CONSCIOUS AND UNCONSCIOUS MENTAL PROCESSES

C8828

Spring Term 2016-17

**Module Convenor:** This module is organised by Prof Zoltan Dienes, a member of the School of Psychology. You are welcome to direct queries concerning the module to Zoltan during his student feedback sessions in Pev1 2B2 (Tuesday and Thursday 9:30-10:30 am), or by email (z.dienes@sussex.ac.uk).
**Type of Module:** Conscious and unconscious mental processes is an optional undergraduate final year module that can be taken by students on any of the Psychology degrees or on the Neuroscience degree. It is also available to people taking the COGS IDPE and Visiting and Exchange students from any School.

**Syllabus:** This module will explore the existence and nature of conscious and unconscious mental processes in the domains of learning, memory, perception, and volition.

**Module Objectives:** By the end of the module you should be able to:
1) Evaluate the relevance of empirical evidence concerning the conscious or unconscious status of mental states.
2) Discuss the contribution of different domains or disciplines (e.g. psychology, philosophy, computational modelling, or neuroscience) to understanding the difference between conscious and unconscious processes.

**Module Requirements and Assessment:**
The assessment is by two assignments, to be submitted to via e-submission, the first assignment is due on Wednesday in Week 10 and the second in the second Assessment Period.

The first assignment contributes 33% to the overall mark. The second assignment, to be submitted as one document, consists of two parts, equally weighted. The first assignment and each part of the second assignment should be between 1000 and 1200 words. (These are absolute minima and maxima. Nothing over 1200 words will help you get marks.)

First assignment, to be submitted 4pm Wednesday of Week 10: Essay- *Discussing a paper.*

Consider the findings in an empirical paper published in 2016 in the journal *Consciousness and Cognition* or *Psychology of Consciousness: Theory, Research, and Practice* or *Frontiers in Consciousness Research* or *Neuroscience of Consciousness* that establishes whether a mental state is conscious or unconscious, and discuss how these findings would be explained by (i) a higher order theory of consciousness, and (ii) a global integration theory of consciousness.

The second assignment is to be submitted in the second assessment period:

2a) Essay- *Research proposal.* For a different 2016 paper from the same set of journals as above write a proposal for a set of experiments that could be performed next to follow on from the research in the paper. Indicate clearly what key question each experiment would address and how it addresses it. State exactly what the independent variables are, how many levels they have, whether they are between-subjects or within-subjects factors, and what your dependent variables are. No need to state fine details like numbers of
participants, items etc., unless they are important conceptually. Explicitly indicate what pattern of results would support one theory rather than another. The direction in which you take the research is up to you. If you can connect different ideas from the module in your proposed research, try to do that. The more you can relate your experiments to particular theories in psychology, the better (i.e. testing a theory is more interesting than saying “I wonder what would happen if I manipulated this variable…”).

2b) *Diary of conceptual change.* Pick one of the concepts or phenomena listed below each topic and write an account of how your understanding of the concept changed as you studied material on the module. In the first lecture I will ask you to write down your thoughts and understanding of the concept. Then keep a diary of how your understanding changed. It might change in several ways: You might simply add to the base you had already. You may change your understanding in more profound ways, completely changing certain views, or seeing the topic from a rather different perspective altogether. When you read on the topic, or suddenly have ideas while reading material from an apparently different topic, make a note of your key insights, recognition of confusions, or revisions of your ideas. A particularly useful feeling to take note of is sensing some problem though maybe you don’t know what it is. Somehow things just don’t make sense. As a researcher this is a particularly welcome experience because it indicates the possibility of understanding the issue more deeply. Try to capture this conceptual development in your diary. Rather than just take notes on what the author of a paper says, take notes on what were the most important things the author said in developing how you understood that concept. Be careful to note the reasons why your view on a topic changed. Finally, when you feel have made substantial progress in understanding the topic, take your diary and try to spot interesting threads and themes. Rework it into a 1200-word account, taking the most coherent or interesting threads and tell the story of what your starting ideas were and what successive pieces of evidence or arguments motivated specific changes in your views. You can describe how you were confused and resolved the confusion. Remember this is a reflection on how your understanding changed; it is quite OK to use the first person and to talk about what you thought or even guessed etc. It is as much a story about yourself as about the objective reasons for having certain views. Remember also 1200 words is not very much. The idea is not to give a comprehensive account of your understanding of the topic but to present some illustrative threads that show off how your understanding developed. The diary of conceptual change must be written up during the term: Diaries must be written the day events happen or else the details fade. You cannot retrospectively write about what you understood of a concept trying to forget what you have since learned. Your memory will deceive you. “Diaries” constructed the week before the deadline stand out as just that.
Assessment information
Assessments deadlines and methods of submission can be found on your assessment timetable via Sussex Direct.

