

Grading Rubric for Independent Research Project

CHM 202 – *Fundamentals of Organic Chemistry*

Spring 2009

LECTURE: M & W 1:00-2:50pm A-208
LABORATORY: M 3:00-5:50pm D-103
CHEMISTRY @ LTCC PAGE: www.ltconline.net/wallace/

revised 06/01/2009

FINAL REPORT (20 points) & POSTER PRESENTATION (20 points)

DUE at the CHM202 Lab "Final"; Monday, June 22 (*in the lab*)

OPTIONAL: Poster Presentation at 12noon, Tuesday, June 9 (*in the cafeteria*)

1. A simple introduction is provided. Simply tell me why you were interested in this project and what you wanted to learn. (2 points)
2. REAL references are used. Your text is an excellent resource, as are other books in the library. *Some* Web pages are excellent sources of information. Wikipedia.com is NOT acceptable, for example. I would also be highly suspicious of most Web pages that are provided by individuals with no credentials and/or commercial enterprises. (2 points)
3. References are appropriately cited and a bibliography is included. I'm not too picky about the format, but A.P.A. or M.L.A. format would be best; you may use this Web page to make this task easier: <http://citationmachine.net/> (2 points)
4. The chemistry of any chemical or physical process is completely and accurately explained. Complete chemical equations are used and structures of molecules are provided. (4 points)
5. How you used any techniques (e.g., extraction, I.R. spectroscopy, distillation) is briefly explained. Why and how these worked – or were supposed to work – and were appropriate for your project is explained, especially in terms of physical and chemical properties. (4 points)
6. The project contains results or data, even if it's: "I have no data because everything went horribly wrong". If things did go awry, provide a reasonable explanation. If you don't have any data yet, describe what sort of data you will eventually collect. Data is neatly presented. (2 points)
7. Any conclusions logically follow from your experimental results and/or legitimate sources. (See #2, above.) NO unsubstantiated claims are made. If you don't have any conclusions yet, describe what sorts of conclusions are possible. (2 points)
8. A simple summary is provided. What did you eventually learn from this? (2 points)

Note that the requirements here refer to your final report. Your poster presentation will be a simplified summary of your overall project report. You can find some good tips regarding the poster by following the links from the "CHM202 Other Helpful Information" Web page:

<http://www.ltconline.net/wallace/CHM202/CHM202/OTHER,CHM202.htm>

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LAB NOTEBOOK (10 points)

DUE at the CHM202 Lab "Final"; Monday, June 22 (*in the lab*)

As specified in the syllabus for this class:

III. REQUIRED MATERIALS:

LAB MANUAL: *The Organic Chem Lab Survival Manual, 7th ed., Zubrick;*
ISBN 978-0-470-12932-6

LAB NOTEBOOK: *bound notebook, ~ 100 pages, about \$2, NOT spiral-bound*

(and)

Part of your lab grade will be based on keeping a notebook record of your work; the grading criteria for your notebook points is detailed in your lab manual (Zubrick, ch. 2).

The lab manual for this class describes a slightly different notebook than what is applicable to this project, but in general the following (from Zubrick) pertain to your project:

1. Record EVERYthing that happens in the lab, EVERYthing you learn, and EVERYthing that you need to know related to your project IN YOUR NOTEBOOK. (Have your notebook with you in the lab, in the library, and whenever you're doing any research for your project.) Do NOT use loose, separate pages for any part of your project. If you do this, PASTE these pages into your notebook.
2. (Cutting and pasting into your notebook is perfectly acceptable.)
3. The notebook must be bound permanently. No spiral bound notebooks. No loose pages.
4. Use ink. No pencil. NO whiteout.
5. Include a table of contents.
6. Initial and date every page.
7. Number every page.