**Course Structure, Aims and Objectives:**

The course has three main parts, dealing with three major themes. Part 1 (GH1) is concerned with the application of theories of perception and memory in a criminological context. Topics covered will include the following. What is wrong with face recall systems such as Photofit, Identikit and E-fit? How reliable are eyewitnesses' accounts of what they have seen, and their identifications of faces they have encountered? Do children make reliable witnesses, or is their testimony not to be trusted?

Part 2 (GH2) is concerned with the application of psychology theories in the context of driving. How do theories of perception and attention explain why some road accidents occur? What effect does a driver's age have on their risk of having an accident, and why? How does using a mobile phone or sat-nav system affect someone's driving?

Part 3 (EF) covers applied issues in the area of language and communication. The interesting questions are how language influences our understanding of the world. How does a specific wording influence our judgments? Why is non-verbal communication so powerful? Is there a difference between face-to-face interactions and computer-mediated communication? How does the internet influence the way we talk to each other? Are computers useful for analyzing what people say or for finding out if someone is lying?

**Course Learning Outcomes:**

By the end of the course, you should have a sound knowledge of contemporary theories and research on perception, memory, attention and language, and of the conceptual and methodological issues involved in applying these theories to real-life situations. You should be able to demonstrate an ability to evaluate the adequacy of empirical research on the topics covered, particularly in terms of its internal and external validity.

**Prerequisites:**

No previous knowledge assumed, although some familiarity with cognitive psychology and research methods would be useful.

**Course contact information:**

Convenor: Graham Hole.
Location: Pevensey 1 2B24.
Telephone: 01273 606755, extension 42426; but don't bother, I never answer it - email me instead.
Email: g.hole@sussex.ac.uk
Lecturers on the course: Graham Hole and Evelyn Ferstl.
**Teaching Methods:**

Weekly lectures in weeks 2-9, plus seminars in weeks 2, 4, 6 and 8. There are three sections to the course: GH1, GH2 and EF, as shown in the table below:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Section of course</th>
<th>Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Week 2  Introduction: issues in doing applied research</td>
<td>GH1</td>
<td>Mon</td>
</tr>
<tr>
<td>2</td>
<td>Week 2  What's wrong with systems such as Photofit and E-Fit?</td>
<td>GH1</td>
<td>Fri</td>
</tr>
<tr>
<td>3</td>
<td>Week 3  Problems with identification parades</td>
<td>GH1</td>
<td>Mon</td>
</tr>
<tr>
<td>4</td>
<td>Week 3  Factors affecting the reliability of eyewitness testimony</td>
<td>GH1</td>
<td>Fri</td>
</tr>
<tr>
<td>5</td>
<td>Week 4  Children as witnesses</td>
<td>GH1</td>
<td>Mon</td>
</tr>
<tr>
<td>6</td>
<td>Week 4  Interview techniques</td>
<td>GH1</td>
<td>Fri</td>
</tr>
<tr>
<td>7</td>
<td>Week 5  Perceptual and attentional factors in driving</td>
<td>GH2</td>
<td>Mon</td>
</tr>
<tr>
<td>8</td>
<td>Week 5  Effects of age on driving performance: youth</td>
<td>GH2</td>
<td>Fri</td>
</tr>
<tr>
<td>9</td>
<td>Week 6  Effects of age on driving performance: old age</td>
<td>GH2</td>
<td>Mon</td>
</tr>
<tr>
<td>10</td>
<td>Week 6  Stressors and driver performance: fatigue</td>
<td>GH2</td>
<td>Fri</td>
</tr>
<tr>
<td>11</td>
<td>Week 7  Stressors and driver performance: in-car information systems</td>
<td>GH2</td>
<td>Mon</td>
</tr>
<tr>
<td>12</td>
<td>Week 7  Non-verbal communication</td>
<td>EF</td>
<td>Fri</td>
</tr>
<tr>
<td>13</td>
<td>Week 8  Language in a forensic context: lies and deception</td>
<td>EF</td>
<td>Mo</td>
</tr>
<tr>
<td>14</td>
<td>Week 8  Language in a forensic context: jury decision-making</td>
<td>EF</td>
<td>Fri</td>
</tr>
<tr>
<td>15</td>
<td>Week 9  NO LECTURE</td>
<td>---</td>
<td>Mon</td>
</tr>
<tr>
<td>16</td>
<td>Week 9  Dialogue and group discussions</td>
<td>EF</td>
<td>Fri</td>
</tr>
<tr>
<td>17</td>
<td>Week 10 Computer-mediated communication: texting and e-mail</td>
<td>EF</td>
<td>Mo</td>
</tr>
<tr>
<td>18</td>
<td>Week 10 NO LECTURE</td>
<td>---</td>
<td>Fri</td>
</tr>
</tbody>
</table>
Course Requirements:

