DESCRIPTION: Human Information Processing

Subject   Cat-Nbr   Class    Term     Mode   Units   Campus  
PSY       2040      14518    2, 2002  EXT     1.00    TWMBA   

Academic Group: FOSCI  
Academic Org:    FOS005  
HECS Band:       1       
ASCED Code:      090701  

STAFFING
Examiner: Gerry Tehan  
Moderator: Malcolm Mills  

PRE-REQUISITES
Pre-requisite: USQ69104 or PSY1020  

RATIONALE
Perceptual, attentional and memory processes play a vital role in our daily life and a well functioning and well integrated perceptual and cognitive system is something that most of us take for granted. Most of us only notice these systems when they begin to fail. However, the true importance of these systems becomes very apparent when a massive breakdown is observed. For example, life is relatively difficult for people who suffer partial or total blindness or deafness. Children with attentional deficits experience daily problems. Elderly people with Alzheimer's Disease show the devastating effect of breakdown in the memory system. In short, deficits in our perceptual, attentional and memory systems have severe impacts upon a normal lifestyle. This course is designed to provide a good understanding of normal perceptual and cognitive processes.  

SYNOPSIS
The course starts with a revision of visual and auditory sensation that was covered in Foundation Psychology B. The course builds upon this material by examining visual and auditory perceptual processes and associated brain structures. Following perception, the course deals with attention looking at both the different types of attention and the different theories of how attention works. Memory over short retention intervals is then examined with an emphasis upon working memory. Finally the course looks at the factors involved in producing long-term memories.
OBJECTIVES

On successful completion of this course students will have acquired:

- a rudimentary knowledge of structures in the areas of sensation, perception, attention and memory; and
- skills in conducting and reporting experimental research in these areas;

TOPICS

<table>
<thead>
<tr>
<th>Description</th>
<th>Weighting (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sensation: The Visual System Structure of the Eye and Retina and the Visual Pathways</td>
<td>8.70</td>
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<tr>
<td>2. Perception: Visual Functions - Edges, Changes and Acuity</td>
<td>8.70</td>
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<tr>
<td>3. Visual Pattern Perception - Shapes, Spatial Frequency &amp; Gestalt Laws</td>
<td>8.70</td>
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<td>4. Distance and Size Perception - 3D from 2D and Illusions.</td>
<td>8.70</td>
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<td>5. Motion - Real and Illusory Movement</td>
<td>8.70</td>
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<tr>
<td>7. Attention: Types of attention and capacity models</td>
<td>8.30</td>
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<td>8. Attention: Resource models</td>
<td>6.30</td>
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<tr>
<td>9. Short-term Retention: Short-term memory</td>
<td>8.30</td>
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<tr>
<td>10. Short-term Retention: Working memory</td>
<td>8.30</td>
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<tr>
<td>11. Long-term Memory: Encoding and imagery</td>
<td>8.30</td>
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<tr>
<td>12. Long-term Memory: Retrieval, organisation and practice</td>
<td>8.30</td>
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TEXT and MATERIALS required to be PURCHASED or ACCESSED:

Books can be ordered by fax or telephone. For costs and further details use the 'Book Search' facility at http://bookshop.usq.edu.au by entering the author or title of the text.

CD-ROM (highly recommended but not compulsory)


Matlin, M.W. & Foley, H.J 1997, PSY2040 Human Information Processing,

((Note selected exercises in study book with CDROM))
REFERENCE MATERIALS

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.

Ackerman, Dianne *Mystery of the Senses Series - Hearing*, USQ Psychology Library,
Ackerman, Dianne *Mystery of the Senses Series - Vision*, USQ Psychology Library,

**STUDENT WORKLOAD REQUIREMENTS**

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment</td>
<td>22</td>
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<tr>
<td>Examinations</td>
<td>2</td>
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<tr>
<td>Private Study</td>
<td>146</td>
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</table>

**ASSESSMENT DETAILS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Marks Out of</th>
<th>Wtg(%)</th>
<th>Required</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>ASSIGNMENT 1</td>
<td>30.00</td>
<td>30.00</td>
<td>Y</td>
<td>13 Sep 2002</td>
</tr>
<tr>
<td>ASSIGNMENT 2</td>
<td>30.00</td>
<td>30.00</td>
<td>Y</td>
<td>11 Oct 2002</td>
</tr>
<tr>
<td>2 HOUR CLOSED EXAMINATION</td>
<td>40.00</td>
<td>40.00</td>
<td>Y</td>
<td>END S2</td>
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</tbody>
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**NOTES:**
3. Examination dates will be available during the Semester. Please refer to the examination timetable when published.

**OTHER REQUIREMENTS**

1. It is the students' responsibility to participate actively in all classes scheduled for them, and to study all material provided to them or required to be accessed by them to maximize their chance of meeting the objectives of the course and to be informed of course-related activities and administration.
2. To pass the course a student must obtain a final score that is at least 55% of the top students' total score over the two assignments and the examination. Final grades
for students will be determined by the addition of the marks obtained in each assessment item, weighted as in the Assessment Details and by considering the students' level achievement of the objectives of the course.

3 The due date for an assignment is the date by which a student must dispatch the assignment to the USQ. The onus is on the student to provide proof of the dispatch date, if requested by the Examiner. In accordance with the University's Policy on Assignments (Regulation 5.6.1), the Examiner of a course may grant an extension of the due date of an assignment in extenuating circumstances. The extension policy is outlined in the Introductory Book. Students should consult the Assessment Section of the Introductory Booklet for this course to see specific policy regarding late assignments.

4 Students must retain a copy of any assignment submitted. This must be produced within 48 hours if required by the Examiner.

5 A closed examination is an examination where the candidates are allowed to bring only writing and drawing instruments into the examination.

6 No supplementary examinations will be given. Deferred examinations will be held during the examination period at the end of the semester of the next offering of this course.

7 Access to email, discussion groups and the internet is a departmental requirement. I expect you to open your university provided email account and check it regularly for personal communication. Information sent this way will be regarded as being receivable. [Note, other accounts often have more limited sized mail boxes, are not accessible when the USQ external connection is down and may not always remain open throughout your candidature].