



**MONASH UNIVERSITY**  
**School of Physics and Astronomy**

**PHS3000**  
**Unit Summary**

**Semester 2 2020**

**Unit/Laboratory Coordinator:**

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## **Unit structure summary**

PHS3000 is laboratory-based unit, consisting of workshops on techniques and skills relevant to experimental practice, and hands-on experimentation on advanced experimental apparatus.

A minimum of four experiments are required to be completed during the semester, with submission of an experimental logbook and report required to meet compulsory submission deadlines times every 3<sup>rd</sup> week of semester.

### **Workshop sessions**

Consist of a mix of pre-recorded presentations with online activities.

Programming capability in several languages is introduced and is generally required for each workshop activity.

### **Laboratory sessions**

These are all based on online resources for at least the first three weeks of semester. During the period that in-person attendance at the Laboratory is not permitted, experiments are completed using these resources. The online experimental work resources consist of:

1. The remote-access Beta ray spectrometer experiment.
2. Pre-recorded video demonstrations of setup and data collection, with sample data for analysis.

## **Number of experiments to be completed**

- You are required to complete four experiments.
- Compulsory submission dates are listed below and on Moodle. You can submit before the official submission date.
- Your experimental work will primarily be assessed based on your completed experimental logbook.
- Formal reports on the first three experiments are submitted approximately two weeks after the logbook submission. This is to allow feedback on the marked logbook to guide the writing of your reports.

## **Extra Credit**

- Some experiments (see the Laboratory Manual) are of longer duration, or have a more involved analysis than a standard experiment. For these experiments, your mark will be multiplied by a weighting factor as indicated in the Laboratory Manual for the experiment.
- Your final mark for the laboratory component will be capped at 100%.
- You may choose to do an extra experiment or report. Logbooks on your best four experiments, and your best three reports, will be used to calculate your final lab mark.

## **Submission Schedule for Experiments**

You are required to submit on (or before) the specified deadlines. This ensures that you get rapid feedback and help with improving your recording and analysis skills, and that you also progress through your laboratory workload. Work is returned within 10 days.

The dates for **compulsory submission** are as follows:

Submission type	Date
1 <sup>st</sup> Logbook	21 August, 11 am
1 <sup>st</sup> Report	9 September, 11am
2 <sup>nd</sup> Logbook	11 September, 11am
2 <sup>nd</sup> Report	14 October, 11am
3 <sup>rd</sup> Logbook	16 October, 11am
4 <sup>th</sup> Logbook	7 November, 11am
3 <sup>rd</sup> Report, any extra work	8 November, <b>11pm</b>

### Assessment Deadlines and Penalties

You are required to submit work by the deadlines set above. Failure to do so will attract a penalty in accordance with the policy of the Faculty of Science:

- The penalty for work submitted late is 10% of the **maximum mark** per day late or part thereof. E.g., if you received 30/32 for your experiment submitted 1 day late, your final mark will be 27/32
- Weekends and holidays attract the same penalty as week days. E.g., if you hand your experiment in on Monday after the due date of the previous Friday, you will be marked down by 30%.
- No submission can be accepted for assessment more than a week after the due date except in exceptional circumstances and in consultation with the Unit Coordinator.

Exceptions can be arranged in cases of genuine hardship (e.g. illness, accompanied with a medical certificate), by contacting the Laboratory coordinator **no later than two days after the due date**.

### Verification of Marks

All marks will be available on Moodle. It is your responsibility to verify the accuracy of the marks entered before the end of the examination period. Please contact staff at PACE [sci-physics-teaching-admin-l@monash.edu](mailto:sci-physics-teaching-admin-l@monash.edu) if you have a query.

### Repeating previously completed experiments

**You are not permitted to repeat experiments** that you have completed previously (in PHS3000 or other level 3 PHS units). Only the Laboratory Coordinator can authorise an exception.