

# e-Exam Trial Cases



## University of Queensland Semester 1 and 2, 2014

This document provides:

- A summary of the six trials conducted at University of Queensland in semester 1 and 2, 2014.
- Details of each case study including a description of the examination and the room in which the trial took place, along with a diagram of the room configuration.

## Acknowledgements

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The views expressed in this document do not necessarily reflect the views of the Australian Government Office for Learning and Teaching or participating institutions.

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# e-Exam Cases

## Overview

This document provides details of the six e-exam trials that took place at University of Queensland during semester 1 and 2, 2014.

All examinations were mid-semester and worth 15% of the course grade on average.

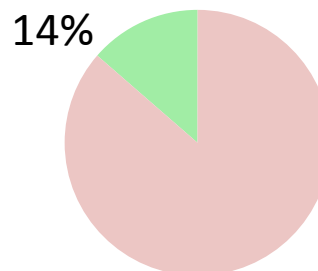
A summary of the participation numbers based on returned post-exam surveys appears in Table 1.

**Table 1 E-exam trial participation figures**

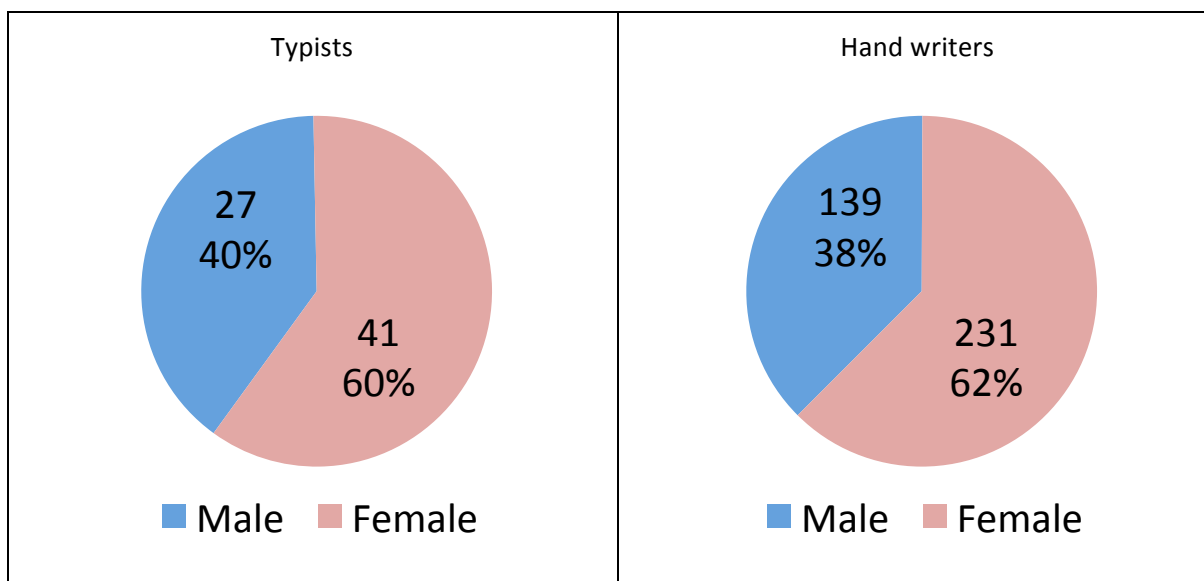
e-Exam Trials	Typed	Handwrote
Animal Biology: 45 min mixed short answer and MCQ (type 'x')	5	109
Zoology (BIOL): 50 min short answer (Multiple choice section done pen on OMR sheet)	10	81
Criminology: 70 minutes. Single long essay response section (and a Multiple choice section done pen on OMR sheet)	17	50
Occupational Therapy: 100 min mixed short answer and MCQ (type 'x')	3	24
Physiotherapy: 15 min (watch video and write) before OSCE	25	108
Veterinary technology: 90 min theory, mostly short answer	11	78
Totals	<b>71</b>	<b>450</b>

It is important to note:

- First 'toe in the water' trials.
- Participation was optional.



Overall gender ratios:



**Figure 1 Gender ratios for typists and hand writers (all trials collated)**

# Case 1 - Veterinary Technology (VETS)

## The Exam

Veterinary Technology: 90 min theory. Students could choose to type or handwrite the entire exam.

