

David B. Fankhauser, Ph.D.

14 June 1990, rvsd 30Dec95, 4Jan'97, 3Jan98, 22Mar01, 18Sept01, 24June03, 2Jan04, 15Sept04, 31May05, 2Sept09, 15Sept10 28Dec10
http://biology.clc.uc.edu/fankhauser/Labs/Keeping_a_Notebook/Notebook_Procedure.htm

Book: Use graph-lined, sewn composition notebooks (10" x 7 7/8") so that you make a permanent record of your experiments and results. (Avoid glued books.) *Notebooks comprise about 25% of your grade.*

Pen: Use a permanent black pen with a fine point, such as a Pilot Precise Rolling Ball V5 (my favorite), Tombow Roll Pen, Jr©, or Uni-ball Vision Micro. These are dark black, permanent, and xerox very well. A pencil or water soluble felt tipped pen are not acceptable. Ball point pens have ink which will dissolve under organic solvents.

- 1) Mount the **LAB SCHEDULE** on the inside of the front cover. (Keep page entire including header.)
- 2) Number the facing page "*i*." Mount the **HANDOUT TABLE OF CONTENTS** here. Enter the page number in your notebook where each protocol is mounted on the lines provided on this handout.
- 3) Number the next three pages *ii*, *iii* and *iv*. Title them: **MY TABLE OF CONTENTS I, II, and III.**
- 4) Then number subsequent right hand pages at the top right with odd numbers: 1, 3, 5, etc.
- 5) Draw **guide lines** along the edge of your closed book at lines 1, 3 (title), 6 (cross references) and 9 (body).
- 6) **Title every page** IN CAPITALS with a specific *focused* title between lines 1 & 3.
- 7) Titles: p.1: **SLIDE LIST**, p 2: LAB NB PROC. Inside back cover: "**MY GRADESLIPS.**" (See #13.)
- 8) Title the back facing page: "**NEW WORDSTEMS.**" Keep a running list of *new* wordstems.
- 9) **Date every page** in the upper left hand corner as you make entries on each page.
- 10) **Begin the entries below line 9.** Enter all data *directly* into the lab book using a permanent black pen.
- 11) Use a **fresh page for each experiment.** Neatness is of secondary importance, but leave adequate space for ease of future use. Do not tear out any pages because its other half will fall out and be lost.
- 12) **Cross reference** pages of related material on line 6 (three spaces below the title). *Be specific* about the nature of each cross reference: State whether the protocol, data, graph, illustration, conclusion, etc.
- 13) **Permanently mount ALL handouts** with clear contact paper. Keep intact, including header. **Permanently mount sequential grade slips inside back cover.** (See #7) You get one point per gradeslip.
- 14) **Use any excuse for an illustration**, since it displays information or data in a manner comprehensible at a glance. (See *Notebook Illustrations.*) To prevent ink from bleeding through, we suggest that you place illustrations on the R page, and handouts on the L (or *vice versa* for lefties).
- 15) For **dissections**, illustrate: 1) cuts made, 2) spatial & functional relations of organs, label thoroughly.
- 16) For **microscopic specimens**, illustrate characteristic views to fill the page below line 9. Clearly resolve all details observed with labels for all features mentioned in the protocol and/or in Lab. The illustration **title** goes above, **magnification** of the view at the lower right. The **legend** is below, indicating the source, treatment and staining procedure used. Draw a second illustration to expand on or clarify the first?
- 17) For each new piece of **apparatus**: illustrate, label and explain the use of all features you used.
- 18) **Make all your illustrations with black pen.** Afterward, appropriate color may be added to the line drawing. Use of appropriate color in illustrations can make them more meaningful as well as attractive.
- 19) **Graphs** should be titled to describe the data precisely. Cross reference to the page containing the original data. Label coordinates, note significant phases or effects observed, especially according to time or changing conditions. Describe conditions under which experiment was performed, and conclusions.
- 20) **Indent new protocols or recipes**, leaving space above and below for clarity. Note in detail any changes made in the original protocol, difficulties encountered, or future cautions.
- 21) **Draw conclusions**, note the value of the exercise and its take home lessons. If appropriate, note problems encountered and make **suggestions** for improvement of the experiment. Include points which could be examined more closely in future experiments and/or questions which may have arisen as a result of the experiment. Offer a *minimum* of three quality conclusions or suggestions. Pure complaints count less...
- 22) **Type up your conclusions on a single page** and mount in NB for an additional 3 points,

Compare these instructions with the *Sample Notebook Grade Sheets* which you have received. Note that points are awarded according to the completeness with which you have followed these instructions. Early effort applied to learning correct notebook procedure will pay dividends when your notebook is graded.

FORMAT FOR TABLE OF CONTENTS

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David B. Fankhauser, Ph.D.

