

PhB Science (Hons) Marking Guidelines

Expectations for ASC projects and Reports

ASC projects constitute the major part of the assessment of an Advanced Study project. The reports are based on original work by the student, equivalent to approximately 120 h of work. Where students work together on a project, each student should write an independent report and the report should make clear what part was contributed by each student. There is no requirement for the project to achieve a certain goal; the emphasis is on assessing the student's understanding of the background and aim, and to report the approach and analysis of data accurately and based on rigorous testing and critical analysis.

We recognize that reports in different areas of Science may vary, and thus might not fit the guidelines outlined below. This might be the case for projects that do not encompass experimental work, but are based on literature surveys or theoretical work. For those reports, the marking guidelines below can be handled flexibly. However, in general, we recommend that reports should contain the components listed below.

- A title page with title, student name and student number.
- An abstract summarising the project, written in a language that can be understood by a non-expert.
- A general introduction to the topic, including references to the previous work in the area of study, leading to the study question/aim. The introduction should include critical analysis of the literature, rather than just listing previous work. The introduction should make it clear why the study was done and why the question/aim is important or interesting.
- Materials and Methods/Concepts section that contains an accurate and detailed description of the experimental procedures, so that these could be repeated by an independent researcher. For theoretical or computational projects it should contain a description of the theoretical framework and/or algorithms used.
- A results section, presented in text form plus figures/tables and statistically analysed (where appropriate). All figures and tables should be presented with a figure/table legend, all figures should include statistical analysis (which statistical test was used, number of samples, error bars). In the results section, it is important to state what was found in respect to the aim. Starting each results section with one or two sentences to state what the aim was, followed by what the main finding was (rather than launching into detailed findings or starting with a figure), will make it easier to read and understand for (external) markers.
- A critical discussion of the main findings, including references to pertinent literature and a comparison of the student's data with the literature. It should be evident that the student has read the references and can put their study into the broader context of the field. An outlook (e.g. possible future experiments) should be part of the discussion.
- A list of all cited references should be given in consistent format.
- It is encouraged that the student submits a draft report to the supervisor in due time, so that feedback can be incorporated into the final ASC report.

Suggested Marking Rubric

The marking should take into account the year the student is in, and whether they have done previous ASC projects and reports. In delivering a mark the most emphasis should be placed on the understanding of the project, as well as on data analysis and integration/ interpretation of the results.

CONTENT AND STRUCTURE (80%)	LOWER SCALE	Fail	P	C	D	HD	HIGHER SCALE
<i>Background knowledge:</i>	Superficial						Thorough, detailed
<i>Understanding of theory:</i>	Limited grasp of fundamental concepts						Clear grasp of fundamentals and critical analysis of the existing literature
<i>Understanding of experimental technique:</i>	Little technical insight						Clear understanding of how information derived
<i>Data analysis:</i>	Restricted to facts						Selective use and critical analysis of information
<i>Overall Structure:</i>	Confused list						Clear, logical structure
<i>Synthesis/ Evaluation:</i>	Poor integration, context, future directions						Excellent integration, context, future directions
<i>Interpretation:</i>	Limited understanding of results						Excellent understanding of results
PRESENTATION (20%)	LOWER SCALE	Fail	P	C	D	HD	HIGHER SCALE
<i>Syntax, Spelling, Grammar:</i>	Difficult to read, lacking fluency						Easy to read, fluent, clear and unambiguous
<i>Language:</i>	Unclear, excessive use of jargon						Clear, intelligible to a non-expert
<i>Layout:</i>	Untidy, badly organized						Visually attractive, well-organised, legible
<i>Figures and Tables:</i>	Untidy, inappropriate, poorly labelled						Well structured, labelled and integrated with text
<i>Citations:</i>	Citations lacking, format inconsistent						Appropriate sources, accurately referenced

ANU Grade	ANU Mark
High Distinction (HD)	80-100
Distinction (D)	70-79
Credit (C)	60-69
Pass (P)	50-59
Fail (F)	<50