The majority of questions were short answer with two MCQ/TF answered by typing an 'x' into a box. There was also one image prompt question and one label-the-diagram question where labels were typed into a prepared table.

Data: 11 students who typed and 78 who hand-wrote returned post exam surveys.

## Room layout

The exam took place in a regular lecture/tutorial room. It was a long rectangle room with tables arranged in rows facing the front (see layout on the next page).

The floor was carpeted but walls were bare. One side of the room had windows and curtains.

The hand writers sat in the main rows or tables (shown in orange of the room layout diagram).

The typists sat on tables (shown as purple) that were rotated such that they were facing the center of the room. This was to ensure no other students were sitting behind them as to alleviate possible concerns about cheating. The typists were located near a set of power outlets.

The course was divided into two cohorts, internal and external. The same room and layout was used for both.

The internal cohort undertook the exam about 3 weeks prior to the external student group. At the time of the internal cohort sitting the exam the weather was warm and there were ceiling fans running. The ceiling fans masked the sound of typing.

The external cohort undertook the exam during the mid semester break. The the weather was cooler and no ceiling fans were used. The sound of typing was clearly noticeable as the room tended to propagate the sound easily.

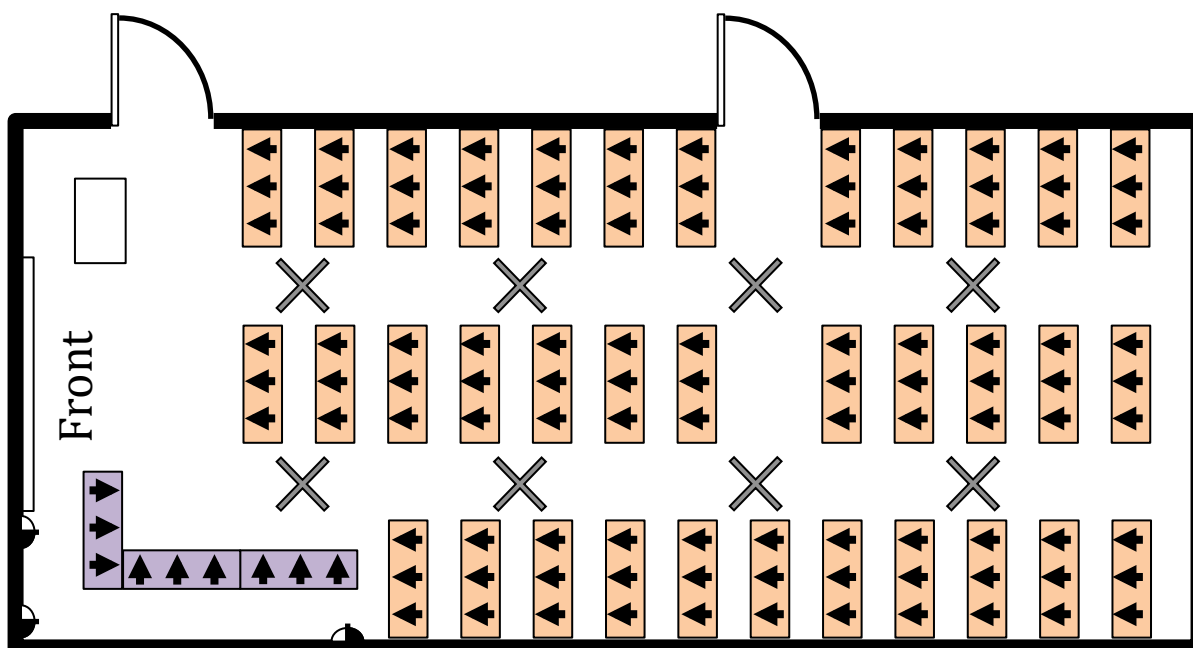


Figure 2 Room layout for VETS exam

For details of the symbols used, please refer to Figure 8 Room diagram key on page 8.

## Case 2 - Animal Biology (ANIM)

### The Exam

Animal Biology: 45 min. Students could choose to type or handwrite the entire exam.

The exam was in two parts. The first portion of the exam consisted of short answer questions of varying lengths including one diagram prompt/labeling question. The second portion comprised several selected response questions with thirteen MCQs and one matching question; both types were answered by typing an 'x' into a box.

