Problems with report:
1. Objectives not complete in introduction/conclusions (be quantitative in conclusions)
2. Organizational problems
   a. Do not write a detailed procedure – describe strategy used to meet objective
   b. No new topics in conclusions – discuss in results, summarize in conclusions
   c. Needed graphs/tables are in appendix (all needed graphs/tables go in report)
3. Problems with writing:
   a. Start each paragraph with a topic sentence
   b. Writing is unclear
   c. Grammar needs improvement
   d. Use past tense in a report
   e. Writing is wrong tone (too casual)
   f. Omit trivial descriptions (only include what is necessary to repeat experiments)
   g. No need for time-stamping events (e.g. first we did this, then this, then that)
   h. No contractions (isn’t, shouldn’t etc.)
   i. No need to say where figure/table/equation is (do not say “figure below” say “Figure 2”)
   j. Avoid one-sentence paragraphs
4. Problems with graphs and tables:
   a. Captions incomplete (allow reader to understand figure without reading text)
   b. Figures/tables not mentioned (all figures and tables must be mentioned in text)
   c. Too high a degree used in polynomial trend-line fit (R²=1 is a danger sign)
   d. Do not put a trendline where there is no trend – trendlines are for interpolation
   e. No symbols on arbitrary points (if you picked the points to plot an equation, they are arbitrary)
   f. Do put symbols on individual data points (if you took the data)
   g. y is a function of x (not the other way around; x is the independent variable)
5. Problems with numbers/symbols:
   a. Wrong number of significant figures reported (use scientific notation for large numbers)
   b. Numbers missing from discussion (be quantitative when comparing)
   c. Symbols not identified (identify all symbols as you introduce them)
   d. Equations not presented right after they are mentioned – if you say eqn 1, put eqn 1 there
   e. Uncertainty (error) analysis missing
   f. Calibration curves are specific to one set of units: they must be included in the equation
6. Problems with References:
   a. References missing or incorrect – a citation is needed here: use (author, year)
   b. Reference(s) in the list are incompletely cited, e.g. include author, institution, city, etc.
7. Miscellaneous problems
   a. Follow capitalization rules (note: Fanning, Moody, Reynolds, Bourdon are names)
   b. If specific valve, unit numbers (e.g. tank T-01) are mentioned, need P&ID as Figure 1
   c. Avoid extra white space – pay attention to where the tables, figures are placed
8. Violation of “Basics Check List”: errant box, tic marks missing, gridlines, not signed, page # missing, etc.