Notebooks

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Notebooks

Why keep a design notebook?

- Chronicle overall team effort on project.
- Repository for ideas, discoveries, & inventions.
- May be used in patent and legal evaluations.
- Documents your *individual* effort on project.
- Important factor in your course grade.

Notebooks

Why keep a good design notebook?

- Keeps things organized in one place.

- Off-loads your brain!
  - Facts, calculations, URL's, etc.
  - Design sketches, construction details
  - Successful results
  - Failure analysis

- Process distills & clarifies thoughts & observations

- Only evidence of what you *contributed* to project.
  - Everything else is evaluated as a team.

UW **BME** Design

Notebooks

Contents - General   (Part 1)

- Info from client
  - Ideas & prior 'art'
  - Design requirements / constraints

- Background literature & patent searches
- Brainstorming ideas
- Design sketches & construction notes
- Calculations
- Experimental data & analysis
- Document reference
  - Annotate
  - Keep in separate folder - or - Post to project website

Notebooks

Contents - General   (Part 2)

- All project <u>meetings</u>:
  - In person (client, advisor, team, consultant, etc.)
  - Phone & conference calls
  - Relevant emails (content specific)
  - Laboratory activities
  - Tutorials & webinars
  - Class lectures
  _____
  - Record:
    - Time and date of meeting
    - Names of all individuals involved
    - Items discussed
    - Any action items

Notebooks

Contents - General (Part 3)

- <u>Narrative</u>. *Best* notebooks tell a story:
  - Describe what was done.
  - Explain how & why.
    - Prior knowledge
    - Specific concept / issue
    - Expected outcomes

  - Characterize results
  - Provide conclusions & recommendations
  - Identify action items

- <u>Audience</u>:
  - Qualified yet unfamiliar reader
  - Want to know what, why, how, when, and by whom.

Notebooks

Contents - General   (Part 4)

- Do <u>not</u> include:
  - Product Design Statement (PDS)
  - Weekly progress reports
  - User manuals
  - Presentations
  - Reports
  - Non-specific correspondence

Notebooks

- **Required Contents** (Part 1)
  - <u>Cover</u> (or inside):
    - Course level
    - Project name
    - Your name
    - Phone number
    - email address

  - <u>First</u> page:
    - Project name
    - Client information
    - Team members & roles
    - Team contact information

Notebooks

- **Required Contents** (Part 2)
  - <u>Second</u> page: Problem statement

  - <u>Third</u> Page: Table of contents (TOC)

  - **Always:**
    - <u>Number</u> all pages
    - Make entries in <u>ink</u>
    - <u>Date</u> and <u>Sign</u> each page (strike blank space)
    - <u>Tape</u> documents - NO staples (handouts, spec. sheets, agendas)
    - Write <u>legibly</u>
    - Include <u>legends</u> for:
      - Diagrams & sketches
      - Plots
      - Tables
      - Equations

Notebooks

- ## Evaluation

  - Bring notebook to ALL meetings / work sessions

  - Instructors may 'spot check' in class

  - Turn in to 2135 ECB - BME Copy / fax room

    - After mid-semester presentations
    - After final poster session & reports

  - Standard form used for assessment:

    http://ecow.engr.wisc.edu/cgi-bin/get/bme/200/webster/8.educatio/bme_forms.pdf

  - Quality of notebook is significant part of <u>your</u> grade

Notebooks

- ## Questions ?

http://ecow.engr.wisc.edu/cgi-bin/get/bme/200/webster/courseinfo/deliverabl/notebook.htm