Aims of course

The aim of this module is to provide the student with practical, hands-on experience of a number of laboratory techniques and research methodologies that are employed by academics within the School of Psychology and Neuroscience. Across the course, the student will experience a wide variety of methods and research practices. By the end of the course, the student will be able to appreciate the possibility of taking an integrative approach to tackle research questions.

Course structure

The course consists of 5 laboratory placements (approximately 5 hours each). Each placement begins with a two hour introductory session where a Principal Investigator (PI) will introduce their research area by focusing on a paper that they have authored. This session will explore the ‘Story of the Paper’, introducing the rationale for the study, the experimental methods, the publication process and the impact of the work on their field. The student will also be provided with information about on-going research. Following this the student will spend time (3 hours in total) in the laboratory of the PI. Students will have the opportunity to observe data collection and/or gain basic training in the specific techniques used by the PI. The student might also be involved in data collection that is taking place during the session, although this will vary between laboratories.

Sessions will be provided from PIs within the main research areas in the School: Human Cognition, Neuroscience, Origins of Mind, Perception, and Social Psychology (as described on the School’s research webpage, http://www.st-
andrews.ac.uk/psychology/research/). Students can choose which placements they wish to attend from the list provided on Moodle. The 5 sessions may occur at any point across the two semesters, depending on availability of PIs, but at least 1 of the 5 sessions will normally occur in Semester 1.

*Example* placements available last year (full details of all current placements will be available on Moodle by week 1).

**Dr Akira O’Connor:** O’Connor, A.R., Han, S. & Dobbins, I.G. 2010. The inferior parietal lobule and recognition memory: Expectancy violation or successful retrieval? The Journal of Neuroscience, 30(8), 2924-2934.

**Dr Barbara Dritschel:** Dritschel, B., McClintock, S. & Beltsos, S. 2013. An ‘alternating instructions’ version of the Autobiographical Memory Test for assessing autobiographical memory specificity in non-clinical populations. Memory, in press.

**Dr Karen Spencer:** Spencer K.A., Buchanan, K. L., Goldsmith, A. R. & Catchpole, C. K. 2003. Song as an honest signal of developmental stress in the zebra finch (Taeniopygia guttata). Hormones and Behavior 44, 2, p. 132-139


IMPORTANT NOTE: Students must choose their 5 placements and email their selection to kas21@st-andrews.ac.uk by end of September. This allows Karen to make sure all the PIs know who is coming to their sessions.

**Introductory session** – this will be conducted by Karen in the first weeks of the course. It’s a chance to talk about the course and assessment and it is always scheduled prior to the start of any PI sessions. This year the intro session will be held at the following time:

12-1pm 24th September – office 2.53 in Psychology.

The following sessions will also be held by Karen (dates to be confirmed on Moodle by week 1)

- How to write an essay on impact
- How to write a research proposal
- How to write a methodological critique paper
Each session will be 1 hour long and scheduled within the timetable to allow all students to attend. Slides will be placed on Moodle.

**Assessment**

This 15-credit module is assessed entirely by Continuous Assessment, consisting of three written pieces of work: three equally weighted 1500 word reports. This is a maximum word limit which does not include references or figure legends. The student can choose the sessions from which the pieces of work will be produced and the three reports can be submitted in any order. Students cannot base two of the assessments on a single session. Students also cannot produce essays based on the work of PIs that did not contribute a teaching session. Students MUST submit one of each assessment type A, B and C. It is not allowed to write two type B assessments for example.

**Assessment A – Essay.** Each essay needs to briefly describe the paper that the initial session was based upon and then go on to discuss and evaluate the impact of the work. There are details of how to look at impact in the introductory session file that Karen will give at the start of the course.

To get a good mark you need to:

1. Concisely describe the paper.
2. Evaluate the impact of the paper on the field/society – if the paper is new then tell us what impact the paper could have in the future.

**Assessment B – Research proposal.** This proposal needs to utilise the methodology that was described in the intro and laboratory sessions as a basis for a novel research proposal that addresses a current question in the relevant research area. The proposal should introduce the research area and question they pose then describe the proposed study with an explanation of how the methodology would be used and the pros and cons of using such a method.

**Assessment C – Critique of methodology.** This report should describe the method in detail and discuss all pros and cons of the methodology, evaluation of the methods and how they are used is required and outside reading will be required to give a good critique of the methodology.

Full details of all assessments will be given in the sessions run by Karen as well as further in-depth information provided on Moodle at the start of Week 1.

**You must submit** one assessment (A, B or C) **in semester 1 – deadline 19th November 2018** and the remaining two in **semester 2 – deadline 29th April 2019.**
Reading material

Students will be provided with suggested reading material by each PI via Moodle or via hard copies. Students will be required to carry out additional, unsupervised reading for their assessments. No feedback on student essays will be provided by PIs prior to submission.

Transferable skills/ Graduate attributes

During the course you will engage with primary and secondary sources of material, as well as directly with current research and gain experience of relevant skills. You will be encouraged to demonstrate reflective learning, creativity and independent thought, as well as hone your time management and analytical skills. This course will also help you to develop several transferable skills, including the ability to demonstrate original thought, construct a coherent argument, and apply critical analysis and evaluation.

Module controller

Dr Karen Spencer (kas21@st-andrews.ac.uk)