This course will be assessed by a short coursework essay (which accounts for 30% of the overall mark, and which has to be submitted in week 8 of the autumn term) and a longer extended essay (accounting for 70% of the overall mark). You also have to do a presentation, but this is not formally assessed.

(a) The coursework essay:
You have to write an essay based on one of the topics covered in the course. The maximum length of this essay is 1,500 words. Find a journal article that is relevant to one of the topics covered in the course, e.g. "driving and age". Summarise the article in your own words; criticise its rationale, methods and statistics; and discuss related articles and the study's broader implications. We are looking for evidence that you can understand the article, describe clearly what it shows, and - most importantly - that you are able to evaluate its methods, conclusions and overall contribution to knowledge in that area. A photocopy of the chosen article must be attached to the essay when it is submitted.

(b) The extended essay:
This is similar to the coursework essay, except that we want you to critically review two journal articles instead of one. These should be based on the same course topic. Summarise each article in your own words, and then compare and contrast them, in terms of their rationales, methods, statistics, conclusions, etc. The maximum length of this essay is 3000 words. The deadline for submission of this essay will be listed on Sussex Direct in due course.

For both essays, we are looking for evidence that you can understand the articles, describe clearly what they have shown, and - most importantly - that you are able to evaluate them. For both essays, merely re-describing the chosen articles will result in a very low mark - you must review them critically. Avoid plagiarism - read the University guidelines before submitting your essays and ensure everything is written in your own words and that all ideas are appropriately attributed to their originators. ALL instances of plagiarism will be reported to the University for disciplinary action to be taken. Photocopies of the chosen articles must be attached to one copy of the essay when it is submitted.

(d) One presentation:
Each student will do one presentation during the term. Find an article for yourself (using PsycInfo, etc.) that is relevant to one of the course topics. Summarise the article and criticise it. (Criticisms might include problems of interpretation of the results, problems of design, or problems concerning the ecological validity of the research - the extent to which it can validly be generalised to real life). You will have a maximum of 10 minutes in which to do this. You will be expected to use Powerpoint for your presentation. The presentation is unassessed, but a highly unfavourable end-of-term report will be produced for anyone failing to do it; it's also good practice at using the kinds of skills that will be assessed by the two essays. The presentation can be on one of the articles used for the coursework essay or the extended essay.
IMPORTANT - Constraints on essay topics:

1. For both essays, the articles chosen should not be ones that are on the reading list: they should be ones that you have found for yourself. THEY MUST HAVE BEEN PUBLISHED AFTER JANUARY 1st 2009. ESSAYS THAT DO NOT CONFORM TO THIS RESTRICTION WILL RECEIVE A MARK OF ZERO.

2. The course is effectively in three sections (as shown by GH1, GH2 and EF in the table). The extended essay and the coursework essay must be based on different sections of the course. For example, if your coursework essay is based on an article relating to GH1 then your extended essay must be based on two articles from a different part of the course (either GH2 or EF).

Reading List:

Unfortunately there is no single textbook that covers all of the topics satisfactorily. To get a general, but rather sketchy overview of the amazing variety of topics studied in Applied Cognitive Psychology have a look at


For a more in-depth treatment of some of the topics, including good explanations of how cognitive theory is used to study applied issues, read:


And finally, for those who are particularly interested: a very comprehensive book covering a wealth of topics is


More informative than these books are the specific references for the parts of the course. Many of the references below are journal articles, whose introduction and discussion sections will provide you with useful background material on the topic concerned. They are all available from the library, either in paper form (if they are older articles) or electronic form (generally post-1995 or so). You are not expected to read everything on this list! (I doubt that you would have the time to do so, even if you tried). Be selective in your reading; most of the titles are self-explanatory.