Information on the following can be found at the link below:
• Submitting your work
• Missing a deadline
• Late penalties
• Exceptional circumstances
• Exams
• Help with managing your studies and competing your work
• Assessment Criteria

http://www.sussex.ac.uk/psychology/internal/students/examinationsandassessment

Attendance, Absence and Engagement
You are expected to be ‘in attendance’ at the University for the full duration of the published term dates for your course of study. That means you should be regularly attending lectures, seminars, labs etc. and committing time to your studies to be in a position to comply with academic and administrative expectations.
**Teaching:** There will be a two-hour lectures each week for 10 weeks. The following Table shows the schematic teaching timetable. See Sussex Direct for full details on dates and times.

### TEACHING TIMETABLE

<table>
<thead>
<tr>
<th>WEEK</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Theories of consciousness</td>
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<td>2</td>
<td>Implicit memory</td>
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<tr>
<td>3</td>
<td>Subliminal Perception</td>
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<tr>
<td>4</td>
<td>Subliminal Perception</td>
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<tr>
<td>5</td>
<td>Implicit learning</td>
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<tr>
<td>6</td>
<td>Implicit learning</td>
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<tr>
<td>7</td>
<td>Implicit attitudes and emotions</td>
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<tr>
<td>8</td>
<td>Hypnosis</td>
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<tr>
<td>9</td>
<td>Hypnosis</td>
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<tr>
<td>10</td>
<td>Cold Control</td>
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<td>11</td>
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<td>12</td>
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**Module Monitoring and Student Feedback:** Towards the end of the module you will be asked to complete an online questionnaire. In addition, I encourage questions or feedback, either during or after lectures. You can see me during my student feedback sessions for individual discussion of issues relating to the module.
Good general references

The following books contain discussion from a range of points of view on various topics to do with consciousness – you might find useful browsing for your chosen concept:


Readings for Specific Topics.

TOPIC 1: MAJOR THEORIES OF CONSCIOUSNESS

Essential reading.

Background reading:

Higher order theory:


Online summary of HOT theory:
http://plato.stanford.edu/entries/consciousness-higher/
http://www.scholarpedia.org/article/Higher-order_theories_of_consciousness

Integration theories:


other papers by Ned Block: [http://www.nyu.edu/gsas/dept/philosophy/faculty/block/](http://www.nyu.edu/gsas/dept/philosophy/faculty/block/)


See also: [http://www.scholarpedia.org/article/Models_of_consciousness](http://www.scholarpedia.org/article/Models_of_consciousness)

**Concepts for diary of conceptual change:**

Unconscious mental state
Conscious mental state
Introspection
Conscious awareness

**TOPIC 2: IMPLICIT-EXPLICIT MEMORY**

**Essential reading**


**Background reading:**


http://www.psy.plymouth.ac.uk/research/tperfect/papers/Cryptomnesia%20chapter%202008.pdf


**Concepts for diary of conceptual change:**

Unconscious memory
Automatic memory

**TOPIC 3: SUBLIMINAL PERCEPTION**

**Essential reading:**


Background reading:


Concepts for diary of conceptual change:

Subliminal perception
Conscious perception
TOPIC 4: IMPLICIT VS EXPLICIT LEARNING

Readings

**Essential reading:**
(On my publications page.)


**Background reading:**


**Concepts for diary of conceptual change:**

Unconscious learning
Implicit learning
TOPIC 6: IMPLICIT ATTITUDES AND EMOTIONS

Readings

**Essential reading:**


**Background reading:**

**Implicit attitudes:**


See also: [https://implicit.harvard.edu/implicit/](https://implicit.harvard.edu/implicit/) to have a go on various IAT tasks

For a bibliography of many papers (linked to PDFs) discussing the criticisms and replies to those criticisms about the IAT: [http://faculty.washington.edu/agg/iat_validity.htm](http://faculty.washington.edu/agg/iat_validity.htm)

PDFs of papers by one of the originators of the IAT: [http://faculty.washington.edu/agg/bytopic.htm#isc](http://faculty.washington.edu/agg/bytopic.htm#isc)

*Unconscious emotions:*


See also: [http://socrates.berkeley.edu/~kihlstrom/Eich2000.htm](http://socrates.berkeley.edu/~kihlstrom/Eich2000.htm)

**Concepts for diary of conceptual change:**

Unconscious feelings

**TOPIC 6: HYPNOSIS AND VOLITION**

*Readings*

**Essential reading:**
(On my publications page)


**Background reading:**

For a summary of recent research on hypnosis see: http://hypnosis.tools


**Hypnosis as an altered state?**

Various chapters in
including by Jamieson & Hasegawa, Lynn et al, Pekala & Kumar, & Burgess.


https://www.researchgate.net/profile/Stuart_Derbyshire/publication/305891296_Suggestions_to_Reduce_Clinical_Fibromyalgia_Pain_and_Experimentally_Induced_Pain_Produce_Parallel_Effects_on_Perceived_Pain_but_Divergent_Functional_MRI-Based_Brain_Activity/links/57a7f1b408ae455e8546fb21.pdf

Can hypnosis make a person perform anti-social acts?

**Concepts for diary of conceptual change:**

- Altered state of consciousness  (not discussed much in the lecture module – you will need to do your own research on this concept by reading the recommended reading above as soon as the module starts)
- Volition
- Involuntary act
- Unconscious control