Suggested Outline for 22.104 Lab Reports

1. **Cover Sheet**  
The name and title of the experiment, the date, the name of the reporter and partners.

2. **Abstract**  
This section, no more than 200 words, briefly reviews the work. Findings and conclusions are mentioned.

3. **Introduction**  
This section describes the objectives of the work.

4. **Procedure**  
Tell briefly how you did the experimental work. Do not write the procedures given in the laboratory instructions but do reference them. Any changes in the written laboratory procedures made by your instructor prior to or during the course of the experiment should be briefly described in this section. Describe any deviation from the suggested procedure and the reasons for the change.

5. **Results**  
The quantitative experimental results, usually in the form of both tables and graphs, are presented in this section. The method(s) by which “data” is transformed into “results” should be described and justified. Due consideration should be given to the statistical nature of the data (error bars on all values - statistical evaluation of data).

6. **Discussion**  
Discuss how well the goals of the experiment were met and any other relevant information that you think might be useful to readers of the report.

7. **References**  
References used in the report.

8. **Appendix I - Equipment**  
An apparatus list should be included. The list identifies those items used that have a direct effect on the quality of the data. For this course this will usually be the detector, the electronic instruments, sources and any other auxiliary devices. The list should give such details as the equipment model (and serial numbers if “easily found”), so that the data can be corrected if it later develops that equipment peculiarities are a factor in the interpretation of the results.

9. **Appendix II**  
Any supporting information, such as data tables, figures and calculations which are so extensive that if they were placed in the text they would seriously disrupt the flow of text, should be placed in a well-labeled appendix. This fact should be stated in appropriate location(s) in the text.