Section GH1: Psychology and the Eyewitness:

General:
Hole, G. and Bourne, V. (2010). *Face Processing: Psychological, Neuropsychological and Applied Perspectives*. Oxford: O.U.P. Chapters 1, 2, 11, 12 and 13 are highly relevant to the topics in this section.

Excellent reviews of many of the topics covered in this section can be found in:


Also worth looking at:


**What’s wrong with systems such as Photofit and E-Fit?:**

*Face reconstruction systems such as E-Fit are notoriously poor at producing recognisable likenesses of suspects’ faces. This lecture looks at the reasons why this is so.*


**Problems with identification parades:**

*Misidentifications by witnesses are one of the leading causes of miscarriages of justice. They are especially likely if the witness and the suspect come from different races. Why do misidentifications occur, and how might they be prevented?*


**Factors affecting the reliability of eyewitness testimony:**

*Eyewitnesses’ memory for events can be quite unreliable. This lecture looks at some of the factors that might account for why this is so.*


**Children as witnesses:**

*Can children ever be reliable witnesses? If not, why not? At what age could juries begin to have faith in their testimony?*


**Section GH2: the Psychology of Driving:**

**General:**


**Perceptual and attentional factors in driving:**

A knowledge of the psychology of perception may help to explain some of the accidents that drivers have. This lecture will focus on the reasons for so-called "look but failed to see" collisions at intersections - to what extent are they due to drivers’ cognitive limitations, as opposed to problems with their eyesight?


**Effects of age on driving performance - youth:**

*Drivers under the age of 25 are far more likely to have an accident than any other age-group. Is this due simply to inexperience, or are there other factors at work too?*


**Effects of age on driving performance - old age:**

*Older drivers are a much-maligned group, popularly perceived as being a danger to themselves and other road-users due to their myopia and incompetence. This lecture reviews research that questions these stereotypes. *


**Stressors and driver performance - fatigue:**

*Fatigue and sleepiness (no, they are not necessarily the same thing) are major causes of accidents. What effect do they have on a driver's performance, and how can they counteracted?*


**Stressors and driver performance - in-car information systems:**

*Cars are becoming cluttered with new technology: mobile phones and satellite navigation systems are already here. Very soon, even cheaper cars will have easy mobile internet access, collision avoidance systems and enhanced vision systems. Can drivers safely use these gadgets at the same time as driving?*


**Section EF: Language and Communication:**
Non–verbal communication:

Communication relies on many channels, not only the verbal content. Eye contact and facial expressions, gestures, body posture and orientation are informative tools for understanding communicative intention.


Individual articles:


Language in a forensic context: Lies and Deception

This lecture will give an overview of the language of lying. Do liars use different words? Is what they say as plausible as the true stories? Do listeners pick up these cues so that they can distinguish truth from lie?
A very comprehensive and well-written book providing a readable overview is

Vrij, A. (2000). *Detecting lies and deceit. the psychology of lying and the implication for professional practice*. Chichester, GB: Wiley. (BJ 1421 VRI – 16 copies)

**Individual articles:**


**Language in a forensic context: Jury decision making**

*If you are especially interested, have a look at the following – rather comprehensive – books:*


**Individual articles:**


**Dialogue and group discussions**

*Most cognitive psychology and psycholinguistic studies are concerned with reading or speech in an experimental context. In real life, though, we communicate with others. In this lecture, we will look at psychological research about group discussions and dialogues. The focus is on how language is used in different situations, how we language is adjusted to the needs of our conversation partners. Two overview articles providing some theoretical background are:*


**Individual research papers:**


Computer-mediated communication:

We are all so much used to texting on mobile phones, to writing e-mails and to using the internet that communicating without these tools is almost unthinkable. In this lecture, we will address questions such as: Does it make a difference whether we talk to a real person or use computer-based channels? What are the factors influencing whether we perceive communication as directed towards a partner? Are there systematic differences in the styles of communication depending on what or who we talk to?

An interesting source for articles on all aspects of this topic is the Journal of Computer-Mediated Communication. It contains papers using a variety of methodologies, including some experimental psychology.

A new book on texting:


Or a shorter version:


A more comprehensive account of CMC is the following book:


And again, a shorter descriptive overview:

http://extra.shu.ac.uk/daol/articles/v1/n1/a3/thurlow2002003-paper.html

Individual articles:


