



HLTH204 – RADIOGRAPHIC PHYSICS & PROTECTION
RADIATION PHYSICS MODULE
GUIDELINES FOR PRACTICAL WORK - 2008

Schedule

Practicals are held during weeks 3–11 of Semester 2. Each student is rostered to attend three sessions during these nine weeks.

You should have been assigned to one of the lab time table slots, i.e. Tuesdays 10-1, Thursday 11–2 or Friday 10–1, and a group letter (A–I) which specifies which three weeks to attend and which experiment to do, according to the following table.

Week	Tues 10-1pm			Thu 11am-2pm			Fri 10am-1pm		
	Exp 1	Exp 2	Exp 3	Exp 1	Exp 2	Exp 3	Exp 1	Exp 2	Exp 3
3	A	B	C	A	B	C	A	B	C
4	D	E	F	D	E	F	D	E	F
5	G	H	I	G	H	I	G	H	A
6	C	A	B	C	A	B	B	C	D
7	F	D	E	F	D	E	CONCEPTION DAY		
8	I	G	H	I	G	H	E	F	G
9	B	C	A	B	C	A	H	A	B
10	E	F	D	E	F	D	C	D	E
11	H	I	G	H	I	G	F	G	H

Expt 1 = Transformers; Expt 2 = Absorption; Expt 3 = Compton/Spectrum

So, for example, if you have been assigned to Fr 10–1 D, you should attend the practicals on Friday mornings in weeks 4, 6, and 10.

Practical work takes place in the Physics Laboratories E7B217 and E7B213. Access to these rooms is through E7B217 off the second floor verandah of E7B.

Please sign the attendance register in room 217 at the start of a session before you are allocated an experiment, and sign out at the end of the session.

Laboratory Safety

You **MUST** wear closed toe shoes in the laboratory. **You will NOT be permitted to do the prac if you are not wearing the appropriate footwear.** Food or drink may not be consumed within the laboratory.

Materials required

You will need a calculator and an A4 size laboratory notebook in which to record your work. The notebook is to be left in the laboratory at the end of each lab session.

Your Practical Note Book

During each session you should keep a record of your work in your note book, which is kept in the laboratory so it can be marked and handed back in the next class.

The detailed form and content of your account of each experiment will vary depending on the experiment. Some experiments are mainly descriptive, others have several distinct parts. However, it is essential to record the following:

1. The title of the experiment and the date when you did the work.
2. A brief (e.g. 10 lines) description of what the experiment was about.
3. A description of the experimental work that was necessary to do the experiment.
4. Your results and conclusions.

It is best to write up the aims and a brief background/theory section before starting to record results, as you will have a much better idea of what you are trying to achieve when making measurements.

Usually each experiment will fill between two and three A4 pages, including a diagram of the equipment if this is appropriate.

A one page write up is inadequate to cover the required information, but an account filling more than four pages probably needs further thought and planning.

Assessment

A maximum of five marks will be given for each experiment, based on the following:

1. How well you have understood the aim of the experiment as indicated by the contents of your note book.
2. How clearly you have recorded the experimental work that you carried out.
3. How clearly you have set out the results of your work and the conclusions you can draw from those results.

Your marks for practical work will contribute 15% of your final marks for the unit.

Help

Remember that the staff who are present in the laboratory during a practical session are there to help you as much as possible, short of doing the work for you!

You will be working with a partner as it is expected that partners will share the experimental work and cooperate during an experiment. However, it is most important that each member of a partnership produce their own version of the account of the work recorded in their note book.