basis of academic record (e.g. GCSEs) and potential, as shown by their UCAS reference, performance in written tests and in interviews if shortlisted.

**Academic requirements:** Offers made to candidates will be conditional upon A-level results (A\*AA) or equivalent qualifications. There are no formal restrictions set on the A-level subjects which a candidate should have studied although it is highly recommended that a candidate for Experimental Psychology should have studied one or more science subjects (which can include Psychology) and/or Mathematics at A-level, or equivalent international qualifications. International and European Baccalaureates and other comparable international qualifications are also welcome.

We are looking for people who are or will become literate scientists; pure science and Mathematics at A-level plus good performance in Arts subjects at GCSE is one route to this goal, but a combination of pure arts at A level, including Mathematics, is also acceptable. Candidates are expected to have an A/7 or above in GCSE Mathematics (where GCSEs are taken). **If you have less than an A/7 at GCSE maths, then you should consider taking Maths AS-level in addition to your other A-levels.** That will reassure us that you are numerically competent.

There is no need to have studied Psychology formally before coming up, but it is important to know something about the subject. This can be done by taking an AS-level in the subject, attending classes and lectures that are organised for A-level students or those that are open to the general public, and reading some recent psychology books. It is obviously important for you to know what you are letting yourself in for before making your application.

**Written test:** All candidates must take the **Thinking Skills Assessment (TSA)** in schools on **4 November 2020**. The TSA is administered by Cambridge Assessment Admissions Testing, and candidates will need to register by **15 October 2020**. Further information about the TSA can be found at: <http://www.ox.ac.uk/admissions/undergraduate/applying-to-oxford/tests/tsa>

**Written work:** No submitted written work is required for this course.

**Interviews:** In the interview, tutors are keen to see whether you can evaluate evidence; are able to consider issues from different perspectives; have a capacity for logical and creative thinking.

**Deferred Entry:** You should be aware that applicants who are offered places for deferred entry will generally be among the strongest of the cohort for their subject. We would not usually offer more than one deferred place per subject in order not to disadvantage the following year's candidates. You must apply for deferred entry at the time of application to Oxford: you cannot change your mind after an offer has been made. Please refer to departmental web sites for subject-specific advice. In some cases, an applicant for deferred entry may be offered a place for non-deferred entry instead. If you require any further advice, please contact the Admissions Officer via [admissions.officer@jesus.ox.ac.uk](mailto:admissions.officer@jesus.ox.ac.uk)

### *Postgraduate Studies and Careers*

The Department of Experimental Psychology at the University of Oxford has a longstanding tradition of excellence in research recognised internationally. The following degrees are offered at postgraduate level:

- DPhil or MSc by Research in Experimental Psychology
- MSc in Psychological Research
- MSc or Four Year DPhil in Neuroscience

For most undergraduates, Psychology is a non-vocational choice. Psychologists tend to have some knowledge of statistics and of using computers, together with a scientific training and competence over a wide range of subject areas. Because of these features, it seems to be highly regarded by a wide range of prospective employers.

However, a number of graduates go on to further qualifications in clinical, educational or occupational Psychology. A small percentage carry on to do independent research as a prelude to careers in teaching and research at a University, and there are also a limited number of vacancies in applied research of various kinds in laboratories attached to industrial organisations and government research establishments.

### *Preliminary Reading and Further Information*

The British Psychological Society (BPS) is the professional body in the UK representing psychology and professional psychologists. The BPS also publishes a wide range of material, from career guidance to research journals.

The undergraduate courses in Oxford have been structured to ensure recognition by the BPS as conferring the Graduate Basis for Registration. Such recognition is necessary for entry to most postgraduate professional courses in Psychology which are practice- rather than research-based in their training mode. Students on a first degree course in Psychology are entitled to become Student Members of the BPS, which can have advantages for students who wish to go on to professional training in Psychology.

Further information can be obtained from the British Psychological Society ([www.bps.org.uk](http://www.bps.org.uk)).

### Suggested Reading: General

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| Hayes, N. (1998)   | <i>Foundations of Psychology: an Introductory Text.</i> (Nelson)            |
| Eysenck, H.J. & Eysenck, M.E. (1995)   | <i>Mind Watching</i> (Prion)  |
| Atkinson, R. et al (1999)  | <i>Hilgard's Introduction to Psychology</i> (Thomson Learning)              |
| Gross, R.D. (2002)   | <i>Psychology: The Science of Mind and Behaviour</i> (Hodder and Stoughton) |
| Gleitman, H. et al (1999)  | <i>Psychology</i> (Norton)  |
| Pinker, S. (1997)  | <i>How the Mind Works</i> (Allen Lane)                                      |
| Gerrig, R. J., Zimbardo, P. G., Campbell, A. J., Cuning, S. R., & Wilkes, F. J. (2015) | <i>Psychology and life.</i> Pearson Higher Education AU                     |

### Suggested reading: Introduction to Specific Subjects

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| Hubel, D. (1988)      | <i>Eye, Brain and Vision</i> (W.H. Freeman)                     |
| Gregory, R. (1998)    | <i>Eye and Brain</i> (paperback)                                |
| Baddeley, A. (1993)   | <i>Memory: a User's Guide</i> (Penguin)                         |
| Donaldson (1978)      | <i>Children's Minds</i> (Fontana)                               |
| Greenfield, S. (1997) | <i>The Human Brain: a Guided Tour</i> (Science Masters)         |
| Hewstone, M. (2016)   | <i>An introduction to Social Psychology</i> (John Wiley & Sons) |

Suggested reading: Statistics

If you have little or no statistical background, the following are recommended:

Field, A. (2009)

Agresti, A., & Finlay, B. (2009)

*Discovering statistics using SPSS.* (Sage publications)

*Statistical methods for the social sciences*

Further information about reading Experimental Psychology at Oxford can be found on the department website at: [www.psy.ox.ac.uk](http://www.psy.ox.ac.uk)

Information about Admissions is available at: <http://www.ox.ac.uk/admissions/undergraduate/courses-listing/psychology-experimental>

*Contact details*

If you have any questions about our entrance requirements, or about applying to study at Jesus College, please contact the Admissions Officer:

Tel: 01865 279721

Email: [admissions.officer@jesus.ox.ac.uk](mailto:admissions.officer@jesus.ox.ac.uk)

Web: [www.jesus.ox.ac.uk/study-here](http://www.jesus.ox.ac.uk/study-here)

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