VCE Psychology 2005
Units 3 & 4

John Reece
Division of Psychology, School of Health Sciences
RMIT University

Phone 9925-7512
john.reece@rmit.edu.au
Presentation Plan

- Main changes from old to new study design
- Changes in exam structure
- Changes in content
- Recent change to study design, as published in the VCAA Bulletin.
- Sample paper
My Background and Role:

• Member of the exam setting panel in 2004 and 2005 for Units 3 and 4.
• Panel Chair/Chief Examiner in 2004 and 2005 for Unit 4

• Senior lecturer in Psychology in the Division of Psychology (School of Health Sciences) RMIT University.

• Got involved via Professor Simon Crowe, Head of Psychology, La Trobe University.
Summary of Major Changes in New Study Design

1. Change in weighting of different areas of study in exam structure

- **Old Study Design**: Each AOS weighted equally, equal marks given for multiple choice and short answer.
- **New Study Design**: Different weightings across AOS, and different weightings to short answer and multiple choice. Weightings reflect the *Marks Allocated* stated in Study Design. However, overall, 50% of the available marks will still be for multiple choice questions and 50% of the available marks will still be for short answer questions.
2. Change in the way research methods is integrated into the study design

- **Old Study Design**: Research Methods separate AOS in Unit 4
- **New Study Design**: Research Methods is represented by a separate AOS in Unit 4, but a lot of research methods material is spread throughout the other AOS as dot points.

- **NOTE**: Any dot point in the study design, except for [AOS 3 Unit 4](#), may be represented by either multiple choice questions, short answer questions, or both, including any of the research methods and ethics questions.
Change to Weightings:

*Unit 3*

AOS 1 (Brain and Nervous System):
• 18 multiple choice + 18 short answer = 36 marks (40%)

AOS 2 (Visual Perception):
• 13 multiple choice + 14 short answer = 27 marks (30%)

AOS 3 (States of Consciousness):
• 13 multiple choice + 14 short answer = 27 marks (30%)
Contrast with 15 multiple choice and 15 short answer for all AOS in previous exams.

Unit 4
AOS 1 (Memory):
• 23 multiple choice + 13 short answer = 36 marks (40%)

AOS 2 (Learning):
• 23 multiple choice + 13 short answer = 36 marks (40%)

AOS 3 (Research investigation):
• 0 multiple choice + 18 short answer = 18 marks (20%)

Contrast with 15 multiple choice and 15 short answer for all AOS in previous exams.
Specific Changes to Areas of Study:

Unit 3

Area of Study 1 (Brain and Nervous System)

Gone

• Findings of research with people who have intact brains (still in) and those with brain damage (gone).
• The two major functions of the spinal cord; distinction between sensory and motor neuron activity.
New
• brain research methods and their values and limitations: EEG, CT, PET, MRI, fMRI.
• Ethical principles in the conduct of brain research.

Changed
• The role of the somatic nervous system in the role of skeletal muscles (specific mention of skeletal muscles gone in new SD).
• The role of the autonomic nervous system in the control of non-skeletal muscles (specific mention of non-skeletal muscles gone in new SD).
Division of the nervous system: central nervous system, peripheral nervous system (somatic and autonomic) (simplified into one dot point in new SD).
Area of Study 2 (Visual Perception)

Gone

• The way in which light is detected and focussed on the retina: the role of the cornea, iris, pupil, lens and retina, and the function of photoreceptors (gone as a specific and detailed dot point).
• Factors that affect perception: psychological (perceptual set); alcohol, old age, diabetes (last three gone in new SD).
• Ponzo and Moon Illusion
New
• Research methods in visual perception, including use of participant selection, random and stratified sampling, participant allocation; control and experimental groups.
• Ethical principles in the conduct of psychological research.

Changed
• ...the interactive nature of the processes in visual sensation and perception... becomes, ...the interactive nature of processes of the retina and the brain in...
• factors that affect visual perception: psychological (perceptual set)... becomes the effect of context and past experience on perception through perceptual set.
Area of Study 3 (States of Consciousness)

Gone
• James’s description of streams of consciousness
• a description of pain as an altered state of consciousness: experiencing and controlling pain.
• purpose of sleep: restoration and survival
• narcolepsy
• types of dreams: distinction between daydreaming, nightdreaming and lucid dreaming.
• sleep laboratories
New

- Research designs used to minimise the effects of extraneous variables, including repeated measures design, matched-participants design, independent groups design.
- Placebo effects, experimenter effects, single blind and double blind procedures
- Ethical principles in the conduct of psychological research related to sleep.
**Changed**

- **definition of consciousness** becomes consciousness as the awareness of objects and events in the external world and the subject’s own existence and activities.
- **characteristics of normal waking consciousness and common characteristics of altered states of consciousness** become concepts of normal waking consciousness and altered states of consciousness (rolled into one dot point). **Daydreaming and memory** not in new SD.
Unit 4

Area of Study 1 (Memory)

Gone
• Alzheimer’s disease
• Significance of tip-of-the-tongue phenomenon
• Pegwood method, acrostics, acronyms, rhymes (as specific mnemonic devices)
• Repression (but motivated forgetting still there).
• Retroactive and proactive interference not specifically mentioned in new SD.
New
• Working memory.
• Formation of operational hypotheses and interpretation of $p$ values.
• ethical principles in the conduct of psychological research related to memory.
**Changed**

- Enhancing retrieval and improving memory and mnemonic devices have become memory enhancement through ...(two dot points rolled into one).
- **Serial position effect** now a standalone dot point.

**Important change, as published in the February VCAA Bulletin**

- The features of the forgetting curve as (the contribution of anterograde and retrograde effects in recall) becomes
- The features of the forgetting curve;
Area of Study 2 (Learning)

Gone

- **Neutral stimulus** not specifically mentioned in new SD in context of classical conditioning.
- Classical conditioning in practice: simple behaviour (conditioned reflexes); complex behaviour (phobias) and aversion therapy.
- Operant conditioning in practice: animal training, behaviour modification, token economies.
- Reinforcement (positive and negative), schedules of reinforcement (continuous/partial, fixed/variable, interval/ratio), punishment (including negative effects of punishment) and ways to maximise effectiveness; shaping
(all not specifically mentioned in new SD in context of operant conditioning).

- **Bo-Bo doll** not specifically mentioned in new SD in context of Bandura.
- Ways that observational learning helps interaction with people from different cultures, using a recent study by Harrison (1992) as an example.
- Learning by insight: preparation, incubation, insightful experience (the “Ah-Ha experience”)

**New**
- Trial and error learning, including Thorndike’s puzzle box experiment
Changed
• None major

Area of Study 3 (Research Investigation)

Gone
The following are not specifically mentioned in any area in the new Unit 3 and 4 SD:
• Measures of relationship: correlation; positive and negative correlation; scatter diagram; strength of correlation
• Inferring from data, meaning of statistical significance; appropriateness of conclusions and generalisations based on results obtained.
• A definition of inferential statistics

**New**
• Reporting of findings and conclusions
• Statistical analysis
• Collection and interpretation of data

**Changed**
• Inferring from data, meaning of statistical significance; appropriateness of conclusions and generalisations based on results obtained approximately equals Collection and interpretation of data
Two changes to punctuation have been mentioned in February VCAA Bulletin as clarifications.

• The addition of a comma in dot point 2 of Brain and Nervous system
• The addition of a bracket in dot point 3 of Memory

• Check VCAA Bulletin regularly for clarifications and erratum.

- Positron emission tomography not position emission tomography (not officially changed at time of writing).