Formal Report: Synthesis Project
Synthesis of Fluorescein
Chem 228   WS/2010

Name:_____________________
Section:___________

General/Grammar (20 points):
\begin{itemize}
    \item Justification - not left and right justified \hspace{1cm} -5
    \item Poor general page layout (margins, font, etc) \hspace{1cm} -5
    \item Title - not properly worded \hspace{1cm} -2
    \item Spelling - general words misspelled \hspace{1cm} -2 each
    -Chemical names misspelled \hspace{1cm} -4 each
    \item Grammar - failure to comply with the following:
        -Used and maintained proper tense for section, good general grammar \hspace{1cm} -2 to -10
    \item Missing page numbers, cover page, section labels \hspace{1cm} -5 each
    \item General format of tables and figures \hspace{1cm} -2 to -5
    \item Failure to attach this gradesheet to paper front \hspace{1cm} -5
\end{itemize}
\textbf{Subtotal: (not to exceed -20 points)}

Abstract (10 points):
\begin{itemize}
    \item Missing Abstract entirely \hspace{1cm} -10
    \item Abstract not really an abstract \hspace{1cm} -8
    \item Missing chemical names or reactions \hspace{1cm} -2 to -5
    \item Missing mention of how purity was checked (eg. IR, NMR, GC, TLC etc.) \hspace{1cm} -2 to -5
\end{itemize}
\textbf{Subtotal: (not to exceed -10 points)}

Introduction (20 points):
\begin{itemize}
    \item Missing background information
        -Reasons for selecting compounds produced \hspace{1cm} -3
        -Commercial importance, sources, uses, etc. \hspace{1cm} -4
        -Review of reactions used, advant. & disadvan. \hspace{1cm} -5 to -10
        -Alternate synthesis routes, if possible \hspace{1cm} -5
\end{itemize}
\textbf{Subtotal: (not to exceed -20 points)}

Procedure (60 points):
\begin{itemize}
    \item Missing g/mol used (need both for all chemicals) \hspace{1cm} -5 each
    \item Missing balanced equations \hspace{1cm} -5 to -20
        -Equations, but not balanced \hspace{1cm} -3 to -12
        -Missing structures of chemicals \hspace{1cm} -3 to -15
        -Structures not typeset (each rxn) \hspace{1cm} -5
    \item Missing table of chemicals used \hspace{1cm} -5 to -20
        -Some info in table inaccurate or missing \hspace{1cm} -3 to -15
        -Table split across 2 pages \hspace{1cm} -5
    \item Procedure not all inclusive or incorrect \hspace{1cm} -3 to -12
        -Missing tests used (e.g. IR, NMR, GC, TLC) \hspace{1cm} -2 to -10
\end{itemize}
\textbf{Subtotal: (not to exceed -60 points)}
IR Analysis (60 pts):
- Missing IR from intermediate steps or all steps: -10 each
- Missing reference IR from intermediates: -10 each
- Missing tables for the IR analysis: -20 each
  - Peak analysis incorrect: -2 to -10
  - Not all "significant" peaks analyzed: -2 to -10
Subtotal: (not to exceed -60 points)

NMR Analysis (60 pts):
- Missing NMR from intermediate steps or all steps: -10 each
- Missing reference NMR from intermediates: -10 each
- Missing tables for the NMR analysis: -20 each
  - Peak analysis incorrect: -2 to -10
  - Not all "significant" peaks analyzed: -2 to -10
Subtotal: (not to exceed -60 points)

Discussion/Results (60 points):
- Missing Tables of Results: -5 to -20
  - Product masses, % Yields, MP, other tests besides IR, NMR (eg. GC, TLC)
- Missing or incorrect calculations of % yield: -5 each
- Missing discussion of side reactions, yields, etc.: -5 to -10
- Discussion not logical: -5 to -15
- Missing discussion of “How to Improve Experiment”: -5 to -10
Subtotal: (not to exceed -60 points)

References (10 points):
- No references: -10
- References are not endnotes: -8
- Incorrect formatting of citations: -5
- Failure to give citations for various information: -2 each
Subtotal: (not to exceed -10 points)

Participation/Yellow Sheets (100 points):
- Failure to turn in yellow sheets (raw data): -100
- Failure to turn in final product: -10
- Missing pre-lab information for each step: -15 each
  (may all be included in one table)
- Missing experimental details: -10 to -30
- Pages not dated and signed by experimenter and TA: -10
- Did not void blank spaces/Initial: -5 each
Subtotal: (not to exceed -100 points)

Late Penalty (After 4:30 pm, Friday 5/7/10): -20pt/da

Total of reduced points (not to exceed -400 points):

Grand Total (400 minus Total of Reduced Points):