14 June 1990, 28 March '94, 5 July '95, 25 June '96, 3 July '97, 3 Jan '98, 26 Mar00, 22Mar01, 25June03, 2Jan04, 12Sept07
http://biology.clc.uc.edu/fankhauser/Labs/Keeping_a_Notebook/Table_of_Contents_Format.htm

TABLE OF CONTENTS

- 1) Type out your table of contents on a computer, it is *much* easier and less stressful than on a typewriter. If you do not have a personal computer at home, go to the Computer Lab here at the college and use theirs. There are people to assist you there if you are new to computers. Do yourself the favor. Use the formatting suggested below.
- 2) Use the following single-spaced format for your table of contents. Make an entry in your table for every page. If an experiment continues for several pages, some ditto marks may be used, but indicate the specific aspect or phase of the experiment found on each page.
- 3) CAPITALIZE HANDOUT SHEETS, this will make them easier to locate.
- 4) Mount your table of contents on pages ii through iv in the first pages in your notebook.
- 5) The next time you turn in your notebook, you may either add to the previous table of contents list which you saved on your disk or on your computer, or you may type up the new entries and strip them in directly under the previous entries with contact paper.

Here are suggested margins and tabs to set on the computer for 8.5" x 11" paper, all in inches from the left margin of the page:

Set margins: **L margin at 1", R margin at 6.5"**.

Set Left Tabs: **1.5" for the topic, 5.5" for entry date.**

TABLE OF CONTENTS

page	entry topic	date
cover	LAB SCHEDULE	20 Sept 07
i	Handout Table of Contents	20 Sept 07
ii	My Table of Contents, First Page	[date mounted]
iii	My Table of Contents (future)	[date mounted]
iv	My Table of Contents (future)	[date mounted]
1	Slide List	
2	First Day's Lab Notes on Notebook Use	20 Sept 07
3	LABORATORY NOTEBOOK PROCEDURE	20 Sept 07
4	CONTACT PAPER FOR MOUNTING HANDOUTS	20 Sept 07
5	USE OF NOTEBOOK ILLUSTRATIONS	20 Sept 07
6	Notes on using the Microscope	20 Sept 07
7	BINOCULAR MICROSCOPE: ITS USE AND FEATURES	20 Sept 07
8	Microscope illustration	20 Sept 07
9	USING AND EVALUATION THE MICROSCOPE	20 Sept 07

etc

USE OF CONTACT PAPER FOR MOUNTING HANDOUTS

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21 September 1983, rvsd, 19 Sept '94, 25 June '96, 3 July '97, 17 Sept '97, 26 Mar 00, 24 June 03, 5 Jan 04

http://biology.clc.uc.edu/fankhauser/Labs/Keeping_a_Notebook/Contact_Paper.htm

Handout sheets should be permanently mounted in your notebook using contact paper which forms a protective, transparent cover, and ensures that you will not lose them.

MATERIALS:

Use clear, transparent contact paper which has a smooth surface (*no embossed pattern*). Otherwise, the specimen will be obscured. The most suitable brand was "Adhere", but appears to be no longer available. "Con-Tact" Clear and "Kwik Kover II" are readily available and are suitable. You may wish to try a different brand. Use these criteria for evaluation: clarity of detail of mounted specimen, ability to reposition an incorrectly placed specimen, ability of the contact paper to be written upon with ink (especially your Pilot Precise Pen), cost, tendency of adhesive to creep out beyond edge of the contact paper, resistance to yellowing.

PROTOCOL:

1. **Write the date and title of the protocol** at the top of the page in your notebook (date = day protocol is mounted). Any additional written notes on the protocol should be made prior to mounting since contact paper resists writing.
2. **Cut away all excess paper** on the printed protocol handout.
3. Placed trimmed handout on top of unrolled contact paper, **cut contact paper so that you have at least 1/2 inch margin** around the specimen. The final dimensions should be smaller than the size of the notebook page. (Some prefer to cut rolls of contact paper in half which then approximates the desired page height.)
4. **Strip off the backing** from the contact paper *without creasing the contact paper*. (Start it by slightly tearing backing paper.) Lie it on the table sticky side up.
5. **CRITICAL STEP:** Hold trimmed specimen above contact paper so that the printed side is down, and margins are even. Bow the sheet and lower the center down onto adhesive. **Roll down specimen evenly onto contact paper**, avoiding bubbles, creases, wrinkles, etc. Press out from the middle out to adhere to adhesive. Do not attempt to pull printed material off contact paper, the ink will stick to the adhesive (what a mess).
6. **Trim excess** margin from around the specimen, but *try to preserve the 1/2 inch margin*.
7. **Position contact-papered specimen into place in notebook**, as close as possible to the bottom of the page, leaving space at the top cross references. *Make sure the sticky edges do not project beyond the edge of the page*. Press from the middle out to adhere edges.
8. **Cross reference at the top of the page** where to find your related class notes, illustrations, or related protocols may be found. On each of those pages, cross reference to the newly-mounted protocol.
9. You may wish to make a pocket at the back cover to carry scraps of contact paper, but save space for your sequentially mounted grade slips.