UBC Department of Mechanical Engineering Logbook Requirements:

- 1. Each student to keep a logbook for the duration of the course and to submit it for assessment upon request and at the end of the project.
- 2. Use notebook Winnable, 8"x10 1/4", Composition Book, #WN109 or similar hardcover bound book with pre-numbered pages. Notebooks are available from the UBC Bookstore.
- 3. On first page: Course, group, your name, & contact information
- 4. Next 4 pages leave blank for a Table of Contents to be completed at the end of project.
- 5. No writing in margins to aid photo-copying
- 6. Entries must be in chronological order
- 7. Entries must be made using inerasable ink. OK to make initial sketch in pencil but must be traced in ink and pencil marks should be erased.
- 8. The date of each entry must be clearly indicated.
- 9. Start time and end time or a total duration for activities must be noted and totaled daily with an updated total at the bottom of every page.
- 10. Logbooks must be available for review upon request during weekly meetings and the design review.
- 11. Do not remove pages, even if the entries are damaged or incorrect. Simply draw a diagonal line across the incorrect entry.
- 12. Draw a single diagonal line through blank spaces
- 13. Date and title insertions and permanently affix with a glue stick.

Types of entries:

- 1. Date and start time of the event (e.g. September 12th 4:25 P.M.)
- 2. Duration of an event (e.g. 135 minutes or start and end times)
- 3. Note on a meeting:
 - a. Date and start time
 - b. Attendance
 - c. Purpose
 - d. Minutes
 - e. Decisions
 - f. Assigned Actions
 - g. Duration or end time
- 4. Note on a discussion, conversation or telephone call:
 - a. Date and start time
 - b. Persons involved
 - c. Summaries of key points and who made each point
 - d. Decisions
 - e. Actions
 - f. Duration or end time
- 5. Note on a WWW information gathering session

- a. Date and start time
- b. Websites reviewed and key information found
- c. May include list of websites searched where no information was found, but should not record searching of irrelevant sites (i.e. if you are researching bicycle wheels, you should not record your time spent interrupting your search to look at your Facebook site)
- d. Duration or end time

6. Key ideas

- a. Date and time of entry
- b. Explanatory sketch with annotations clear enough for someone else to be able to understand the idea by looking at the sketch and reading the description.
- c. Inspiration/ sources where did you get the idea?
- d. Duration of time spent developing idea

7. Key calculations

- a. Date and time of entry
- b. Clear presentation of the calculation according to the posted guidelines for presentation of calculations. (Someone else must be able to follow and make meaning of the calculation.)
- c. Discussion of the significance. (e.g. "With a maximum tensile stress of 31.2 kpsi as shown by the calculation, the bolt will not fail in tension if the assumptions on p. 67 are maintained. This may not be true if the assumption that maximum transverse load of 4500 N is not maintained and in particular must be re-examined if the coefficient of friction estimate µ falls below 0.23.")
- d. Duration of time spent doing calculation
- 8. Software session (e.g. solid modeling, FEA, on-line bearing sizing utility, etc.)
 - a. Date and time of entry
 - b. Notes on what was done particularly important trials, summarized record of values and results, etc.
 - c. Duration of time spent doing activity
- 9. Testing session (e.g. estimates of coefficient of friction between two materials.)
 - a. Date and time of entry
 - b. Notes on what was done, particularly test set-up (annotated digital photos help) important trials, summarized record of values and results, etc.
 - c. Duration of time spent doing activity

Logbooks are not to be used for performing rough work, rather they should be a summary of work performed and the time spent doing the work, key decisions, key calculations, contact information. Rough work such as original sketches may be inserted by pasting them in and adding notes that explain the sketch.

Best Practices for Logbooks

Keep it where you can see it and keep it open.
Keep it where you can use it
Must be easy to use and carry
Must be personal
Date all entries
Cross reference when you have the option.
Use a consistent format
Use icons, drawings, colors
Keep it readable but don't spend time being beautiful, spend time being informative.