Data: 5 students who typed and 109 who hand-wrote returned post exam surveys.

### Room layout

The typists sat in a tutorial room with tables in rows. This was wide rectangle room with tables arranged in rows facing the front. The typists sat in the back row close to the power sockets. The floor was carpeted and walls had a band of material covering the mid third of the walls which served to absorb sound. The sound of typing was moderate but not particularly noticeable.

Note: hand writers sat in separate, large tiered lecture theater in rows.

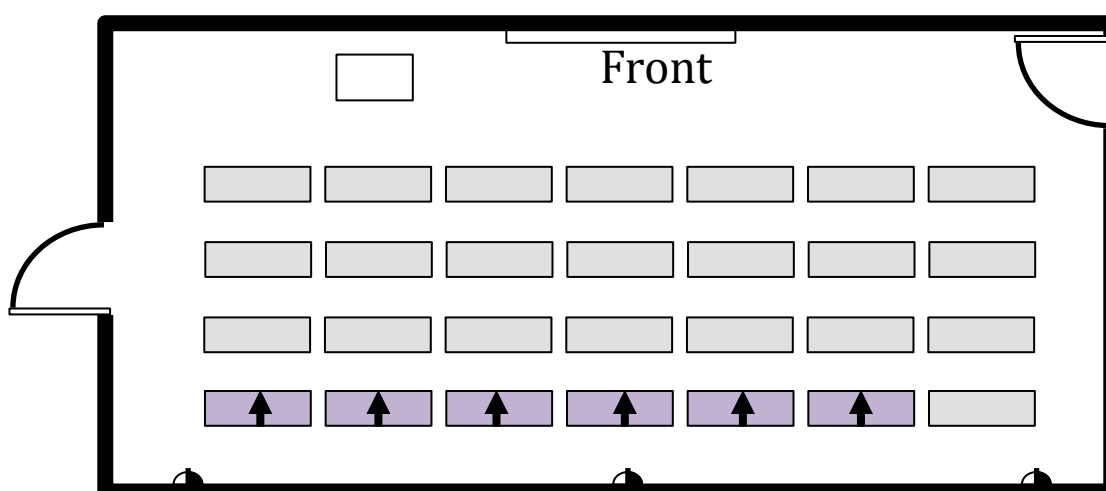


Figure 3 Room layout for ANIM exam

For details of the symbols used, please refer to Figure 8 Room diagram key on page 8.

## Case 3 – Physiotherapy (PHTY)

### The Exam

Physiotherapy: 15 min. Students could choose to type or handwrite the entire exam.

This short exam was done prior to an OSCE (practical exam).

The student cohort was processed in batches of about 15 students.

Students had to watch video case study and then write down their observations. The video case study was played in a loop on a large screen at the front of the room. The case was changed for each co-hort.

Format of the exam consisted of an empty table divided into three rows and columns into which students had to record their observations.

Data: 25 students who typed and 108 who hand-wrote returned post exam surveys.

### Room layout

The typists and hand writers sat in the same tutorial room. This was a square room with tablet chairs for hand writers arranged to one side of the room in arcs facing the front. The typists sat on tables on the other side of the room. The tables were angled diagonally towards the front of the room close to the power sockets. To the front was a video screen playing a looped video of a physiotherapy case. The floor was carpeted and walls were bare. The sound of typing was moderate but not particularly noticeable. The rear of the room was stacked with unused tablet chairs.

