

# Documentation

Michael Brodskiy

Professor: B. O'Connell

September 15, 2022

- Design Notebook
  - Why Keep a Design Notebook?
    - \* Documents/provides evidence of your work (both individually and as a group)
    - \* Useful resource for preparing reports
    - \* Serves as an object of memory
    - \* Becomes a communication tool of past activity for new colleagues
  - Format
    - \* Typically you'd use a physical tamper-proof notebook
    - \* Front Matter
      - Put your name(s) and a contact e-mail on cover
      - Include a team contact page
      - Leave space in the front for a table of contents
    - \* Inside
      - Number pages
      - Date all entries
    - \* Record Directly into the notebook
      - As often as possible
      - Take pics of notes, dry erase boards, etc.
      - Add links to other documents/resources used
    - \* Include narrative to describe any sketches, diagrams, plots, and equations
      - Don't assume you're the one reading this
      - Someone else won't have the first-person experience that you do
    - \* Any and all work on your project
      - Ideation, sketches, calculations, etc.
    - \* Project meeting notes

- Agendas, discussion items, and action items
- \* Relevant external info
  - Salient lectures and other reference material
- \* Consultations
  - Include contact information
- \* Detailed notes on any compiled info
  - Library and patent searched
  - Observations
- \* For digital content, describe the work done and where it can be found
- \* Include conclusions and recommendations
- \* Narrative — Describe what is being done
  - Enough that other engineers can follow
- \* Not rigidly formatted
  - More guidelines than rules
- \* Not for everyone's consumption
  - But should be readable by other engineers
  - Someone at your level should be able to follow your EDP
- \* Provides a time-lapse view of your engineering design process

- Status Memos

- This is a formal statement
  - \* In this case, an update on your project status
- They are a primary form of communication in many industries
  - \* For informing colleagues of progress or status
  - \* For making formal requests as part of your design activity
- A memo is a brief communication written to busy people who want information as soon as possible
  - \* Economize your ideas
  - \* Be concise
- What to include
  - \* Introduction with the main point
    - The header
    - To, From, Date, Subject, CC, Attachments
    - A brief summary
    - Necessary background
    - A clearly stated purpose

- Preview of what's to be discussed
- \* Discussion of the topics
  - A brief discussion of each of the main topics
  - Approximately 1-2 paragraphs each
- \* Review what's been said
  - Restate the main points and associated main ideas
  - Include follow-up contact information
- \* Specific topics will be included as requirements in the project assignments
- Know who your readers are
  - \* Primary — “To:”
  - \* Secondary — “CC:”
- Know why you are writing this
  - \* This should be clear to the reader
  - \* Most difficult sentence is a statement of purpose