## Sample Grading Rubrics

## Formal report evaluation sheet

Student: $\qquad$ Lab: $\qquad$

| Score | Max | Section | Comments |
| :--- | :--- | :--- | :--- |
|  | 3 | Abstract <br> Summary of work <br> Final results \& uncertainty <br> Appropriate length and information |  |
|  | 6 | Introduction <br> Motivation for measurement <br> Theory behind experiment with appropriate refs <br> Introduction to equations that will be used <br> Context of previous work, if applicable |  |
|  | 3 | Experimental procedure <br> Summary of technique including reference to published procedure <br> Instrumentation and chemicals used <br> Description of modifications to standard procedure <br> Sketch with sufficient detail and labels, if appropriate |  |
|  | Results (\& data) <br> Use of tables and figures to present data and results <br> Description of results in text with refs to tables and figures <br> Description of methods used to calculate results. <br> Quality of results <br> Correct calculation of results <br> Any rejection of data? If so, with adequate explanation? <br> Error analysis - propagation of errors method and/or statistical <br> analysis, including basis for uncertainty estimates in measured values |  |  |
| 7 | Discussion <br> Evalation of reliability of data \& results (use unc. analyses) <br> Identification of major sources of error and their effect on results <br> Comparison of results with literature values, theory, and/or class results as <br> appropriate <br> Discussion of significance of results - any trends observed, etc.? <br> Conclusions and future directions (suggestions for improvements, possible <br> further experiments/explorations) |  |  |
| References <br> Literature references properly cited in the text <br> References are primary or well-accepted secondary sources <br> ACS style used for list of references at the end of the report <br> At least one primary source cited - intro or discussion section |  |  |  |
| 5 | Written mechanics: spelling, grammar, and style |  |  |
|  | 50 | Appendices <br> Lab notebook pages with original data <br> Sample calculations for results <br> Sample calculations for error analysis <br> Detailed spreadsheet for calculations <br> Total |  |