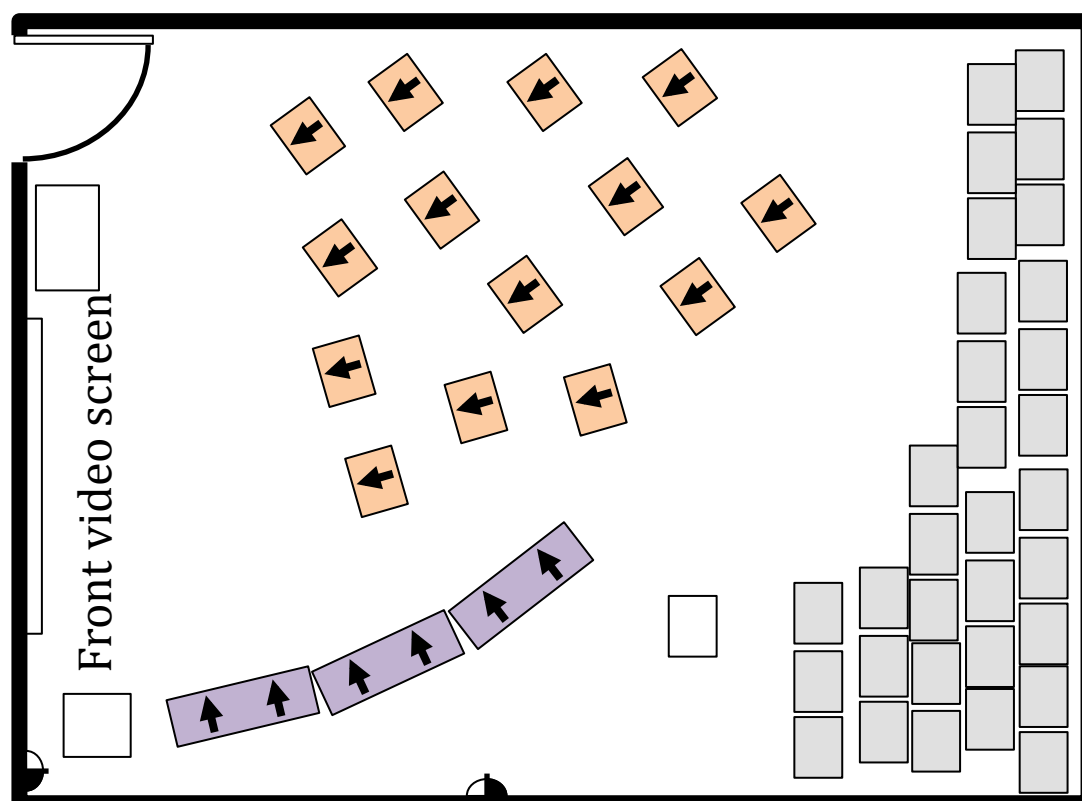


Figure 4 Room layout for PHTY exam

For details of the symbols used, please refer to Figure 8 Room diagram key on page 8.



## Case 4 – Criminology (CRIM)

### The Exam

Criminology: 70 minutes (entire exam). Students could choose to type or handwrite the essay portion of a two-part exam.

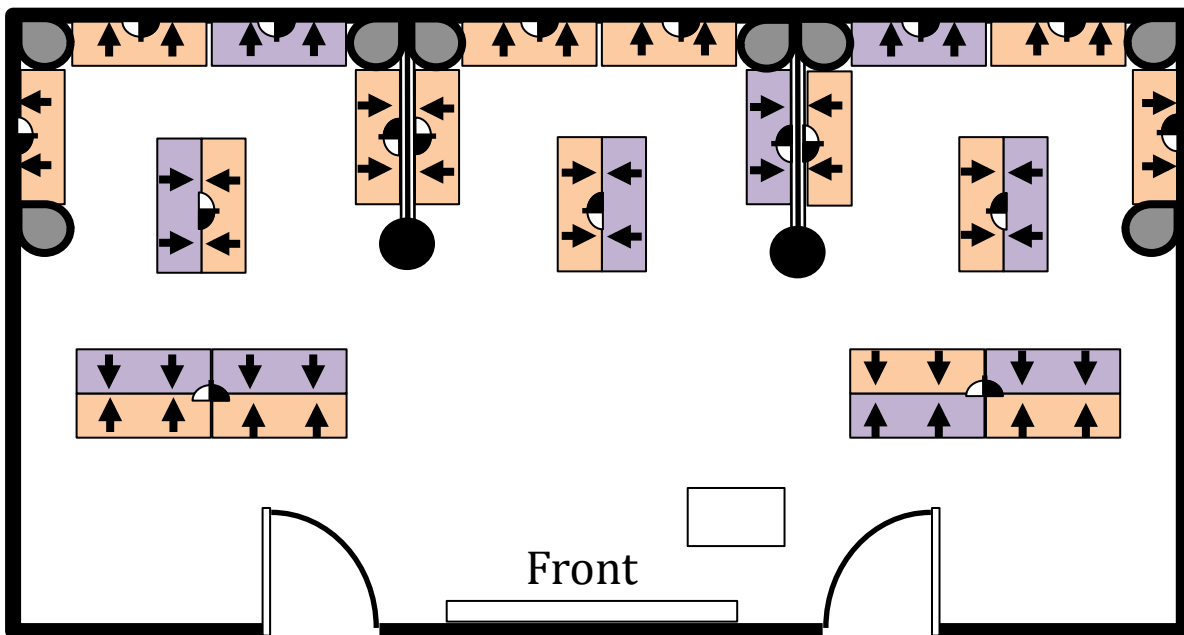
The typed portion of the exam took the form of a single long essay response.

