ASTR121 Lab Report Rubric – 38 Points Total

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| --- | --- | --- | --- | --- | --- |
| **Aspect** | **Excellent** (100%) | **Good** (75%) | **Adequate** (50%) | **Poor** (25%) | **Absent** (0%) |
| **Cover Page**  (2 pts) | Cleary presents name and number of lab, student names and contact information, date and section | Missing an aspect | Missing aspects | Missing all aspects | Absent |
| **Abstract**  (4 pts) | Concisely summarizes the purpose, procedures used, and results of project. | Missing an aspect | Missing aspects; too lengthy or inaccurate | Missing all aspects | Absent |
| **Introduction** (4 pts) | * Includes the question to be answered by the project * Develops the reason why the question is relevant/interesting * Discusses general method (without specifics) that will be used to answer the question and develops theoretical background | One aspect is missing | Two aspects are missing | Three aspects are missing | Absent |
| **Methodology** (8 pts) | Description of the data used and what was done with the data, complete enough that another scientist could repeat the process. | Some steps are vague or unclear | Only includes generalities, but enough to get the idea | Would be difficult to repeat; reader must guess at some parts | Absent |
| **Analysis**  (8 pts) | Results and data are clearly displayed, organized in a way that makes it easy to see trends. Figures and charts are appropriately labeled and captioned. Excessive data and Matlab code are included in appendix. Uncertainties in all determined quantities are calculated and explained. | Errors in results, but otherwise well done; flaws in organization | Unclear results; missing labels or captions; disorganized; missing data/plots/tables | Results do not make sense, or not enough to justify conclusions | Absent |
| **Discussion** (8pts) | * Summarizes the data used to draw conclusions * Conclusions follow logically from data * Discusses sources of error (random and systematic) * Discusses if conclusions fit expectations and/or seem plausible * Discusses any unusual results or disagreement with theory and speculates on cause * Discusses addition questions/issues asked in hand-out * Discusses real world implication of results | Missing 1-2 aspects | Missing 3-5 aspects | Missing 5-6 aspects | Absent |
| **Format**  (4 pts) | * Report follows typical scientific format and organization * Any references are cited appropriately in a bibliography * Writing flows well and is easy to read * Grammar, vocabulary, and similar errors are minimized | Some grammar, writing, or formatting issues. | Significant errors in one aspect, minor errors otherwise | Significant errors in many aspects | Paper is nearly unreadable |