The other section of the exam consisted of a number of MCQs that were completed by pen on OMR sheet.

Data: 17 students who typed and 50 who hand-wrote returned post exam surveys.

### Room layout

This was a large rectangular room fitted out as a technology enhanced collaborative learning facility. It had two half height dividers and pillars creating alcoves. The typists and hand writers sat in mixed groups around clustered tables or on tables adjacent the walls. Students were facing each other across the tables or facing the walls. All tables had power supplies built into the table. Each table had computers however these were not used in the exam. The floor was carpeted and walls were bare however there were semi-porous materials used to wrap pillars and fill-in corners. The sound of typing was moderate but not particularly noticeable.



**Figure 5 Room layout for CRIM exam**

For details of the symbols used, please refer to Figure 8 Room diagram key on page 8.

Note: the indicated location of typists are approximate in this diagram.

## Case 5 - Occupational Therapy (OCTY)

### The Exam

Occupational Therapy: 100 min. Students could choose to type or handwrite the entire exam.

The exam was in two parts. The first entailed ten MCQ that were answered by typing an 'x' into a box with one using a diagram prompt.

The second half of the exam consisted of a two-part case study. The first section of the case study was about one page long and appeared on its own page. The first portion utilised a couple of semi structured questions where a table was used to provide placeholders for 'steps' and 'phases' related to relevant theories. The second portion of the case was half a page long with questions following on immediately. These comprised several short and medium response questions.

Data: 3 students who typed and 24 who hand-wrote returned post exam surveys.

### Room layout

The typists and hand writers sat in a physio practical room with tables in rows and short plastic stools. This was square room with tables arranged in rows facing the front. The typists sat in the back row. Power sockets were suspended from the ceiling above each table. The floor was hard covered and walls were bare. The sound of typing was moderate but not particularly noticeable.

At the back of the room were stored physio practical/treatment tables.

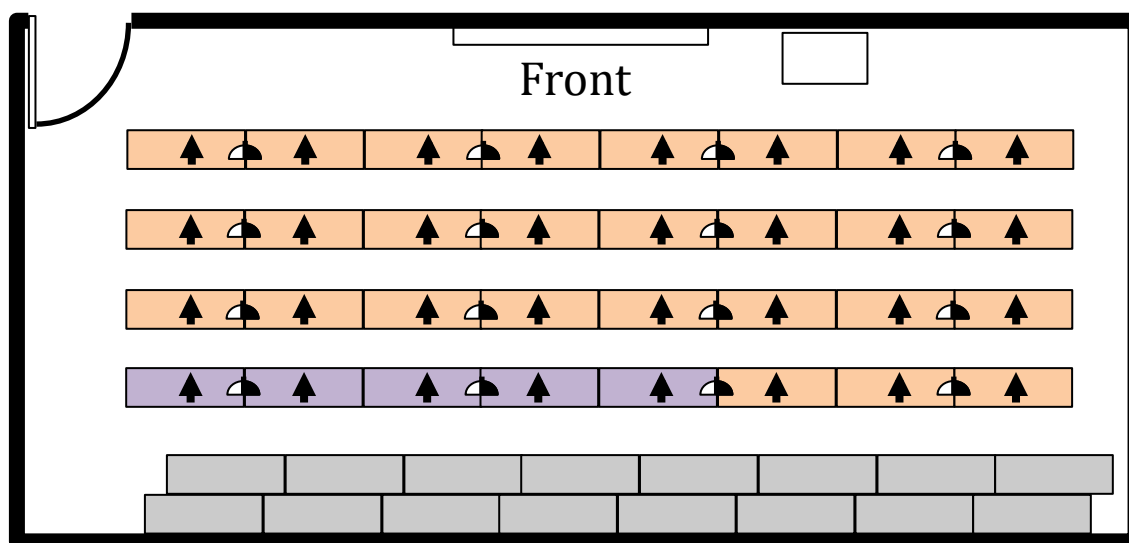


Figure 6 Room layout for OCTY exam

For details of the symbols used, please refer to Figure 8 Room diagram key on page 8.

## Case 6 – Zoology (BIOL)

### The Exam

Zoology (BIOL): 50 min. Students could choose to type or handwrite the constructed response section of the exam.

The exam was in two parts.

The first entailed sixteen MCQs, one using a diagram prompt, that were answered by pen on OMR sheet.

The second half of the exam consisted of a mix of constructed response question types. Several short answer questions, one of which used a diagram prompt, a further two short text responses used a table to provide a prompt to arrange the response into groups. There were also two label-the-diagram questions where the labels were typed into a prepared table.

Data: 10 students who typed and 81 who hand-wrote returned post exam surveys.

### Room layout

The typists sat in a collaborative tutorial room with tables in clusters around large wall mounted screens (the screens were not used in the exam).

The typists sat facing each other across the tables in the front portion of the room. Tables had power sockets built-in.

The projection screen at the front of the room was used to display a clock. The floor was carpeted and walls were bare. There were large air-conditioning units attached to the ceiling down one side of the room. The sound of typing was moderate but not particularly noticeable.

The hand writers sat in separate, large tiered lecture theater in rows.

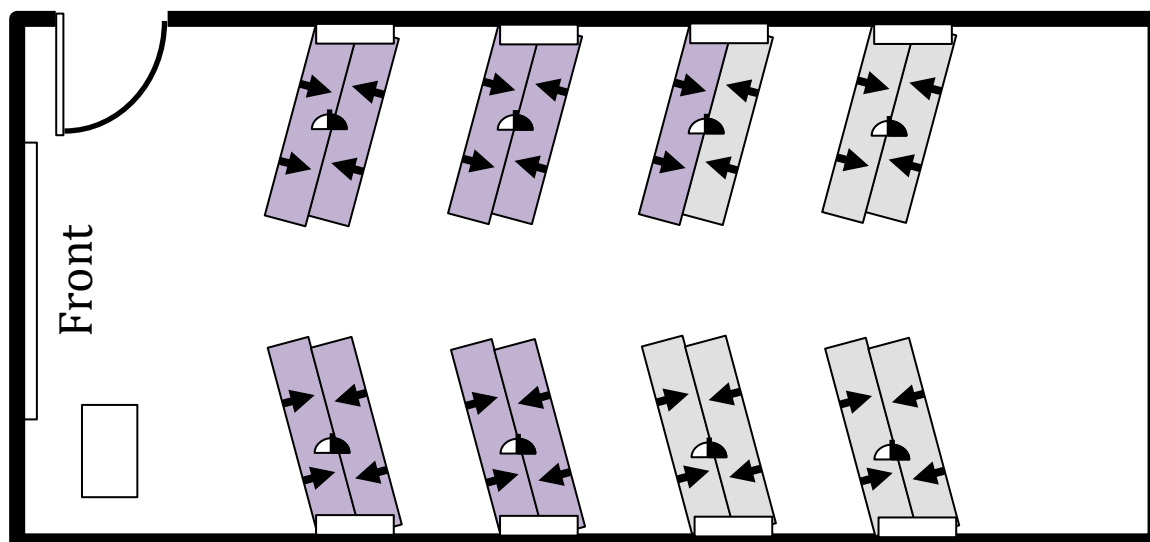


Figure 7 Room layout for BIOL exam

For details of the symbols used, please refer to Figure 8 Room diagram key on page 8.

# Room Diagram Key

The following symbols are used in each exam case diagram to denote the room layout.







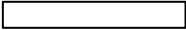

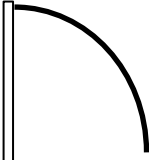
	Student(s) hand-writing (desk/seat)
	Student(s) typing (desk/seat)
	Empty desk/seat
	Facing direction
	Ceiling fan
	Power socket(s)
	Whiteboard/screen (front of room)
	Lectern
	Door

Figure 8 Room diagram key



Good luck :-)